Institute of Business Management

College of Computer Science and Information Science

Final Year Project Guidelines

Foreword:

This is the Final Year Project handbook of the College of Computer Science and Information Science. This handbook contains guidelines for the conception, preparation, implementation, completion and finally the assessment of Final Year Projects.

The intention of this handbook is to develop guidelines and a uniform structure and outline for undergraduate students. It serves as an instructional manual for the expected contents, deliverables, quality and the required quantity of the final projects for students and also provides evaluation rubrics for supervisors and evaluators.

Members:

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Reviewer:

Dr. Sana Alam

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1 Introduction

The Final Year Project (FYP) is the culmination of students' degree program. The main purpose of this project is to encourage students to apply the knowledge acquired during their studies. It allows them to work on a substantial problem for an extended period of time, show how proficient they are in solving real world problems. It brings them a sound

opportunity to demonstrate their competence as professionals and to apply what they have learnt in the other components of the degree. Besides, they get a chance to improve their technical skills, communication skills by integrating writing, presentation and learn how to work in teams. With a real-world problem at hand, they get to learn professional practice and a variety of non-technical issues such as management, finance, safety, reliability, environment and social impacts. Moreover, it provides an integrated assessment of the progress of the students toward the training they went through during their academic tenure at the college.

FYP course is different other courses because it demands independent objective formulation, planning, management and self-motivation. It is therefore essential to design fair and comprehensive guidelines for the students, supervisors and the evaluators. A structured manual and lifecycle process is therefore essential in order to help students conform to the required quality standards, outline general expectations from the supervisors and sketch assessment criteria for the evaluators. Hence, contribute as a fundamental underpinning to achieve high quality learning outcomes of the projects.

2 Degree Graduate Attributes (GAs)

Graduate Attributes (GAs) are the expected knowledge, skills and attitude must acquire while progressing through the program. By graduation, students should have attained a certain set of these attributes including Academic Education, Knowledge for solving computing problems, Problem analysis, Design/ Development of solutions, Modern tool usage, Individual and team work, Communication, Computing professionalism and society, Ethics and lifelong learning. Specifically, it is demonstrated that students must acquire:

i. **Academice Education**: Completion of an accredited program of study designed to prepare graduates as computing professionals.

ii. **Knowledge for Solving Computing Problems**: Apply knowledge of computing fundamentals, knowledge of a computing specialization, and mathematics, science, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

iii. **Problem Analysis**: Identify and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

iv. **Design/Development of Solutions:** Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs. GA-5 Modern Tool Usage: Create, select, or adapt and then apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

v. **Modern Tool Usage**: Create, select, or adapt and then apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

vi. **Individual and Teamwork**: Function effectively as an individual and as a member or leader of a team in multidisciplinary settings.

vii. **Communication**: Communicate effectively with the computing community about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

viii. **Computing Professionalism and Society**: Understand and assess societal, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.

ix. **Ethics**: Understand and commit to professional ethics, responsibilities, and norms of professional computing practice.

x. **Life-long Learning**: Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

3 Overview of Final Year Project

A Final Year Project is a two-semester course in which students usually of 2-3 members select a project and are supervised by a faculty member. In this course, students choose a project subject and define the objectives of the project under the supervision of a faculty member, and prepare the project proposal including: defining the statement of the problem, defining system requirements, defining different candidate solutions for the problem of study, making feasibility study for different candidate solutions, defining the best candidate solution, defining time table schedule. Students present the final project report at the end of the semester to an evaluation a committee.

4 FYP milestones and evaluation stages

The FYP milestones, deliverables, evaluation stages along with their timelines is given the Table 1 and Table 2.

Table 1: Milestones & Marks Distribution

Assessments	Acceptance / Rejection
Mid Evaluation FYP I (Internal Evaluators)	30%
Final Evaluation FYP I (Internal Evaluators)	50%
Supervisor	20%
Mid Evaluation FYP II (Internal Evaluators)	10%
Final Evaluation FYP II (External Evaluators)	40%
Final Evaluation FYP II (Internal Evaluators)	30%
Supervisor	20%

Table 2: Detailed timeline of FYP phases

Phase	Calendar
Submission FYPD titles by students	12th Week of 6th Semester
Submission FYPD titles by Faculty	13th Week of 6th Semester
FYP committee meeting in which committee members finalize FYP topics and allocate supervisors	14th & 15th Week of 6th Semester
Synopsis Submission	1st Week of 7th Semester
Synopsis Defense	3rd Week of 7th Semester
FYPD-1 Mid-Term Evaluation + SRS Submission + Report Submission	8th Week of 7th Semester
Detail meeting with Supervisor, FYDP Convener 9th Week of 8th Semester and Chairman (on the flow of the FYDP project)	9th Week of 8th Semester

FYPD-1 Final Evaluation	17th Week of 7th Semester
FYPD-2 Mid-Term Evaluation	8th Week of 8th Semester
Detail meeting with Supervisor, FYDP Convener and Chairman (on the flow of the FYDP project)	9th Week of 8th Semester
FYPD-1 Final Evaluation + Final Report Submission	17th Week of 8th Semester

4.1 Synopsis Defense

Synopsis defense is the main step of acceptance and rejection of proposal in which the student's group have to defense their proposal in the presence of the evaluator jury of FYPC and the evaluator form that specific domain of project then they thoroughly asses the working of the student and judge it as per HEC criteria and requirement of the market.

4.2 Acceptance of FYP

Acceptance of FYP marks the start of working on the project. Students are formally informed about the acceptance of their project after the successful synopsis defense in front of FYPC and evaluators.

4.3 Acceptance With Revision FYP

Acceptance with revision of FYP marks the start of working on the project after changes in he idea which suggested by FYPC and evaluators Students are formally informed about the acceptance with revision of their project after the successful synopsis defense in front of FYPC and evaluators.

4.4 Rejection of FYP

Rejection of FYP marks the complete rejection in the project. Students are formally informed about the rejection of their project after the unsuccessful synopsis defense in front of FYPC and evaluators. Now they have to come up with new project ideas or get the idea which were suggested by the FYPC.

5 Guidelines for Project Supervision

Following rules should be taken under considerations during project supervision.

a) Each group will work under the supervision of an assigned supervisor throughout the final year (term 7 & 8).

b) Students are recommended to meet with their supervisor at least once a week. The students are expected to discuss their progress with their supervisors in these weekly meetings.

Depending on students' requirements and the supervisor's availability, supervisors may also arrange additional meetings (physical/online) as requested.

c) Supervisors might also arrange communication with student groups via email or other means for the purpose of advising project groups.

d) It is the responsibility of the supervisor to inform his students with this handbook and all he included instructions and regulations.

5.1 Tasks expected from supervisors

During these meetings supervisors are expected to:

Table 3: Tasks expected from supervisors

provide FYP Outlines / Objectives	Orientation
Discuss project expectations an the plan with the group	
share previous practice experience, research, skills and expertise	
Assign /Recommend related literature	Provide Knowledge
Give training sessions on the respective research area and tell them what they need to know	
clarify students queries effectively as needed	
make students aware of professional ethics and standards	
advise students on how to deal effectively as a team while working under pressure, remaining optimistic and persistent, and how to meet milestone deadlines	
monitor the project progress on a weekly/fortnightly basis	Assess
ensure students are completing outlined project deliverables	
grade students, work (at individual/group level) at the end of each semester	

5.2 Project Development Life Cycle:

The supervisors will guide the group through different steps in the software engineering life cycle and describe, discuss, assign, receive and review the corresponding outcomes/artifacts at the end of each step

During the Project Proposal, students undertake the initial phases of project planning, selection, analysis and designing phases. In the Project Implementation, students proceed with the implementation phase of their proposed project. As part of SDLC, the supervisors should guide the students to follow, but not limited to, the following best- practices:

a) Having a life cycle or system development methodology
b) Ensure proper research and background knowledge is acquainted
c) Feasibility study is conducted on the proposed project
d) Scope of the project is precise and crystal clear
e) Generating and comparing alternative designs to determine best match for the requirements
f) Roles & responsibilities of individual student working within the group is clear and accepted
g) Able to apply project resources as per the approved project plan
h) Track and report any issues and risks in completing assigned tasks
i) Both logical and physical design aspects are analyzed
j) Proper programming standards are maintained during the development of the project
k) Auto or Manual Test Cases are implemented and executed
l) Source control with versioning tools are used for developing as a team
m) Documenting required deliverables using industry standards
n) Participating in Seminars, Events, Publications and Workshops relevant to the project

