

Student's Perception on Completing the Final Year Project on the Starting Phase

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ABSTRACT. Final Year Project (FYP) is a compulsory course to be taken by Diploma programme students in Polytechnic. This course undoubtedly will give knowledge and experience to reinforce their problem-solving and research skills. However, the students might have issues related to the course and has no platform to discourse their concern. Therefore, our research will study on student's perception and issues regarding final year project. A questionnaire is being distributed to the students based on the questions related to final year project phases and also their interest and knowledge. It is hoped that from the study, recommendations from the findings would improve the running of this course on the next semester.

KEYWORDS: Final Year Project (FYP), student's issues, student's perception.

INTRODUCTION

Background of the Study

The Final Year Project (FYP) is a compulsory course for students of the Information Technology (Digital Technology) Track Networking System Diploma program. By following the DFT50114 Integrated Project course, students will be provided with the experience of how to develop a project. They will be involved with various phases of development according to the guidelines that have been set. From the analysis phase, students will study each system development requirement with the various methods that have been taught.

The selection of the FYP title is critical because it will determine the direction of the selected project. The first step to implementing a good FYP project is to choose the right topic. At the initial stage, students are often seen as inexperienced and unable to find the most relevant and useful research papers on their research topic.

Student project development requirements require students to be knowledgeable, skilled, knowledgeable and innovative in implementing final year projects (FYP). So, this study was carried out to identify the issues and problems faced by students in preparation for the Final Year Project (FYP).

Problem Statement

The Final Year Project (FYP) is a tough course and requires a lot of problem-solving skills and research skills. Most students have their own perception and issues related to the course. They might talk to their supervisor in charge however, there is no centralised platform to discourse the issues. Therefore, this study will study on student's perception and issues regarding final year project.

Research Objective

This study aims to identify the issues and problems faced by students in preparation for the Final Year Project. The objectives of the study are:

1. To investigate on student's perception related to FYP.
2. To identify on student's issues related to FYP.

METHODOLOGY

Questionnaire

A questionnaire is distributed to 40 students of the Information Technology (Digital Technology) Track Networking System Diploma program. The questions contain 3 components which are component 1 that is related to preparation of proposal paper, component 2 is related to project development and lastly component 3 related to project presentation. Each phase in the Final year project is included in the questions to ensure that this study has covered all the phases. From 40 questionnaires distributed, we have gathered 35 feedbacks. The feedbacks are being analysed and the findings are being documented.

LITERATURE REVIEW

This section discusses past studies related to issues in developing final year projects. This literature review focuses on previous studies from polytechnics and higher education institutions that offer courses for final year projects. Where FYP is part of a course or module that must be taken for a graduate in all fields including computer science where the assessment is the most critical [2][3].

This final year project aims to enable students to combine and use almost all core modules or courses they have learned throughout their study session as undergraduates. [3]

The goal of the final year project (FYP) for an Information Technology (Digital Technology) Track Networking System student at the polytechnic is to enable students to combine and use almost all modules or main courses that have been learned throughout their studies. Therefore, students need to focus and emphasize more on FYP because it is a very important assessment. The string, the selection of the FYP title is something critical because it will determine the direction of the selected project. The first step to implementing a good PA project is to choose the right topic. At the initial stage, students (FYP) are often seen as inexperienced and unable to find the most relevant and useful research papers on their research topic [1].

The results of the study [1] show that the title under the Information system category is the most popular chosen by students as an FYP topic compared to the least amount of courseware. The selection of the titles still follows the current trend in Malaysia. Students are also encouraged to follow the current of technology in making the selection of titles so as to remain relevant for the future.

Technology helps a lot in improving the quality of learning and introducing digital learning activities. [4] The Internet of Things (IoT) is an introduced technology that brings together several technologies such as wireless communication, the internet, internal systems and microelectromechanical systems (MEMS) [5]. The combination of network technology, automation such as smart home, flood detection and so on will contribute to the widespread use of IoT and have an impact on human needs.

As a result of the discussion that has been done, the students are ready to use IoT in the development of the students' final project but the course is not offered to the students. However, students are ready to explore the knowledge theoretically and practically. However, students are still not confident to complete the project within the set time. [4]

To overcome the problem, perhaps the project supervisor can play a role as a student guide in completing their FYP. [6] This is because the project supervisor's commitment is necessary and has great potential in changing the attitude and status of students towards a curriculum. The Polytechnic also plays an important role in providing the latest courses according to current technology trends.

