

Final Year Projects

Guidelines and Policy

Version 1.4



Department of Computer Science

University of Engineering and Technology Lahore

Revision History

Compiled By	Date	Reason for Changes	Version
Mr. Samyan Qayyum Wahla	Dec 10, 2017	Initial Document	1.0
All members	May 11, 2018	Rubrics of FYP added	1.1
All members	September 18, 2018	Evaluation Criteria Updated	1.2
All members	November 20, 2018	Templates Added	1.3
Mr. Samyan Qayyum Wahla	September 16, 2019	Policy Flowchart	1.4

Table of Contents

1	Introduction.....	4
2	Overview of Final Year Project.....	4
3	FYP milestones and evaluation stages.....	4
3.1	Ideas Compilation.....	5
3.2	Idea Selection.....	6
3.3	Enrollment for the Internship Program.....	6
3.4	Feasibility Study	6
3.5	Requirement Engineering/Analysis	7
3.6	Evaluation 1	7
3.7	Project Design/Partial Development.....	7
3.8	Evaluation 2/ Initial Demonstration.....	7
3.9	Complete Development	7
3.10	Evaluation 3/ Project Demonstration.....	7
3.11	Industrial Open House	8
3.12	Deployment/ KPI fulfill	8
3.13	Evaluation 4/Project Expo	8
3.14	Thesis Submission	8
4	Guidelines for Project Supervision.....	8
4.1	Tasks expected from supervisors.....	8
5	Team Leadership:	9
6	Students Responsibility:	9
7	Late submissions:.....	9
8	Plagiarism:	9

1 Introduction

The Final Year Project (FYP) in Department of Computer Science UET Lahore 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 and align their course of studies with the industry demanded technologies. 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 from 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 Overview of Final Year Project

A Final Year Project is a two-semester course in which students usually of 3-4 members select a project and are supervised by a project advisory board. 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 pass through set of evaluation during the Final Year Project Course.

3 FYP milestones and evaluation stages

The FYP milestones, deliverables, evaluation stages along with their timelines are given below.

Table I FYP Milestones

Milestone	Timeline
Ideas Compilation	Before Summer
Idea Selection	Before Summer
Enrollment in Internship Program	Summer
Feasibility Study	Fall Semester
Requirement Engineering/Analysis	Fall Semester
Evaluation 1	Mid Fall Semester
Project Design/Partial Development	Fall Semester
Evaluation 2/ Initial Demonstration	End of Fall Semester
Complete Development	Spring Semester
Evaluation 3/ Project Demonstration	Mid Spring Semester
Industrial Open House	Mid Spring Semester

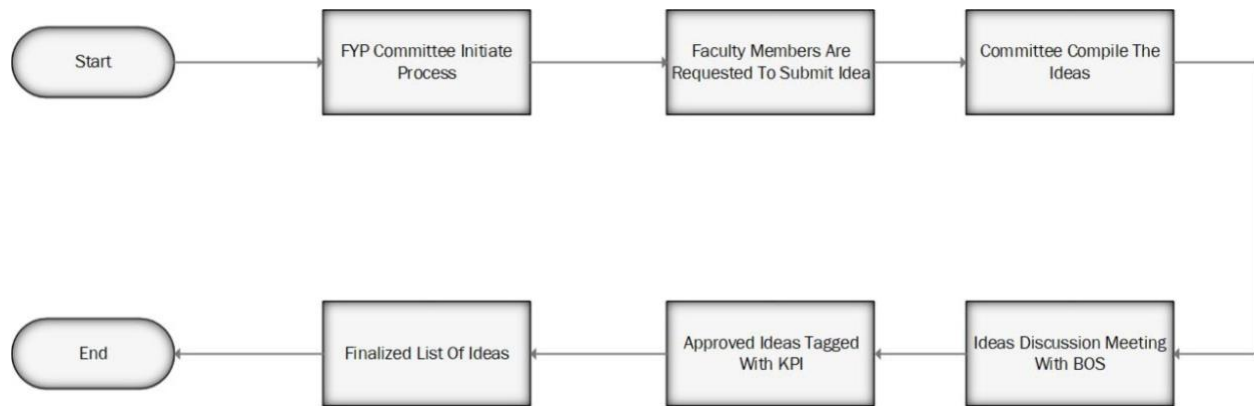


Figure 2 Idea Compilation Policy

3.2 Idea Selection

Students form a group of 3-4 student and apply for the project idea from the final list of ideas. Multiple groups can apply on same idea. Project advisor interviews the applying students and award the idea to one group. Not selected groups apply for another idea.