6 Team Leadership:

Every graduation project group is assigned with a team leader who is essentially a cross- functional key player working within the project group. It is extremely important to get the right student within each group fit for the role of team leader which is crucial for the success of any project. Team leader should work very closely with the supervisor with the following, but not limited to, the primary tasks:

a) Provide input on the performance of team members
b) Resolve any conflicts within group members and maintain healthy group dynamics
c) Inform supervisor of any task delays and meeting hours change requests from students
d) Ensure rest of the group understands their roles and responsibilities on the assigned tasks;
e) Coordinate with internal or external project stakeholders on behalf of the team
f) Provide weekly status report– completed and signed by each team member as per the schedule

Note: *During the course of the project, if the supervisor finds team leader is not performing as per the above expectations, the supervisors can request for the replacement of team leader with an alternative group member fit for this role.*

7 Students Responsibility:

During the Final Year Project, students are responsible for the following:

a.	Agree with their assigned supervisors on the topic
b.	Perform weekly tasks, assigned by the supervisor (or distributed by the team leader)
c.	Discuss problems and seek advice from the supervisor in order to accomplish the assign tasks.
d.	Provide supervisor weekly status reports and get his/her feedback
e.	Apply recommendations to refine the previous task
f.	Finalize the project proposal and implementation, incorporating all the feedbacks and comments provided by the supervisor and evaluators.
g.	Conduct presentation at the end of each semester and defend project to the evaluation panel

8 Late submissions:

It is the responsibility of each group to ensure they complete the milestones of each semester and submit deliverables by the cutoff submission date. No project will be accepted after the cutoff date and necessary actions will be taken as per the supervisor and the evaluation committee decision policy.

9 Plagiarism:

Each project must be the original work of student groups. At the end of each semester, students will be required to present their project proposal and implementation outcomes as per the provided deliverables guidelines and the original work undertaken throughout each semester.

In the project report, for instance, if students have taken ideas or referencing other work as part of the proposed project, then, it must be cited and reference should be clearly specified. Same is the case while implementing the proposed solution. For instance, if students are developing project using 3rd party tools and libraries, it must be referenced and relevant comments and notes must be highlighted and will not be regarded as part of the original work of student groups. Hence, it is extremely important to note that it is the responsibility of students to ensure they are not plagiarizing knowingly or unknowingly.

In order to prevent plagiarism related issues, students are encouraged to get familiar with plagiarism specified in [1] and general referencing guidelines specified in [2]. In order to prevent plagiarism related issues during implementation, students are strongly encouraged to get familiar with software plagiarism specified in [3].

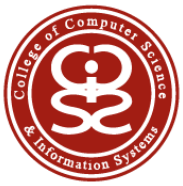
If students are found plagiarizing either in project proposal report or in the project implementation solution/code, immediate strict action will be taken as per the university policy.

Annex-A - (FYP Proposal Document Template)

INSTITUTE OF BUSINESS MANAGEMENT

Final Year Project Title

Project Proposal



Supervisor

Supervisor Name

Submitted by

1st Student Name (Registrtion ID)

2nd Student Name (Registrtion ID)

3rd Student Name (Registrtion ID)

College of Computer Science and Information Systems

Institute of Business Management (IoBM)

[Date of Submission]

1. Introduction

Briefly introduce your project idea.

2. Project Objective and Scope

Write down your project objective in a very precise and concise manner.

3. Literature Review

A brief literature review is required. Download some research articles related to your topic from GOOGLE SCHOLAR and summarize. Also explore some related / existing systems and summarize them as well.

4. Methodology

In this section you have to put your project System Diagram / Project Framework with explanation.

5. Benefit to Industry

Which industry or application domain you are targeting? How that target domain may benefit from your solution?

6. Tools/Technology

Mention all the HW/SW tools/technologies required for the project.

7. Gantt Chart

A Gantt chart is required which is a graphical representation of project activities against time.

8. References

Mention all the literature or web references here. The references should be properly numbered and correctly used in the text. References should be in IEEE format.

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College of Computer Science and Information Systems (CCSIS)

Evaluation Form (Final year Project Proposal)

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

		YES	NO
GA-1	Understanding of the Proposal Idea	☐	☐
GA-3,4	System Diagram	☐	☐
GA-1,2	Existing Ideas + Gaps	☐	☐
GA-5	Uniqueness + Innovation	☐	☐
GA-9	Gantt Chart	☐	☐
GA-6,7	Presentation / Level of Preparedness	☐	☐
GA-7	References	☐	☐

Comments / Suggestions:

1. _____
2. _____
3. _____
4. _____
5. _____

ACCEPTED ☐ **ACCEPTED WITH SUGGESTIONS** ☐ **REJECTED** ☐

Reason for rejection: _____

_____

_____ _____

Name of Evaluator **Signature**

Annex-B - (FYP SRS Template)

INSTITUTE OF BUSINESS MANAGEMENT

Final Year Project Title

Software Requirements Specification (SRS)

Submitted by

1st Student Name (Registrtion ID)

2nd Student Name (Registrtion ID)

3rd Student Name (Registrtion ID)

College of Computer Science and Information Systems

Institute of Business Management (IoBM)

[Date of Submission]

Contents

1. Introduction

1.1 Introduction

The purpose of this document is to define and describe the requirements of the project and to spell out the system's functionality and its constraints.

1.2 Scope of this Document

The customer and the user for the system are the employees of the IDANRV, including Mrs. Sheila Roop, and the developers of the system is the Shock Force Software Team. Our constraints for this section includes our deadline for the document which is due 10/29/09

1.3 Overview

The product is an Access Database with import/export capabilities from Excel that will hold information on auctions, bid items and their bidders, including auction income, auction expenses, bid amount, bid increment, bid ID, item donor, item's original value, payment type, bidder name, and bidder email.

1.4 Business Context

As it applies to this project, The Intellectual Disabilities Agency of the New River Valley is a non-profit organization that supports people struggling with intellectual disabilities through holding fundraisers and silent auctions to raise aid as well as awareness

2. General Description

2.1 Product Functions

The product should make input of data and the entire checkout process easier and streamlined for the users (employees) and time efficient for the bidder.

2.2 Similar System Information

The product is being developed with Access, so there are a large number of similar databases or systems and they are used for a wide array of different purposes. The possible strength our system has over the majority is the Excel import/export feature of the program.

2.3 User Characteristics

The users include the employees of the IDA as they input data on bids and their bidders. For this system, the user is required to know the basic usability of Excel as well as a very base level understanding of access, which hopefully will be facilitated by the software team through training.

2.4 User Problem Statement

The users system, currently, is slow and inefficient as it relates to the checkout process. Bidders must wait hours to check out the item they have won. Too many man hours have been needed to enter the wealth of information collected.

2.5 User Objectives

The user wants a database that will store information on a silent auction. The program must faciliatate the speed and ease of input. It also must store the items the IDANRV needs to store.

2.6 General Constraints

Constraints include an easy to use interface for the program through forms, a Windows platform or, at bare minimum, a Mac with Access and Excel for Mac installed. Also, it must be constructed in Access, Excel, or another related program that is easily learnable.

3. Functional Requirements

1. **Items provided to the IDANRV shall be stored in the Access Database.**
    1. Items shall be stored on the laptop machine and have complete fields.
    2. Very high criticality
    3. Limited network / wi-fi availability could present a technical challenge
    4. The above stated factor is a risk we have encountered. Eliminate it by reducing the dependency of our program on these things.
    5. This requirement is the basis of the project; all other aspects depend on it.
2. **The items shall be accessible via queries and reports.**
    1. Users of the database should be able to run reports on the data that has been put into the database. They should also be able to run queries.
    2. Very high criticality
    3. We do not foresee any technical issues preventing the implementation of this.
    4. Given the capabilities of Access, this requirement is able to be satisfied.
    5. This requirement depends on requirement number one.
3. **The data stored should be able to be manipulated through forms.**
    1. Items and other data should be able to be added and updated through the use of forms.
    2. Very high criticality
    3. We do not foresee any technical risks involved in this requirement.
    4. The only factor we can encounter here is the user of the system not being able to use it correctly. We will overcome this by training those who will be using it.
    5. This requirement is dependent on requirement one.

4. Interface Requirements

4.1 User Interfaces

4.1.1 GUI

The user interface for this program is the interface provided by Microsoft Access 2007. Access includes forms and reports for the users to query and organize data to suit their needs. Forms

and reports both have builders that let the user specify which fields they want to use and which constraints they want to define.

4.1.2 CLI
There is no command line interface

4.1.3 API
There is no API for the product

4.1.4 Diagnostics or ROM
There is a troubleshooting and help section provided by Microsoft

4.2 Hardware Interfaces

The program (Access) uses the hard disk. Access to the hard drive and other hardware is managed by the operating system and Access.