RESEARCH FINDINGS

This study is carried out to identify the issues and problems faced by students of the Information Technology (Digital Technology) Track Networking System Diploma program in preparing students to carry out the Final Year Project (FYP). This study is divided into 3 sub-components which are the process of preparing the proposal paper, project development and the project presentation process. This study involves a total of 40 respondents who are currently taking the DFT50114 Integrated Project course. Out of 40 respondents, 35 respondents have given their feedback. The following are the findings from the research that has been carried out:

COMPONENT 1: Preparation of proposal paper.

- i) I will have no difficulty in choosing a suitable title for the Final Year Project.

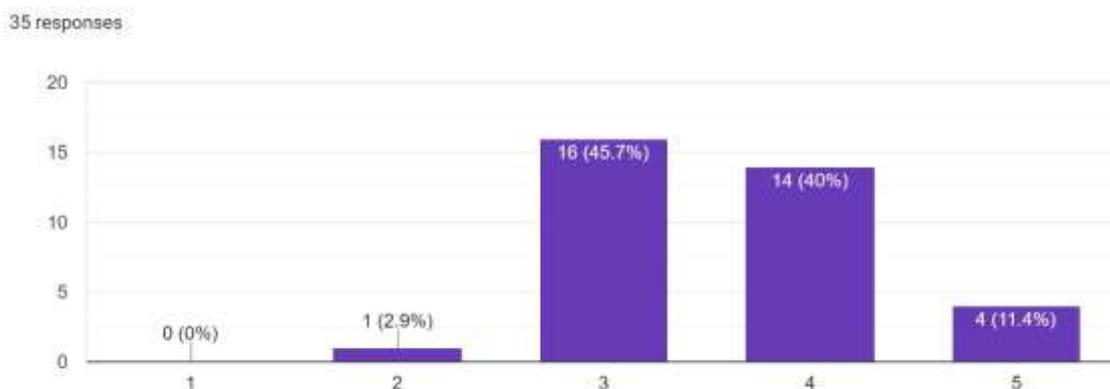


FIGURE 1. The difficulty of selecting a title

Figure 1 shows that 45.7% agree and 2.9% disagree and make a total of 48.6% respondents disagree stating that they will not face difficulties in selecting the appropriate title for their Final Year Project. While 51.4% agreed that they did not face difficulties in the selection of FYP titles. Most of the titles that have been rejected are titles that have been implemented in previous semesters.

- ii) I will have no difficulty in getting motivated to carry out the Final Year Project.

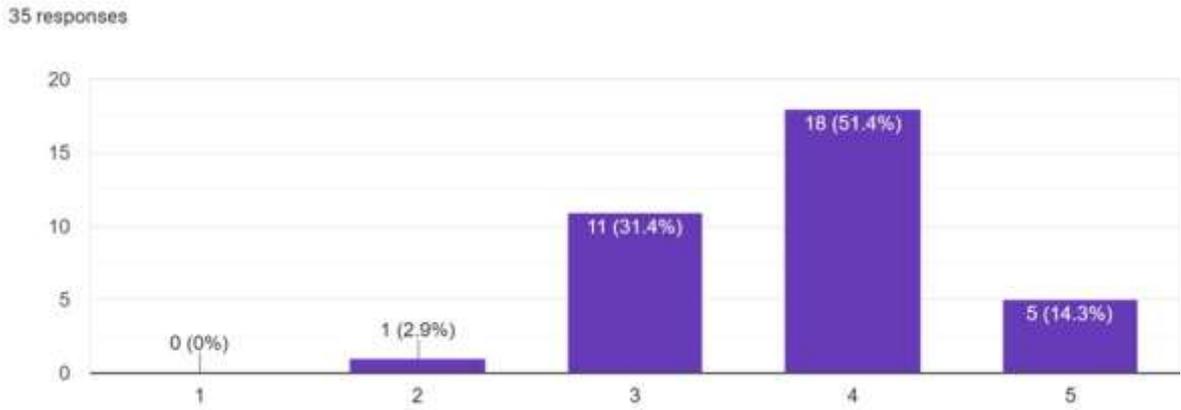


FIGURE 2. Difficulty getting motivation

Figure 2 shows that 65% of respondents do not face difficulties in getting motivated to implement PYP. While another 34.3% have problems getting motivated to implement the FYP.

iii) I will have no difficulty in finding objectives for the implementation of the Final Year Project.