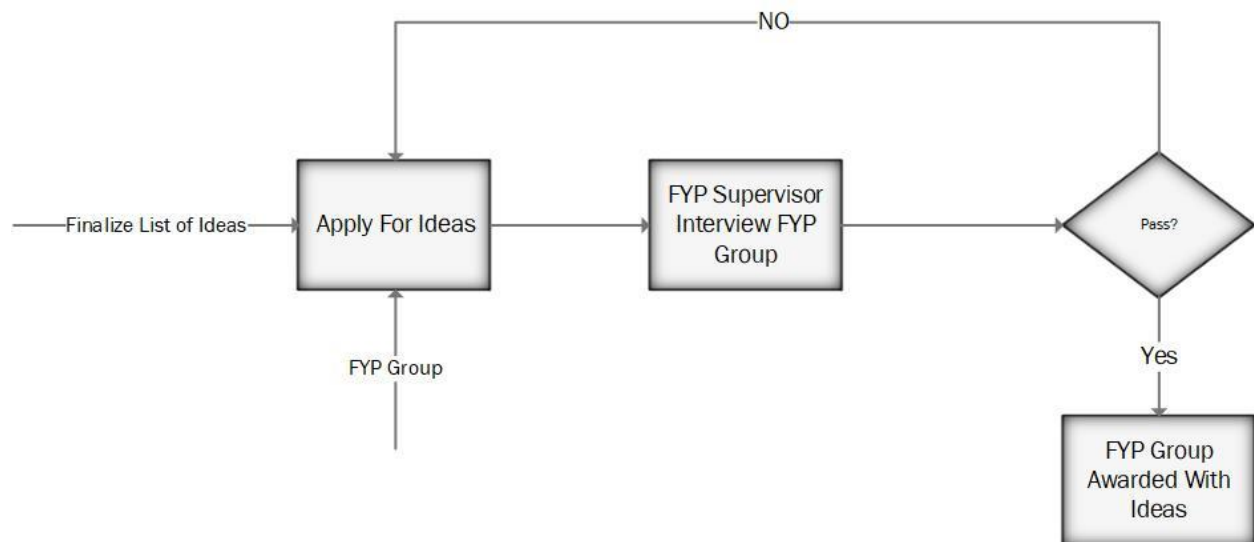


Figure 3 Idea Selection Policy

3.3 Enrollment for the Internship Program

It is compulsory for the students to enroll in internship program during summer for at least 6 weeks so that student can learn state of art technologies being applied in the industry. Without completion of internship, student cannot enroll for FYP.

3.4 Feasibility Study

Students perform feasibility study of the selected idea to determine whether selected idea is financially, technically and operationally feasible or not. If the idea is not feasible, students have to select another idea. In case the idea is feasible, students submit the final feasibility report. Template of feasibility report is given in the appendix.

3.5 Requirement Engineering/Analysis

After the completion of feasibility report, student perform detailed requirement analysis and submit SRS to FYP committee after the verification of advisor. Template of requirement engineering is given in the appendix.

3.6 Evaluation 1

During the Fall semester, panel of 2-3 faculty members evaluates the project. Students are required to present their project feasibility and requirement analysis. Panel communicates feedback to project committee. Students are required to incorporate feedback before next milestone. Evaluation form is available in appendix.

Marking Criteria for evaluation 1 is as follow:

- Feasibility Study Document 50%
- Group Effort and Presentation(Style, format, formalization, presentation template) 25%
- Idea Complexity, Market Surveys 25%
- Demonstration (Extra marks based on work)

3.7 Project Design/Partial Development

During this milestone, students prepare the software design of their final year project. Students learn best practices of software design during FYP course and submit design document to FYP committee after approval of their advisor.

3.8 Evaluation 2/ Initial Demonstration

During the Fall semester, panel of 2-3 faculty members evaluates the design of project with basic demonstration. Students are required to present their design document. Panel communicates feedback to project committee. Students are required to incorporate feedback before next milestone. Evaluation form is available in appendix.

Marking criteria for the evaluation 2 is as following:

- Design Document 30%
- Group Effort and Presentation(Style, format, formalization, presentation template) 15%
- Commercialization & Research Work 15%
- Demonstration 40%

3.9 Complete Development

During this milestone, students complete the development of their project using state of art technologies which is aligned with their design and requirement analysis.

3.10 Evaluation 3/ Project Demonstration

During the Spring semester, panel of 2-3 faculty members evaluates the demonstration of project. Students are required to present their complete demonstration. Panel communicates feedback to project committee. Students are required to incorporate feedback before next milestone. Evaluation form is available in appendix.

3.11 Industrial Open House

Open house is arranged for exhibition of final year projects. Most of the people from industry visits FYP stalls.

3.12 Deployment/ KPI fulfill

During the idea compilation, each FYP project is assigned a KPI that students have to fulfill for the completion of project. These KPIs depend on the nature of project that may be entrepreneurship, commercialization and R&D.

3.13 Evaluation 4/Project Expo

Each year, Department of Computer Science organize ITEC, in which students present exhibit their FYPs, judges are allocated to each FYP group. Evaluation forms are available in Appendix.

3.14 Thesis Submission

Final Report/ Thesis is submitted at the end of project. Template of project thesis is available on www.cse.uet.edu.pk and also attached in appendix.

4 Guidelines for Project Supervision

Following rules should be taken under considerations during project supervision.

- Each group will work under the supervision of an assigned supervisor throughout the final year project
- Each advisor can supervise maximum 4 FYP groups.
- 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.
- Supervisors might also arrange communication with student groups via email or other means for the purpose of advising project groups.
- It is the responsibility of the supervisor to inform his students with this handbook and all the included instructions and regulations.

4.1 Tasks expected from supervisors

During these meetings supervisors are expected to:

- To provide FYP Outlines / Objectives
- Discuss project expectations and the plan with the group
- To share previous practice experience, research, skills and expertise
- Assign /Recommend related literature
- Give training sessions on the respective research area and tell them what they need to know
- To clarify students queries effectively as needed
- To make students aware of professional ethics and standards
- To advise students on how to deal effectively as a team while working under pressure, remaining optimistic and persistent, and how to meet milestone deadlines
- To monitor the project progress on a weekly/fortnightly basis

- To ensure students are completing outlined project deliverables
- To grade students work (at individual/group level) at the end of each semester

5 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. To help students develop leadership qualities, each student is given opportunity to be team lead. Team leader should work very closely with the supervisor with the following, but not limited to, the primary tasks:

- Provide input on the performance of team members
- Resolve any conflicts within group members and maintain healthy group dynamics
- Inform supervisor of any task delays and meeting hours change requests from students
- Ensure rest of the group understands their roles and responsibilities on the assigned tasks;
- Coordinate with internal or external project stakeholders on behalf of the team
- 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.

6 Students Responsibility:

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

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

7 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.

8 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.

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.