4.3 Communications Interfaces

If we decide to implement an Ad Hoc network for a shared database, the operating system will handle those connections.

4.4 Software Interfaces

The Access system may be used to import and export data with Microsoft Excel. This functionality is built in to the user interface.

5. Performance Requirements

The database is designed to be operated through Microsoft Access 2007, thus no additional system requirements exist beyond those required to run Microsoft Office 2007, except for a negligible amount of hard drive space to store the database.

Microsoft lists the requirements for Access 2007 as follows:
500 MHz processor or higher
256MB RAM or higher
1.5GB Available Hard Drive Space
Windows XP SP2 or later operating system.
Windows Office Professional 2007 (Windows Access)
There is also Access Available for Mac OS X, the clients have not stated a need thus far.

6. Other non-functional attributes

.

6.1 Security

The system shall be designed with a level of security appropriate for the sensitivity of information enclosed in the database. More interaction is needed with client about the volatility of the information. Since there is no obvious information that is of a high security level such as credit card information, the

only requirements that could be implemented are encrypting the database and/or making the database password-protected, by user's request.

6.2 Binary Compatibility

This system will be compatible with any computer that has Microsoft Office Professional 2007 or later installed (whether PC or Mac), and will be designed with more than one computer in mind.

6.3 Reliability

Reliability is one of the key attributes of the system. Back-ups will be made regularly so that restoration with minimal data loss is possible in the event of unforeseen events. The system will also be thoroughly tested by all team members to ensure reliability.

6.4 Maintainability

The system shall be maintained by Sheila Roop, of the IDA, or delegated to another employee.

6.5 Portability

The system shall be designed in a way that shall allow it to be run on multiple computers with Microsoft Office Professional 2007 or later installed.

6.6 Extensibility

The system shall be designed and documented in such a way that anybody with an understanding of Microsoft Access shall be able to extend the system to fit their needs with the team's basic instructions.

6.7 Reusability

The system should be designed in a way that allows the database to be re-used regularly for the various silent auctions that the organization shall hold.

6.8 Application Affinity/Compatibility

This system requires the Microsoft Office Professional 2007 suite or later, as it operates primarily through Microsoft Access, in conjunction with Microsoft Excel.

6.9 Resource Utilization

The resources used in the creation of this system include: Dr. Lewis, the client (Sheila Roop), the computers in Davis Hall, and the internet.

6.10 Serviceability

The maintenance of the system should be able to be sufficiently performed by any person with a basic understanding of Microsoft Access.

7. Operational Scenarios

Scenario A: Initial Item Definitions

The user shall enter the information about the items into the database for its initial construction and evolution. The fields will be completed via a form that will manipulate the data.

Scenario B: Customer Check-out

The user shall be able to enter information about the customer purchasing a particular item, and record their bid and other information. They will also enter the winning bid

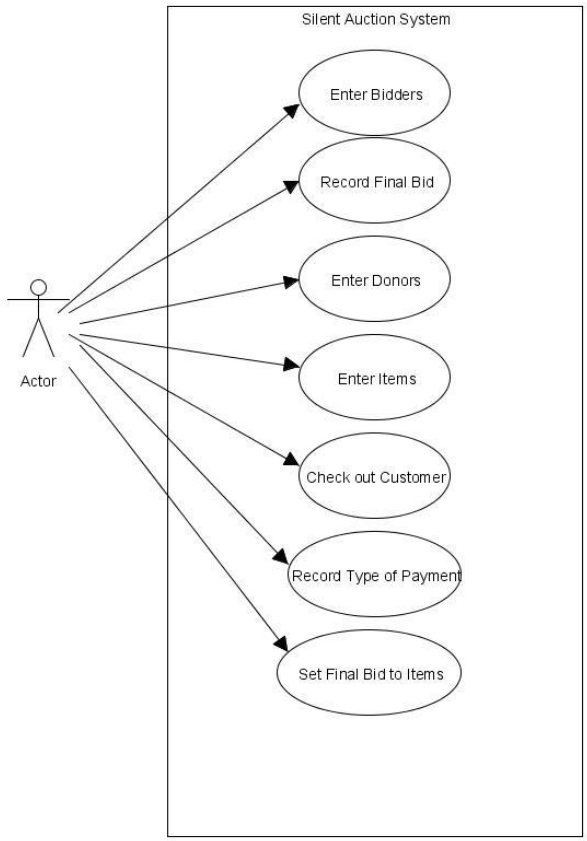
Scenario C: Database Maintenance

The user may want to alter/delete information after the auction is over, In this case they will need to be able to remove the data that has been entered.

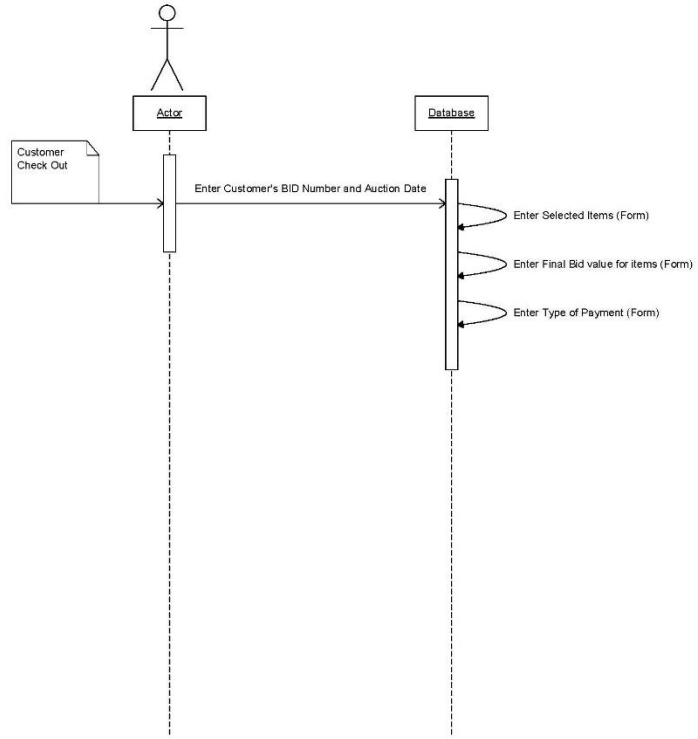
8. Preliminary Use Case Models and Sequence Diagrams

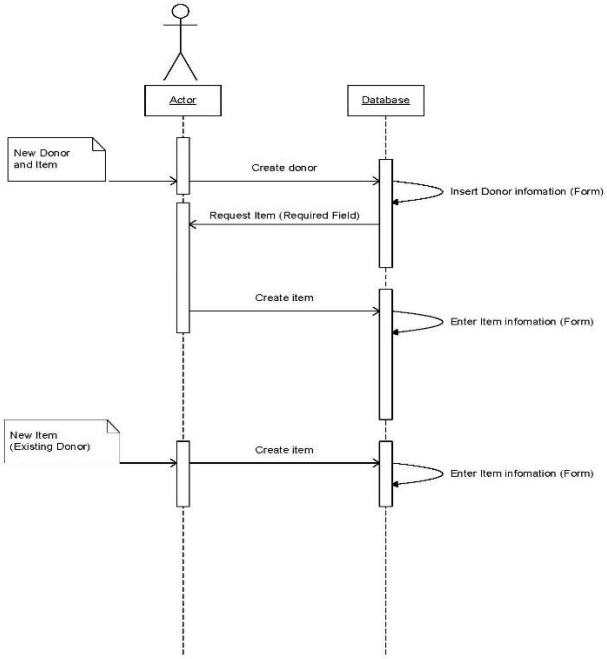
This section presents a list of the fundamental sequence diagrams and use cases that satisfy the system's requirements. The purpose is to provide an alternative, "structural" view of the requirements stated above and how they might be satisfied in the system.

8.1 Use Case Model



8.2 Sequence Diagrams





Annex-C - (FYP-I Report Template)

INSTITUTE OF BUSINESS MANAGEMENT

FINAL YEAR PROJECT - I

Session 20xx-20xx

Project Title

Supervisor

Supervisor Name

Submitted by

1st Student Name (Registrtion ID)

2nd Student Name (Registrtion ID)

3rd Student Name (Registrtion ID)

College of Computer Science and Information Systems

Institute of Business Management (IoBM)

ACKNOWLEDGEMENT

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries. Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme. Save time in Word with new buttons that show up where you need them.

To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign. Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device. Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

Yours Sincerely,

Student 1 (12345-6789)

Student 2 (12345-6789)

Student 3 (12345-6789)

ABSTRACT

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries. Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme. Save time in Word with new buttons that show up where you need them.