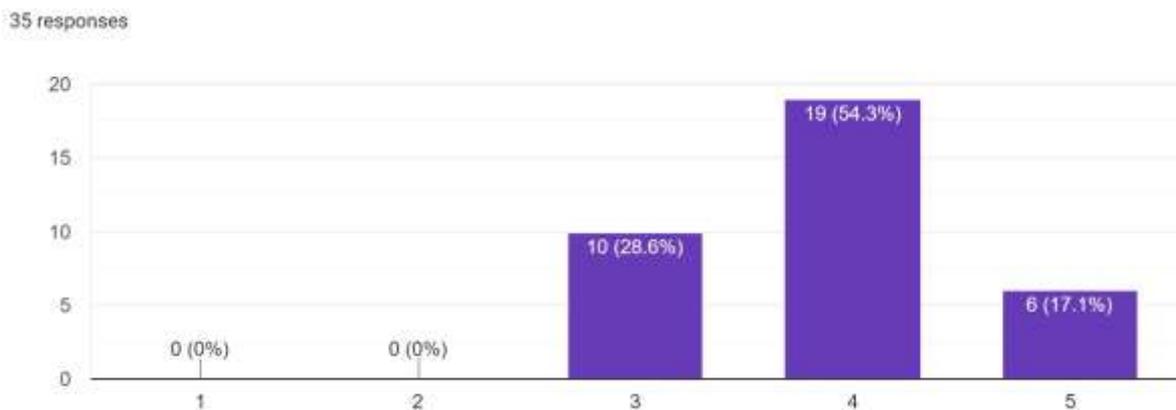


FIGURE 3. Difficulty finding the objective

Figure 3 shows that many respondents equal to 71.4% do not face difficulties in finding objectives to implement PFY. While 28.6% have problems in finding objectives for their FYP.

iv) I will have no difficulty in finding a methodology for the implementation of the Final Year Project.

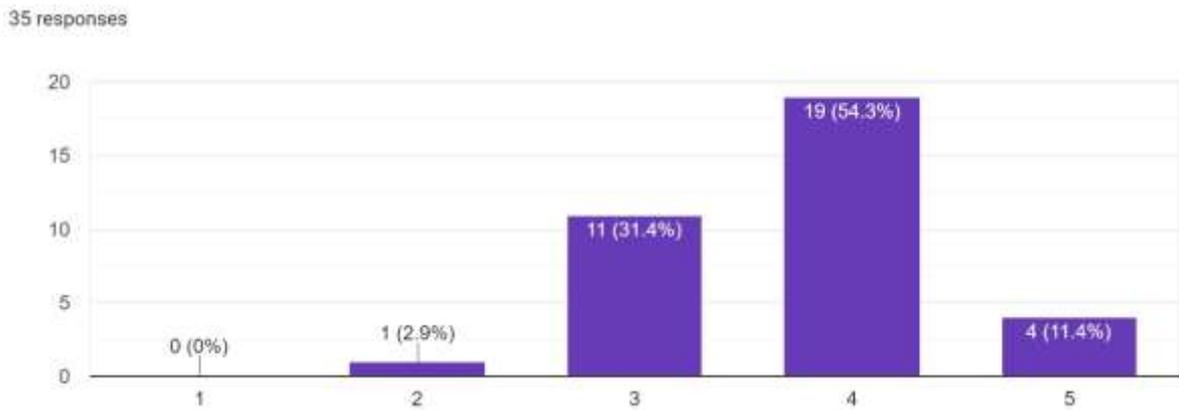


FIGURE 4. Difficulty finding methodology

Figure 4 shows that 65% of respondents had no difficulty in finding a methodological model as a guide to develop their FYP project. While 34.3% face difficulties in obtaining the appropriate methodology.

v) I will have no difficulty in writing the Final Year Project proposal paper.