Keywords – *Keyword 1, Keyword 2…….Intrusion Detection System, Facial Features, Classified, Camera.*

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Chapter 1

Introduction

1.1 Background of the Project

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

1.2 Purpose of the Project

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

1.3 Scope and Objectives of the Project

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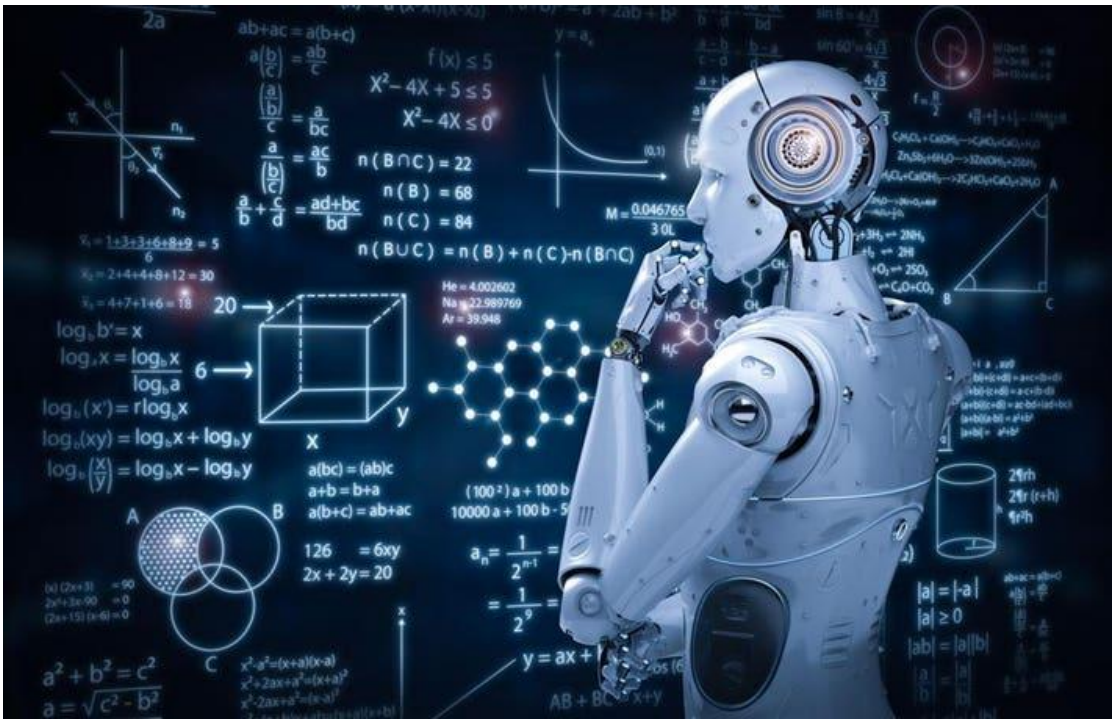

Fig 1.1: Caption [1]

1.4 Overview of the Project

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

1.5 Project Gaps

- Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.
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- Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

1.6 Problem Statement

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1.6 Chapter Summary

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Chapter 2

Literature Review

2.1 Introduction

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2.2 Reviewd Research Articles Summary

In the context of risk classification used in software development projects, the authors [17] proposed an SVM based method and highlighted the importance discussing the factors affecting the risks associated with the classification. Based on the CAR and AUC, the methods of SVM and K-Means were compared with the method proposed in the study. The CAR and AUC in the proposed method are found to be superior as compared to the values of SVM and K-Means. It ultimately contributes to relatively higher precision and better performance of the method proposed for the classification of risk in the software development projects.

Researchers in [18] a solution was found to determine the effort required for a software project based on an organizations historical data for projects. The solution, based on a predictive model, is a result of research which includes two methods i.e., (a) correlation matrix and (b) decision tree. Tests were run using both methodologies, which generated the same results, eventually leading the researchers to identify three parameters that were be used as input for various predictive models. Evaluation from results of these predictive models led to the concluded “Evolutionary Support Vector Machine” as the best model. Therefore, it was determined that the effort required to complete a project can be predicted based on these three parameters (a) number of entities in a project, (b) transaction of the project and (c) project duration in months.

2.3 Reviewd Existing Systems Summary

2.2.1 Existing System 1

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2.2.2 Existing System 2

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

2.2.3 Existing System 3

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

2.4 Comparison of Existing Systems with Proposed System

Table 1 Comparison

Features	Pixel point	LRS	Eric soft	Smart order system	Proposed System
Graphics	NO	NO	NO	NO	YES
ATM Sweeper	NO	NO	NO	NO	YES
Prices	NO	NO	NO	NO	YES
Group Orders	NO	NO	NO	YES	YES
Status of Ordering	NO	NO	NO	NO	YES
Wireless Network	YES	YES	YES	NO	YES
Touch Screen	YES	NO	YES	NO	YES

2.5 Chapter Summary

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Chapter 3

Requirement Analysis

3.1 Introduction

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3.2 Stakeholder Identification

Identify and describe all stakeholders involved in the project. This includes users, clients, customers, and any other parties affected by or influencing the project.

3.3 Requirement Gathering Techniques

Explain the methods used to gather requirements. This could involve interviews, surveys, workshops, or other techniques used to collect information from stakeholders.

3.4 Functional Requirement

This includes functional requirements (what the system should do)

3.5 Non-Functional Requirement

Non-functional requirements (constraints, performance, security, etc.).

3.6 Chapter Summary

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Chapter 4

System Design

4.1 Introduction

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4.2 Software Development Model

Explain the software development model you used in your project (waterfall, incremental, spiral, agile etc)

4.3 Hardware and Software Requirement

Hardware Requirements

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above
- Some classes require a camera and microphone

Software Requirements

- Windows: 7 or newer
- MAC: OS X v10.7 or higher
- Linux: Ubuntu

4.4 Architectural Design

Describe the overall architecture of the system. This includes high-level components, modules, and their interactions. Diagrams (such as UML diagrams) could be used to illustrate the architecture.

4.5 Database Design

Explain the structure and organization of the database. Include entity-relationship diagrams, tables, schemas, and any normalization techniques applied.

4.6 Chapter Summary

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Chapter 5

Methodology

5.1 Introduction

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5.2 Proposed System Framework / Architecture

Proposed system architecture diagram should be incorporated here with explanation step by step.

5.3 Data Collection Procedure

Detail the methods used to collect data (interviews, surveys, experiments, observations, etc.). Discuss the tools or instruments used and how they were developed or adapted.

5.4 Algorithm Used

Explain all algorithm used in this project with their block diagrams.

5.5 Chapter Summary

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

CONCLUSION

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REFERENCES

[1] "Face Recognition Technology on ATMs & More | Wuxi City Guide", Wuxicityguide.com, 2019. [Image]. Available: http://www.wuxicityguide.com/2019/face-recognition-technology-on-atms-more/. [Accessed: 18-May-2019].

[2] "Advantages and Disadvantages of Python Programming Language", Medium, 2019. [Online]. Available: https://medium.com/@mindfiresolutions.usa/advantages-and-disadvantages-of-python-programming-language-fd0b394f2121. [Accessed: 20-May-2019].

[3] M. Roux, "Face Recognition vs Face Detection: What's the difference?", *Sightcorp*, 2019. [Online]. Available: https://sightcorp.com/blog/face-recognition-vs-face-detection-whats-the-difference/. [Accessed: 25-Mar-2019].

APPENDICES

Project Schedule

Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text…..

Gantt Chart

Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text…..

Turnitin Plagiarism Report

Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text Text…..