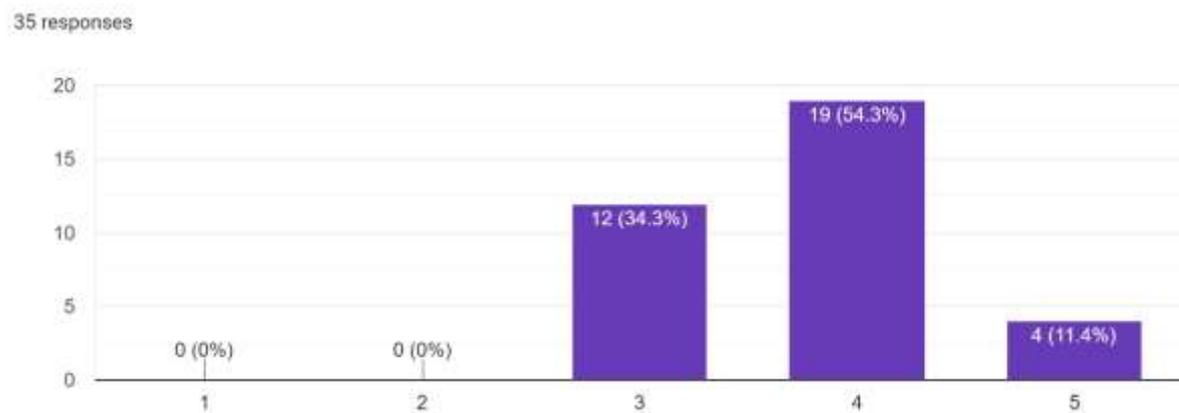


FIGURE 5. Difficulty writing a proposal paper

Figure 5 shows students' difficulty in writing a proposal paper for FYP. A large number of 67.7% did not face difficulties in writing the proposal paper. While 34.3% of respondents stated that it was difficult to write their proposal paper.

COMPONENT 2: Project Development

i) I am interested in developing a project in the field of Network Security.

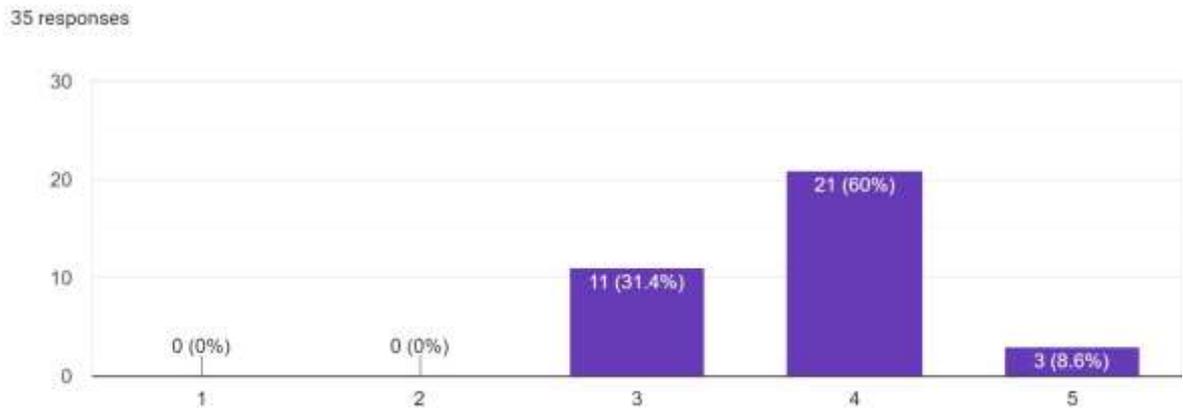


FIGURE 6. Interest in network security

Figure 6 shows that 68.6% of students are interested in developing their PYP in the field of network security and 31.4% are not interested in this field.

ii) I am interested in developing a project for the field of Network Design.

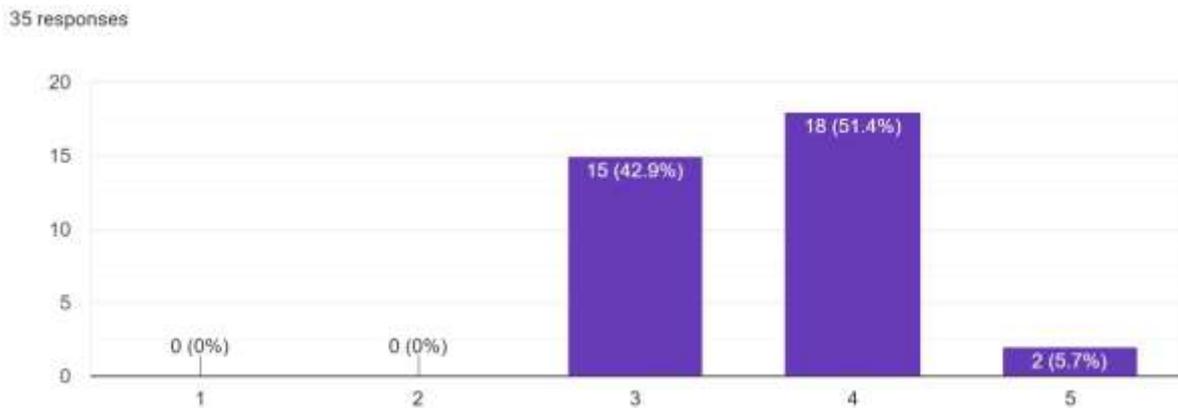


FIGURE 7. Interest in network design

Figure 7 shows students' interest in developing projects in the field of network design. 57.1% of respondents are interested in developing projects in the field of network design. While 42.9% are not interested in developing FYP in the field of network design.