FYP-2 Final Report

ORIGINALITY REPORT

12%	6%	4%	11%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to The University of Manchester Student Paper	1%
2	us.norton.com Internet Source	1%
3	Submitted to University of Derby Student Paper	1%
4	Submitted to Altinbas University Student Paper	<1%
5	Blerim Rexha, Gresa Shala, Valon Xhafa. "Increasing Trustworthiness of Face Authentication in Mobile Devices by Modeling Gesture Behavior and Location Using Neural Networks", Future Internet, 2018 Publication	<1%
6	www.geeksforgeeks.org Internet Source	<1%
7	buildmedia.readthedocs.org Internet Source	<1%

INSTITUTE OF BUSINESS MANAGEMENT (IoBM), KARACHI

RUBRICS FOR FYP-I MIDTERM EVALUATION FORM

Criteria	Excellent (>=90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1 Understanding the Project Idea GA-1 *(out of 5)*	Project Idea is stated clearly and provides full justification of its potential impact.	Project Idea is stated clearly and provides insufficient justification of its potential impact	Project Idea is stated and provides justification of its potential impact	Project Idea is not stated clearly and lacks justification of its potential impact
C2 Literature Review + Gaps GA-2 *(out of 5)*	Literature Review is Comprehensive to the relevant literature and provides sufficient analysis of key findings. Clearly identifies gaps in the existing literature.	Literature Review is adequate to the relevant literature and provides insufficient analysis of key findings. Identifies gaps in the existing literature	Literature Review is limited to the relevant literature and provides analysis of key findings. Identifies some gaps in the existing literature.	Literature Review is minimal to the relevant literature and lacks in analysis of relevant literature. Fails to identify gaps in the existing literature.
C3 Problem Statement GA-03 *(out of 2)*	Problem statement is stated and covered sufficient justification. New reader can clearly understand its value and context	Problem statement is stated and covered necessary justification with reference.	Problem statement is stated but lacks necessary justification.	Problem statement is vaguely stated without any justification
C4 Uniqueness and Innovation GA-2 *(out of 5)*	Demonstrates exceptional originality and introduces the disruptive idea	Shows originality and introduces new ideas or concept	Presents original ideas but lack in significant innovation	Lacks originality and innovation
C5 Update on SRS GA-2 *(out of 5)*	All functional and non-functional requirements are clearly defined, leaving no ambiguity or gaps.	Most of the required functionality and system constraints are specified, but there are some minor omissions or ambiguities.	Several key requirements are missing or vaguely defined, requiring additional clarification.	Many essential requirements are omitted or poorly defined, making it difficult to understand the system's scope and functionality.
C6 System Diagram GA-4 *(out of 5)*	System Diagram is coherent and provides full justification of the specified requirements	System Diagram is coherent and provides insufficient justification of the specified requirements	System Diagram is coherent and provides justification of the specified requirements	System Diagram is not coherent and lacks in justification of the specified requirements
C7 Presentation / Level of preparedness GA-6 *(out of 3)*	Present clearly with confidence while maintaining presentation flow. The student listens carefully and answers questions easily and directly.	Lacks in confidence while maintaining presentation flow. The student is able to answer questions about the project.	Lacks in confidence and presentation flow. The student attempts to answer questions about the project but clearly doesn't really understand	Lacks in confidence and presentation flow, and inefficient use of Visual aids. The student is unable to answer questions about the project.

FYP-I Midterm Evaluation Form

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	Description of Criteria	GAs	STD MARKS (OUT OF 30) STD 1	STD 2	STD 3	STD 4
C1	Understanding of the Project Idea **(out of 5)**	GA-1				
C2	Literature Review + Gaps **(out of 5)**	GA-2				
C3	Problem Statement **(out of 2)**	GA-3				
C4	Uniqueness + Innovation **(out of 5)**	GA-2				
C5	Update on SRS **(out of 5)**	GA-2				
C6	System Diagram **(out of 5)**	GA-4				
C7	Presentation / Level of Preparedness **(out of 3)**	GA-6				

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

RUBRICS FOR FYP-1 FINAL ASSESSMENTS

Criteria	Excellent (>=90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1 Methodology GA-04 ***(out of 10)***	The methods, approaches, tools, techniques, algorithms, or other aspects of the solution are well-described with sufficient details and supporting diagrams.	The methods, approaches, tools, techniques, algorithms, or other aspects of the solution are well-described. However further explanation is required.	The methods, approaches, tools, techniques, algorithms, or other aspects of the solution are described but not in a convincing manner.	Some aspects of the solution are described briefly but much of the description is left out.
C2 System Design GA-04 ***(out of 10)***	System Design is coherent and provides full justification of the specified requirements	System Design is coherent and provides insufficient justification of the specified requirements	System Design is coherent and provides justification of the specified requirements	System Design is not coherent and lacks in justification of the specified requirements
C3 Presentation and Viva GA-07 ***(out of 5)***	Present clearly with confidence while maintaining presentation flow. The student listens carefully and answers questions easily and directly.	Lacks in confidence while maintaining presentation flow. The student is able to answer questions about the project.	Lacks in confidence and presentation flow. The student attempts to answer questions about the project but clearly doesn't really understand	Lacks in confidence and presentation flow, and inefficient use of Visual aids. The student is unable to answer questions about the project.
C4 SRS Submission GA-07 ***(out of 10)***	All functional and non-functional requirements are clearly defined, leaving no ambiguity or gaps.	Most of the required functionality and system constraints are specified, but there are some minor omissions or ambiguities.	Several key requirements are missing or vaguely defined, requiring additional clarification.	Many essential requirements are omitted or poorly defined, making it difficult to understand the system's scope and functionality.
C5 Report Submission GA-07 ***(out of 15)***	The report is well-structured, comprehensive, and professionally formatted, covering all necessary sections with in-depth analysis.	The report is structured and covers most sections adequately, but some details are missing or need improvement.	The report is incomplete, with several missing sections or lacking depth in discussion and analysis.	The report is poorly structured, missing critical sections, and lacks clarity, making it difficult to follow.

FYP-I Final Evaluation Form

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	**Description of Criteria**	**GAs**	**STD MARKS (OUT OF 50)** STD 1	STD 2	STD 3	STD 4
C1	Methodology **(out of 10)**	GA-4				
C2	System Design **(out of 10)**	GA-4				
C3	Presentation **(out of 5)**	GA-7				
C4	SRS Submission **(out of 10)**	GA-7				
C5	Report Submission **(out of 15)**	GA-7				
	Total Marks					

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

RUBRICS FOR FYP-I SUPERVISOR EVALUATION FORM

Criteria	Excellent (≥90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1 Project Knowledge (GA-2) (out of 5)	Demonstrates a deep understanding of project concepts, objectives, and technical aspects with confident and accurate explanations.	Demonstrates a good understanding of project concepts but lacks some depth or clarity in explanations.	Shows a basic understanding but struggles to explain certain aspects or lacks confidence.	Demonstrates minimal knowledge and is unable to clearly explain key concepts.
C2 Group Coordination (GA-6) (out of 5)	Actively collaborates with team members, contributes ideas, and ensures smooth team coordination with effective communication.	Collaborates well with the team but has occasional lapses in coordination or communication.	Shows inconsistent teamwork; limited contributions to discussions and coordination efforts.	Poor coordination with the team, lack of communication, and minimal involvement in group activities.
C3 Individual Contribution (GA-6) (out of 5)	Takes initiative, consistently completes assigned tasks on time, and provides high-quality contributions to the project.	Completes assigned tasks well but may require occasional prompting or improvements in quality.	Contributes to the project but inconsistently meets deadlines or provides lower-quality work.	Rarely contributes, frequently misses deadlines, and provides minimal or no meaningful work.
C4 Progress Reports & Milestones (GA-7) (out of 5)	Submits well-structured, detailed, and timely progress reports; milestones are clearly achieved with strong documentation.	Submits good reports with most required details; milestones are mostly achieved but need minor improvements.	Reports are incomplete or lack details; milestones are met with some inconsistencies.	Reports are missing, poorly written, or lack substance; milestones are largely unmet or unclear.

FYP-I Supervisor Evaluation Form

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	**Description of Criteria**	**GAs**	**STD MARKS (out of 20)** **STD 1**	**STD 2**	**STD 3**	**STD 4**
C1	Project Knowledge **(out of 5)**	GA-2				
C2	Group Coordination **(out of 5)**	GA-6				
C3	Individual Contribution **(out of 5)**	GA-6				
C4	PROGRESS Reports & Milestones **(out of 5)**	GA-7				
		Total Marks				

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

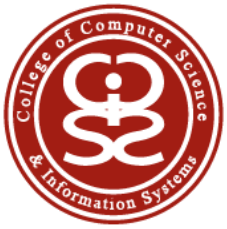
Annex-D - (FYP-II Report Template)

INSTITUTE OF BUSINESS MANAGEMENT

FINAL YEAR PROJECT

Session 20xx-20xx

Project Title



Supervisor

Supervisor Name

Submitted by

1st Student Name (Registrtion ID)

2nd Student Name (Registrtion ID)

3rd Student Name (Registrtion ID)

College of Computer Science and Information Systems

Institute of Business Management (IoBM)

[Date of Submission]

ACKNOWLEDGEMENT

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To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign. Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device. Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

Yours Sincerely,

Student 1 (12345-6789)

Student 2 (12345-6789)

Student 3 (12345-6789)

ABSTRACT

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Keywords – *Keyword 1, Keyword 2……..Intrusion Detection System, Facial Features, Classified, Camera.*

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Chapter 1

Introduction

1.1 Background of the Project

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1.2 Purpose of the Project

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1.3 Scope and Objectives of the Project