iii) I am interested in developing projects for the Internet of Things (IOT) field:

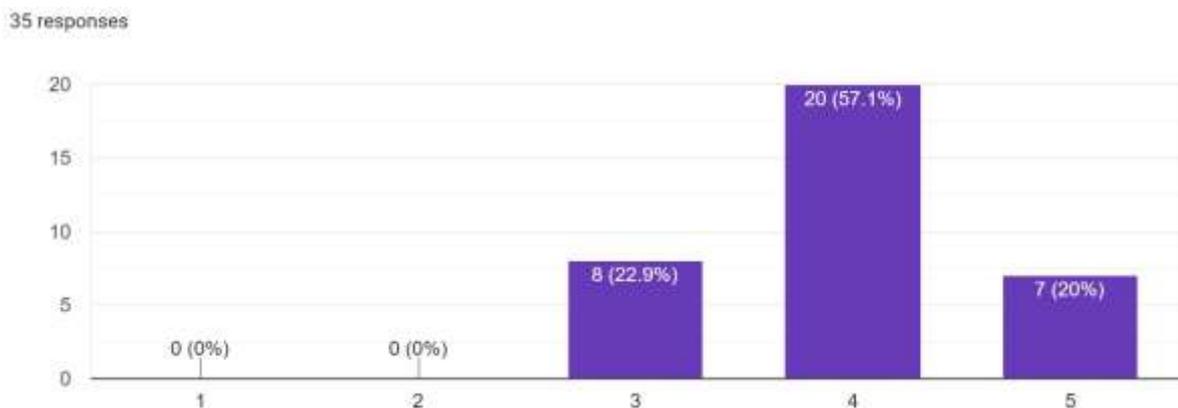


FIGURE 8. Interest in IOT

Figure 8 shows that 75.1% of respondents are interested in developing projects in the field of Internet of Things. While 22.9% less agree to develop projects in the field of IOT.

iv) I am interested in developing projects that emphasize data security.

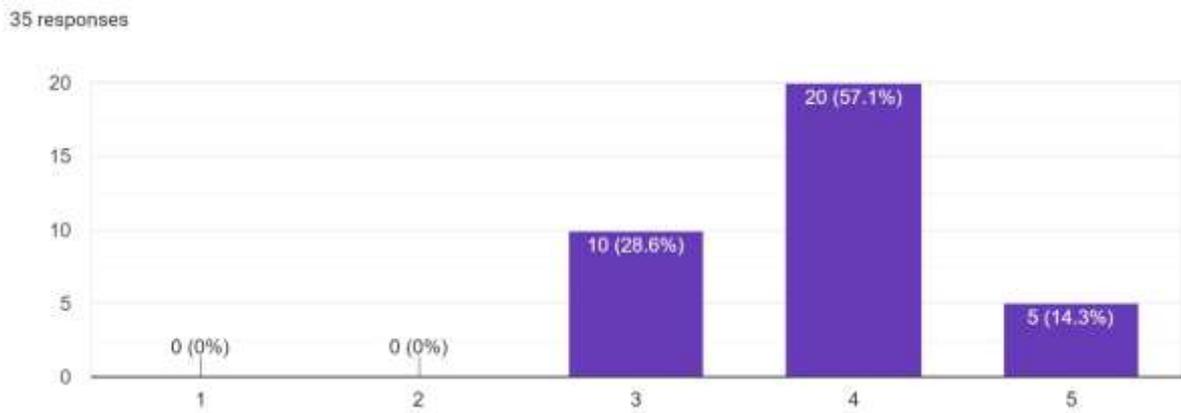


FIGURE 9. Interest in data security

Figure 9 shows that a large number of 71.4% of respondents agree and are interested in developing projects that emphasize data security. While another 28.9% less agree to emphasize data security.

v) I am interested in developing a system that requires me to learn a new programming language.