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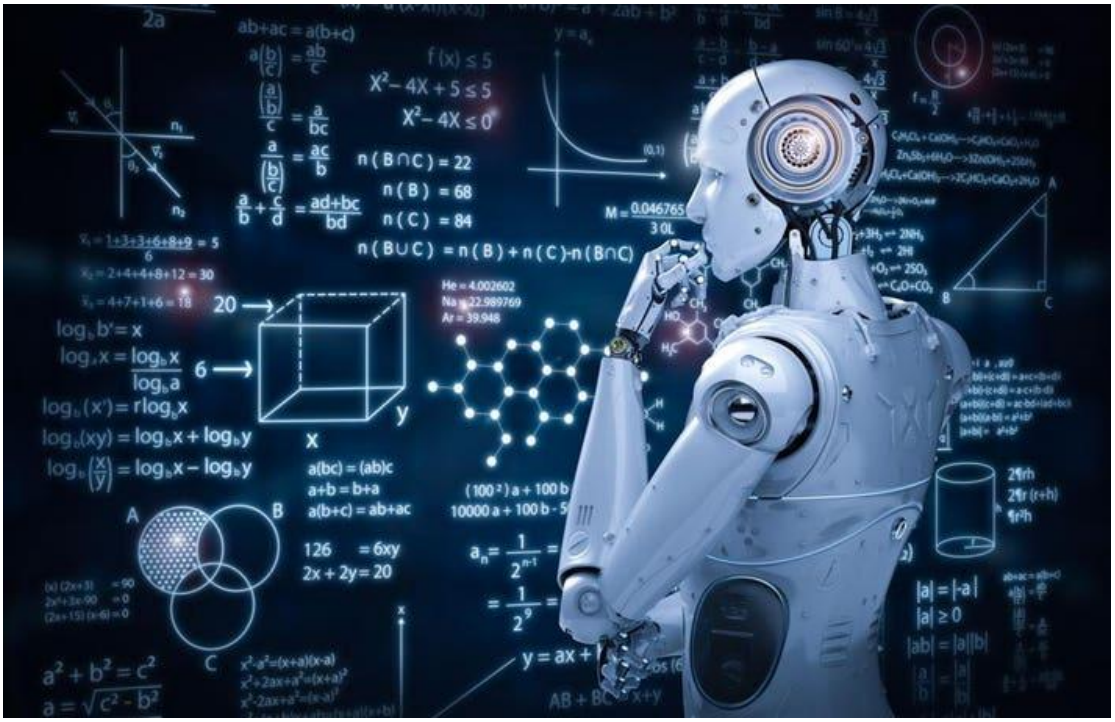

Fig 1.1: Caption [1]

1.4 Overview of the Project

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1.5 Project Gaps

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- Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.
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1.6 Problem Statement

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Chapter 2

Literature Review

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Researchers in [18] a solution was found to determine the effort required for a software project based on an organizations historical data for projects. The solution, based on a predictive model, is a result of research which includes two methods i.e., (a) correlation matrix and (b) decision tree. Tests were run using both methodologies, which generated the same results, eventually leading the researchers to identify three parameters that were be used as input for various predictive models. Evaluation from results of these predictive models led to the concluded “Evolutionary Support Vector Machine” as the best model. Therefore, it was determined that the effort required to complete a project can be predicted based on these three parameters (a) number of entities in a project, (b) transaction of the project and (c) project duration in months.

2.3 Reviewd Existing Systems Summary

2.2.1 Existing System 1

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2.2.2 Existing System 2

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

2.2.3 Existing System 3

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

2.4 Comparison of Existing Systems with Proposed System

Features	Pixel point	LRS	Eric soft	Smart order system	Proposed System
Graphics	NO	NO	NO	NO	YES
ATM Sweeper	NO	NO	NO	NO	YES
Prices	NO	NO	NO	NO	YES
Group Orders	NO	NO	NO	YES	YES
Status of Ordering	NO	NO	NO	NO	YES
Wireless Network	YES	YES	YES	NO	YES
Touch Screen	YES	NO	YES	NO	YES

2.5 Chapter Summary

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Chapter 3

Requirement Analysis

3.1 Introduction

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

3.2 Stakeholder Identification

Identify and describe all stakeholders involved in the project. This includes users, clients, customers, and any other parties affected by or influencing the project.

3.3 Requirement Gathering Techniques

Explain the methods used to gather requirements. This could involve interviews, surveys, workshops, or other techniques used to collect information from stakeholders.

3.4 Functional Requirement

This includes functional requirements (what the system should do)

3.5 Non-Functional Requirement

non-functional requirements (constraints, performance, security, etc.).

3.6 Chapter Summary

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides

header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Chapter 4

System Design

4.1 Introduction

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

4.2 Software Development Model

Explain the software development model you used in your project (waterfall, incremental, spiral, agile etc)

4.3 Hardware and Software Requirement

Hardware Requirements

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above
- Some classes require a camera and microphone
- etc

Software Requirements

- Windows: 7 or newer
- MAC: OS X v10.7 or higher
- Linux: Ubuntu
- Etc.

4.4 Architectural Design

Describe the overall architecture of the system. This includes high-level components, modules, and their interactions. Diagrams (such as UML diagrams) could be used to illustrate the architecture.

4.5 Database Design

Explain the structure and organization of the database. Include entity-relationship diagrams, tables, schemas, and any normalization techniques applied.

4.6 Chapter Summary

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Chapter 5

Methodology

5.1 Introduction

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5.2 Proposed System Framework / Architecture

Proposed system architecture diagram should be incorporated here with explanation step by step.

5.3 Data Collection Procedure

Detail the methods used to collect data (interviews, surveys, experiments, observations, etc.). Discuss the tools or instruments used and how they were developed or adapted.

5.4 Algorithm Used

Explain all algorithm used in this project with their block diagrams.

5.5 Chapter Summary

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Chapter 6

Results and Discussion

6.1 Introduction

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

6.2 Algorithm 1 Results

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

No. of Images	kNN				Decision tree			
	Precision	Recall	Accuracy	F score	Precision	Recall	Accuracy	F score
1	0.80	1.00	0.97	0.89	0.75	0.75	0.93	0.75
2	1.00	1.00	1.00	1.00	0.90	1.00	0.96	0.95
3	1.00	0.95	0.98	0.97	0.86	0.95	0.92	0.90
4	1.00	1.00	1.00	1.00	0.84	1.00	0.95	0.91
5	0.96	0.96	0.96	0.96	0.92	1.00	0.98	0.94
6	1.00	1.00	1.00	1.00	0.93	0.96	0.94	0.95
7	1.00	0.93	0.98	0.96	0.93	0.93	0.95	0.93
8	1.00	0.84	0.92	0.91	0.96	0.83	0.90	0.89
9	1.00	0.95	0.98	0.97	0.95	0.95	0.97	0.95
10	0.96	1.00	0.98	0.98	0.82	0.88	0.85	0.85
Average	0.97	0.96	0.98	0.96	0.87	0.93	0.94	0.90

6.3 Algorithm 2 Results

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

No. of Images	kNN				Decision tree			
	Precision	Recall	Accuracy	F score	Precision	Recall	Accuracy	F score
1	0.80	1.00	0.97	0.89	0.75	0.75	0.93	0.75
2	1.00	1.00	1.00	1.00	0.90	1.00	0.96	0.95
3	1.00	0.95	0.98	0.97	0.86	0.95	0.92	0.90
4	1.00	1.00	1.00	1.00	0.84	1.00	0.95	0.91
5	0.96	0.96	0.96	0.96	0.92	1.00	0.98	0.94
6	1.00	1.00	1.00	1.00	0.93	0.96	0.94	0.95
7	1.00	0.93	0.98	0.96	0.93	0.93	0.95	0.93
8	1.00	0.84	0.92	0.91	0.96	0.83	0.90	0.89
9	1.00	0.95	0.98	0.97	0.95	0.95	0.97	0.95
10	0.96	1.00	0.98	0.98	0.82	0.88	0.85	0.85
Average	0.97	0.96	0.98	0.96	0.87	0.93	0.94	0.90

6.4 Comparative Analysis

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

No. of Images	kNN				Decision tree			
	Precision	Recall	Accuracy	F score	Precision	Recall	Accuracy	F score
1	0.80	1.00	0.97	0.89	0.75	0.75	0.93	0.75
2	1.00	1.00	1.00	1.00	0.90	1.00	0.96	0.95
3	1.00	0.95	0.98	0.97	0.86	0.95	0.92	0.90
4	1.00	1.00	1.00	1.00	0.84	1.00	0.95	0.91
5	0.96	0.96	0.96	0.96	0.92	1.00	0.98	0.94
6	1.00	1.00	1.00	1.00	0.93	0.96	0.94	0.95
7	1.00	0.93	0.98	0.96	0.93	0.93	0.95	0.93
8	1.00	0.84	0.92	0.91	0.96	0.83	0.90	0.89
9	1.00	0.95	0.98	0.97	0.95	0.95	0.97	0.95
10	0.96	1.00	0.98	0.98	0.82	0.88	0.85	0.85
Average	0.97	0.96	0.98	0.96	0.87	0.93	0.94	0.90

6.5 Chapter Summary

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Chapter 7

Implementation

7.1 Introduction

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7.2 User Interface (UI) Design

Explain here the following user interface

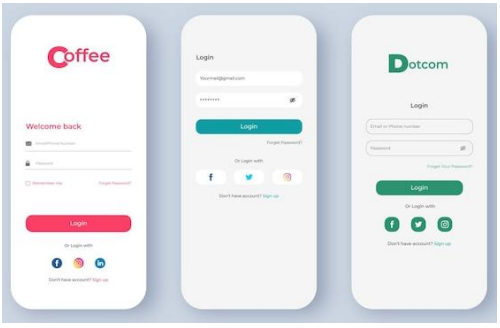

Figure 1 sign up and sign in interface

Explain here the following user interface

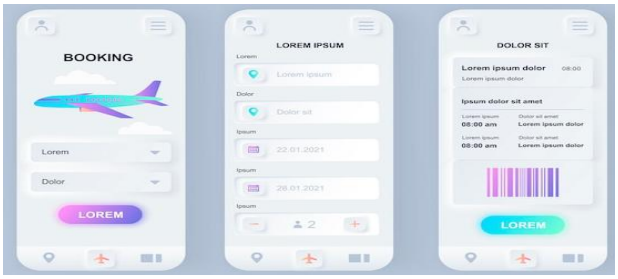

Figure 2 Booking Interface

7.3 Security Considerations

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7.4 Integration of External Systems

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7.4 Chapter Summary

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Chapter 8

Conclusion

8.1 Introduction

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8.2 Conclusion

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

8.3 Contribution / Novelty

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

8.4 Contribution towards Industry

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

8.5 Future Directions

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8.6 Chapter Summary

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REFERENCES

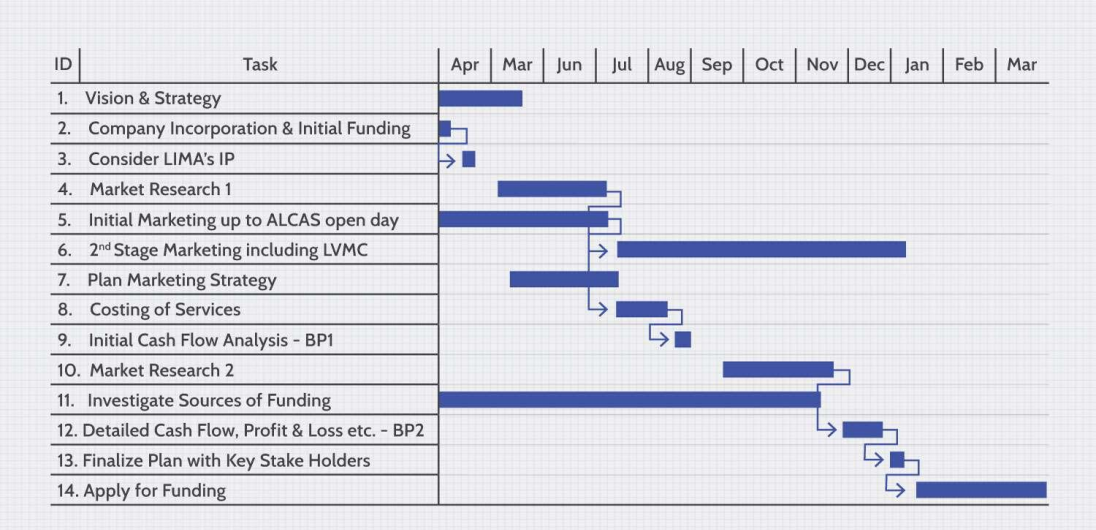
[4] "Face Recognition Technology on ATMs & More | Wuxi City Guide", Wuxicityguide.com, 2019. [Image]. Available: http://www.wuxicityguide.com/2019/face-recognition-technology-on-atms-more/. [Accessed: 18-May-2019].

[5] "Advantages and Disadvantages of Python Programming Language", Medium, 2019. [Online]. Available: https://medium.com/@mindfiresolutions.usa/advantages-and-disadvantages-of-python-programming-language-fd0b394f2121. [Accessed: 20-May-2019].

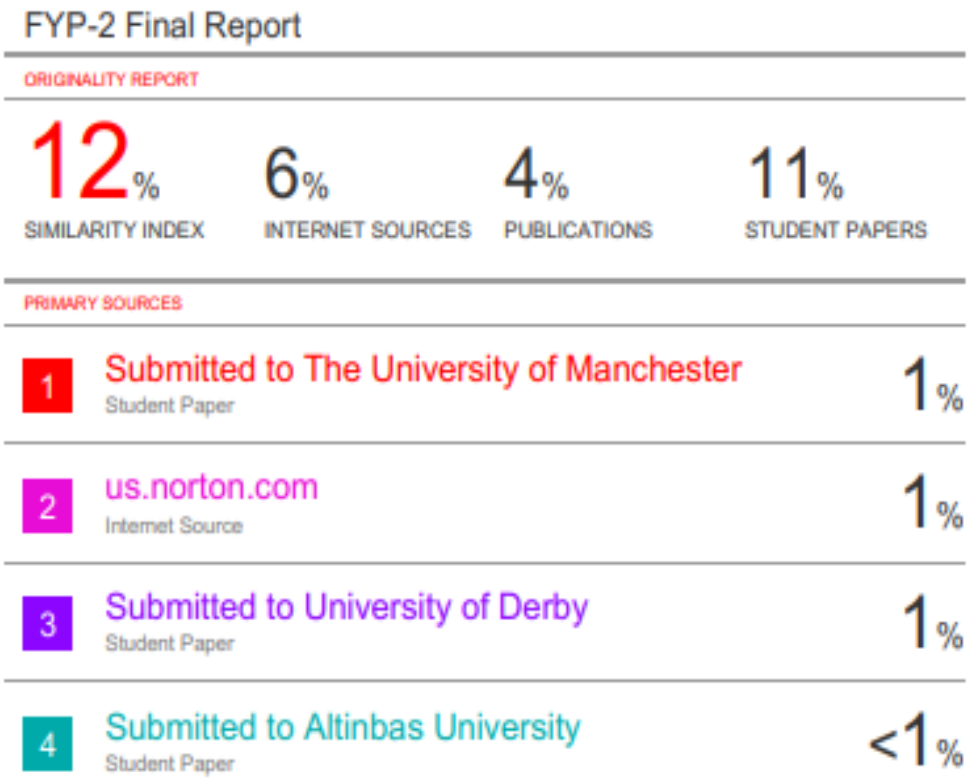
[6] M. Roux, "Face Recognition vs Face Detection: What's the difference?", *Sightcorp*, 2019. [Online]. Available: https://sightcorp.com/blog/face-recognition-vs-face-detection-whats-the-difference/. [Accessed: 25-Mar-2019].

APPENDICES

Appendix A: Gantt Chart



Appendix B: Turnitin Plagiarism Report



FYP-2 Final Report

ORIGINALITY REPORT

12%	6%	4%	11%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to The University of Manchester Student Paper	1%
2	us.norton.com Internet Source	1%
3	Submitted to University of Derby Student Paper	1%
4	Submitted to Altinbas University Student Paper	<1%

RUBRICS FOR FYP-II MIDTERM EVALUATION FORM

Criteria	Excellent (>=90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1 **System Development Progress / Results** **GA-4 *(out of 5)***	The project is in execution phase with complete achievement of the objectives approved till mid.	The project is in development phase with achievement of the objectives approved till mid.	The project is in design phase with moderate achievement of the objectives approved till mid.	The project is in initial phase and student fail to achieve the objectives approved till mid.
C2 **Use of Modern & Appropriate Tool** **GA-5 *(out of 2)***	Effectively utilizes modern and appropriate tools to enhance project development, demonstrating a deep understanding of their usage.	Uses modern tools appropriately but lacks full utilization or optimization for project development.	Uses some modern tools but with limited effectiveness and understanding.	Fails to use or apply modern tools appropriately, showing little to no understanding of their relevance.
C3 **Presentation and Viva** **GA-7 *(out of 3)***	Present clearly with confidence while maintaining presentation flow. The student listens carefully and answers questions easily and directly.	Lacks in confidence while maintaining presentation flow. The student is able to answer questions about the project.	Lacks in confidence and presentation flow. The student attempts to answer questions about the project but clearly doesn't really understand	Lacks in confidence and presentation flow, and inefficient use of Visual aids. The student is unable to answer questions about the project.