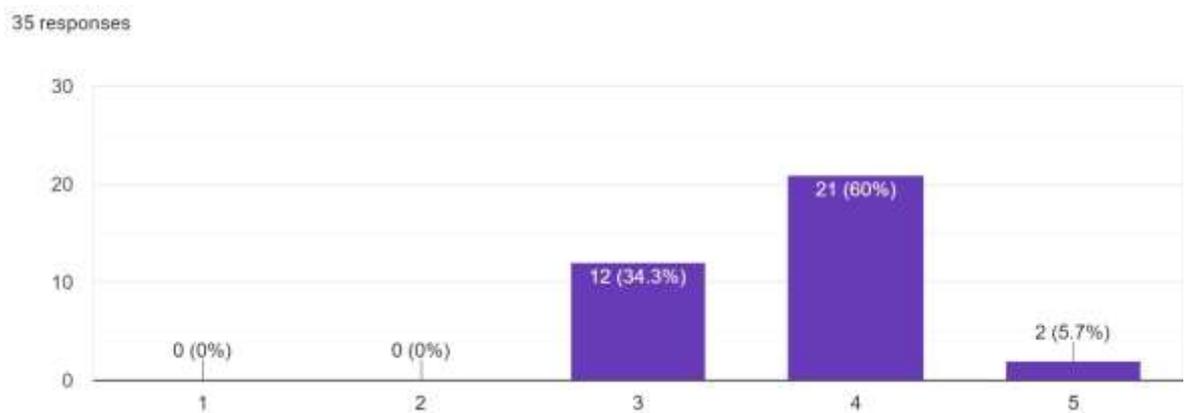


FIGURE 10. Interest in learning a new programming language

Figure 10 shows students' interest in developing a system that requires them to learn a new programming language. A total of 65.7% of respondents agreed to learn a new programming language to develop their FYP. While 34.3% of respondents less agree to learn a new programming language to develop their project.

vi) I am interested in developing a project that is integrated with a database.

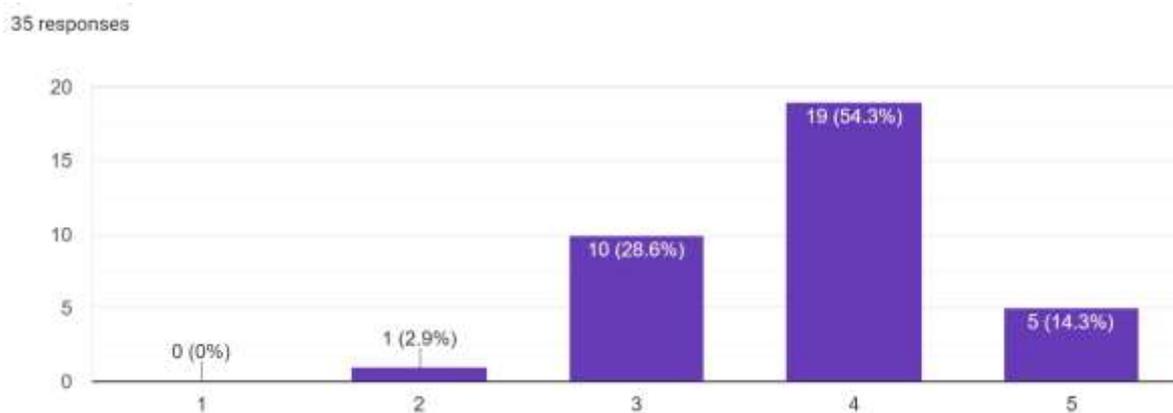


FIGURE 11. Interest to integrate with the database

Figure 11 shows the respondents' interest in developing a project that is integrated with the database. A total of 68.6% of respondents are interested in developing a project that is integrated with a database. While 28.6% less agree and 2.9% disagree to develop a project that is integrated with the database.

vii) I have the skills to develop projects in the field of Network Security.

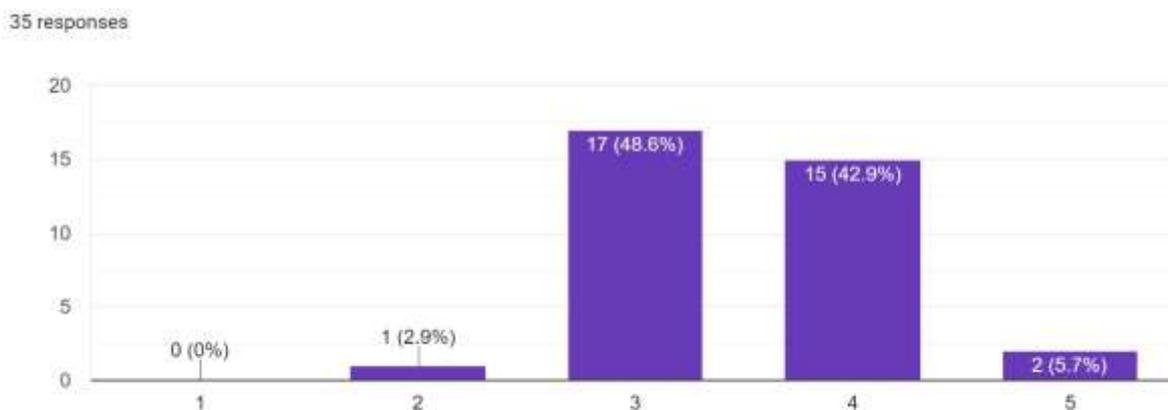


FIGURE 12. Skills in the field of network security

Figure 12 shows that respondents have the skills to develop projects in the field of network security. A total of 5.7% of respondents strongly agree and 42.9% agree that they have the skills to develop projects in the field of network security. While 48.6% disagree and 2.9% disagree that they have the skills to develop projects in the field of network security.

viii) I have the skills to develop projects in the field of Network Design.

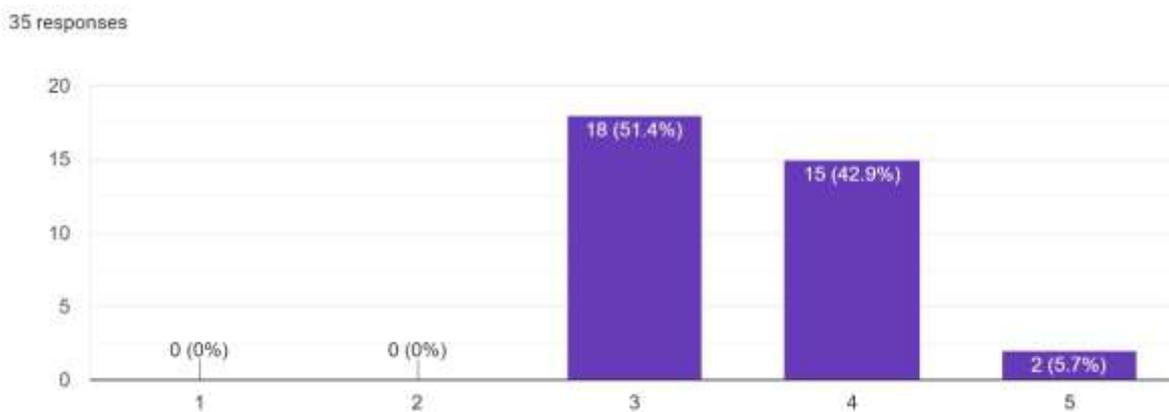


FIGURE 13. Skills in network design

Figure 13 shows the percentage of respondents who have the skills to develop projects in the field of network design. A total of 5.7% strongly agreed and 42.9% agreed that they have the skills to develop projects in the field of network design. While 51.5% less agree that they have skills in the field of network design.

ix) I have the skills to develop projects in the field of Internet of Things (IOT).

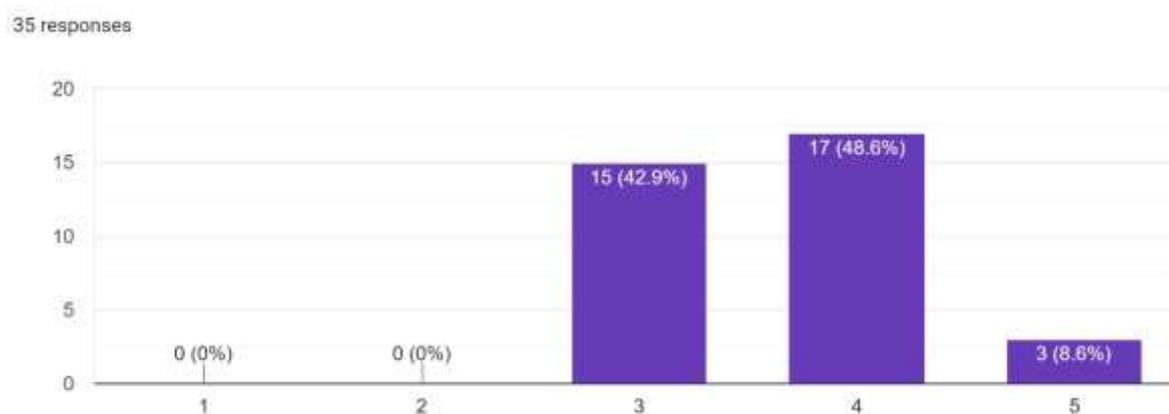


FIGURE 14. Skills in the field of IOT

Figure 14 shows that 8.6% of respondents strongly agree and 48.6% agree that they have the skills to develop projects in the field of IOT. While 42.9% of respondents do not agree that they have skills in the field of IOT.

x) I have the skills to develop projects that emphasize data security.