FYP-II Midterm Evaluation Form

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	Description of Criteria	GAs	STD MARKS (OUT OF 30) STD 1	STD 2	STD 3	STD 4
C1	System Development Progress / Result **(out of 5)**	GA-4				
C2	Use of Modern & Approval Tools **(out of 2)**	GA-5				
C3	Presentation & Viva **(out of 3)**	GA-7				
	Total Marks					

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

RUBRICS FOR FYP-II FINAL (INTERNAL EVALUATION FORM)

Criteria	Excellent (≥90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1: Significant Industry, Social, or Local Problem Addressed in Project (GA-8) (out of 5)	The project addresses a highly relevant and impactful problem with clear industry, social, or local significance.	The project addresses a relevant problem with moderate impact but lacks depth in significance.	The project addresses a problem with limited impact and relevance, requiring further justification.	The project does not adequately address an industry, social, or local problem, with little to no relevance.
C2: System Implementation (GA-4) (out of 5)	The system is fully implemented, functional, and meets all specified requirements with high efficiency.	The system is mostly implemented with minor missing functionalities or inefficiencies.	The system is partially implemented with several missing components or inefficiencies.	The system is poorly implemented, largely incomplete, or non-functional.
C3: End Product Quality (GA-9) (out of 5)	The final product is well-developed, robust, and meets all quality standards with excellent performance.	The final product meets most quality standards but has some minor flaws.	The final product is functional but has noticeable quality issues affecting performance.	The final product is poorly developed with significant flaws or fails to meet basic quality standards.
C4: Reflection and Continuous Improvement (GA-10) (out of 5)	Demonstrates strong reflection on the project, identifying key lessons learned and continuous improvement strategies.	Shows good reflection but lacks depth in identifying improvements.	Provides limited reflection with only basic insights into improvements.	Little to no reflection on project learnings or improvement strategies.
C5: Report Submission (GA-7) (out of 5)	The report is well-structured, detailed, and professionally written, covering all necessary aspects comprehensively.	The report is well-structured but lacks depth in some areas.	The report is incomplete or lacks proper structuring and clarity.	The report is poorly written, missing critical sections, or lacks coherence.
C6: Presentation + Viva (GA-7) (out of 5)	Presents clearly with confidence, structured flow, and effectively answers all questions with in-depth understanding.	Presents well but lacks confidence or has minor issues in clarity and question responses.	Struggles with presentation flow and confidence, providing weak or unclear answers.	Poor presentation with lack of confidence, clarity, and inability to answer questions effectively.

FYP-II Final Evaluation Form (Internal)

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	Description of Criteria	GAs	STD MARKS (OUT OF 30) STD 1	STD 2	STD 3	STD 4
C1	Significant industry, social, or local problem addressed in project **(out of 5)**	GA-8				
C2	System Implementation **(out of 5)**	GA-4				
C3	End Product Quality **(out of 5)**	GA-9				
C4	Reflection and continuous improvement **(out of 5)**	GA-10				
C5	Report Submission **(out of 5)**	GA-7				
C6	Presentation + Viva **(out of 5)**	GA-7				
		Total Marks				

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

RUBRICS FOR FYP-II FINAL (EXTERNAL EVALUATION FORM)

Criteria	Excellent (≥90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1: Significant Industry, Social, or Local Problem Addressed in Project (GA-8) (out of 5)	The project addresses a highly relevant and impactful problem with clear industry, social, or local significance.	The project addresses a relevant problem with moderate impact but lacks depth in significance.	The project addresses a problem with limited impact and relevance, requiring further justification.	The project does not adequately address an industry, social, or local problem, with little to no relevance.
C2: System Implementation (GA-4) (out of 10)	The system is fully implemented, functional, and meets all specified requirements with high efficiency.	The system is mostly implemented with minor missing functionalities or inefficiencies.	The system is partially implemented with several missing components or inefficiencies.	The system is poorly implemented, largely incomplete, or non-functional.
C3: End Product Quality (GA-9) (out of 5)	The final product is well-developed, robust, and meets all quality standards with excellent performance.	The final product meets most quality standards but has some minor flaws.	The final product is functional but has noticeable quality issues affecting performance.	The final product is poorly developed with significant flaws or fails to meet basic quality standards.
C4: Reflection and Continuous Improvement (GA-10) (out of 5)	Demonstrates strong reflection on the project, identifying key lessons learned and continuous improvement strategies.	Shows good reflection but lacks depth in identifying improvements.	Provides limited reflection with only basic insights into improvements.	Little to no reflection on project learnings or improvement strategies.
C5: Report Submission (GA-7) (out of 10)	The report is well-structured, detailed, and professionally written, covering all necessary aspects comprehensively.	The report is well-structured but lacks depth in some areas.	The report is incomplete or lacks proper structuring and clarity.	The report is poorly written, missing critical sections, or lacks coherence.
C6: Presentation + Viva (GA-7) (out of 5)	Presents clearly with confidence, structured flow, and effectively answers all questions with in-depth understanding.	Presents well but lacks confidence or has minor issues in clarity and question responses.	Struggles with presentation flow and confidence, providing weak or unclear answers.	Poor presentation with lack of confidence, clarity, and inability to answer questions effectively.

FYP-II Final Evaluation Form (External)

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	Description of Criteria	GAs	STD MARKS (OUT OF 30) STD 1	STD 2	STD 3	STD 4
C1	Significant industry, social, or local problem addressed in project **(out of 5)**	GA-8				
C2	System Implementation **(out of 10)**	GA-4				
C3	End Product Quality **(out of 5)**	GA-9				
C4	Reflection and continuous improvement **(out of 5)**	GA-10				
C5	Report Submission **(out of 10)**	GA-7				
C6	Presentation + Viva **(out of 5)**	GA-7				
		Total Marks				

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**

RUBRICS FOR FYP-II SUPERVISOR EVALUATION FORM

Criteria	Excellent (≥90%)	Good (70-89%)	Fair (50-69%)	Poor (<50%)
C1: Modern tools and technologies usage GA-5 (out of 5)	Demonstrates exceptional proficiency in using advanced tools and technologies relevant to the project; seamlessly integrates modern techniques.	Effectively utilizes modern tools and technologies with minor gaps in implementation.	Uses basic tools and technologies but struggles with integration or efficiency.	Limited or ineffective use of modern tools and technologies, significantly impacting project quality.
C2: Identification of potential social impacts of the project GA-8 (out of 5)	Provides a comprehensive analysis of the social implications of the project, including both positive and negative impacts, with well-supported recommendations.	Identifies key social impacts with moderate depth and provides reasonable recommendations.	Recognizes some social impacts but lacks depth or supporting evidence.	Fails to identify or discuss the social impacts of the project meaningfully.
C3: Adheres to ethical standards throughout the project GA-9 (out of 5)	Demonstrates exemplary adherence to ethical standards, including transparency, integrity, and responsibility in all project phases.	Maintains ethical standards with minor lapses; generally follows best practices.	Shows awareness of ethical standards but inconsistencies exist in application.	Ethical considerations are neglected or violated.
C4: Application of Core principles in the field GA-10 (out of 5)	Expertly applies fundamental principles of the field with strong reasoning and precision; demonstrates deep understanding.	Applies core principles correctly, with occasional minor errors or gaps in reasoning.	Shows basic understanding of core principles but struggles with application or consistency.	Fails to apply fundamental principles effectively, demonstrating weak understanding.

FYP-II Supervisor Evaluation Form

Project Title	
Supervisor	
Group Members (Name & ID)	1.
	2.
	3.
	4.

Criteria	**Description of Criteria**	**GAs**	**STD MARKS (out of 20)** **STD 1**	**STD 2**	**STD 3**	**STD 4**
C1	Modern tools and technologies usage **(out of 5)**	GA-5				
C2	Identification of potential social impacts of the project **(out of 5)**	GA-8				
C3	Adheres to ethical standards throughout the project **(out of 5)**	GA-9				
C4	Application of Core principles in the field **(out of 5)**	GA-10				
		Total Marks				

Comments / Suggestions to Improve

1. _____
2. _____
3. _____
4. _____
5. _____

_____ _____ _____

Evaluator Name and Signature **FYP Coordinator Signature** **HOD Signature and Stamp**