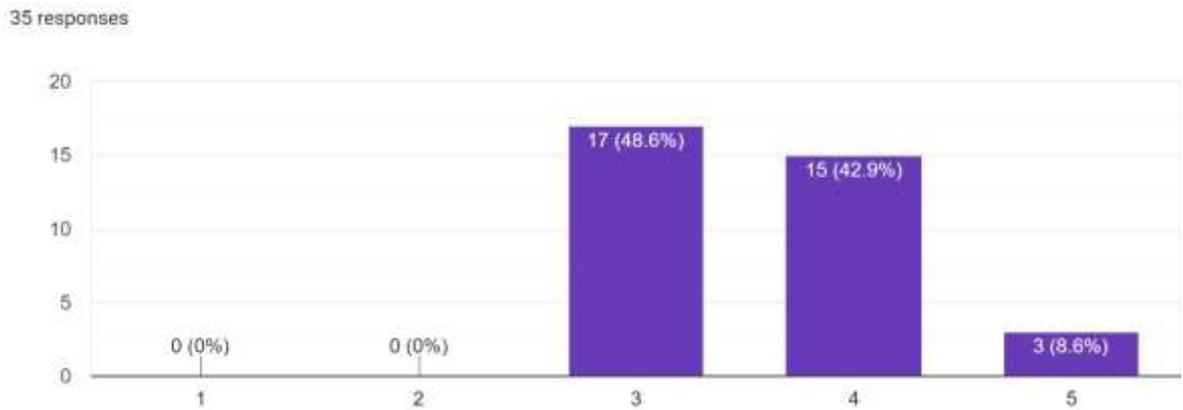


FIGURE 15. Skills in the field of data security

Figure 15 shows that 8.6% of respondents strongly agree and 42.9% agree that they have the skills to develop projects that emphasize data security. While 48.6% of respondents disagreed with having the ability to emphasize data security.

xi) I have skills in programming.

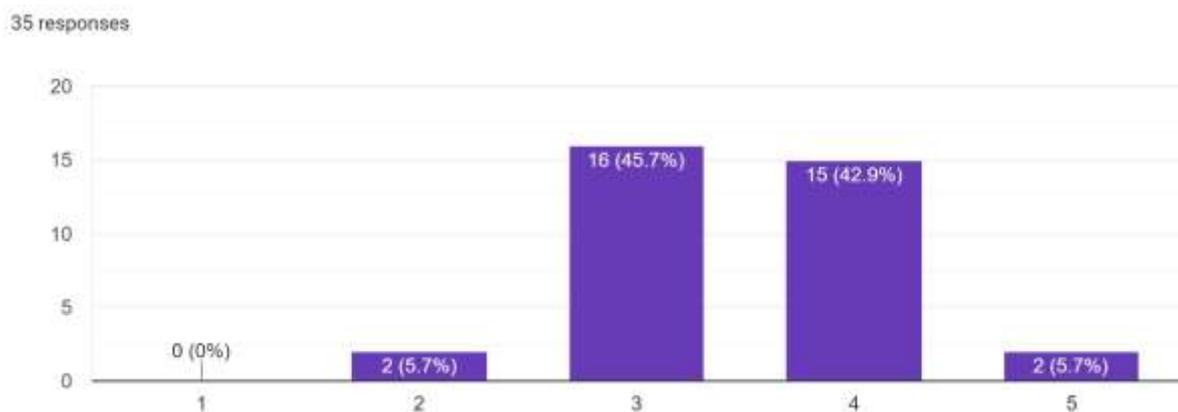


FIGURE 16. Skills in programming

Figure 16 shows 5.7% strongly agree and 42.9% agree to have skills in programming. While 45.7% disagree and 5.7% disagree that they have skills in the field of programming.

xii) I have the skills to develop projects that are integrated with databases.

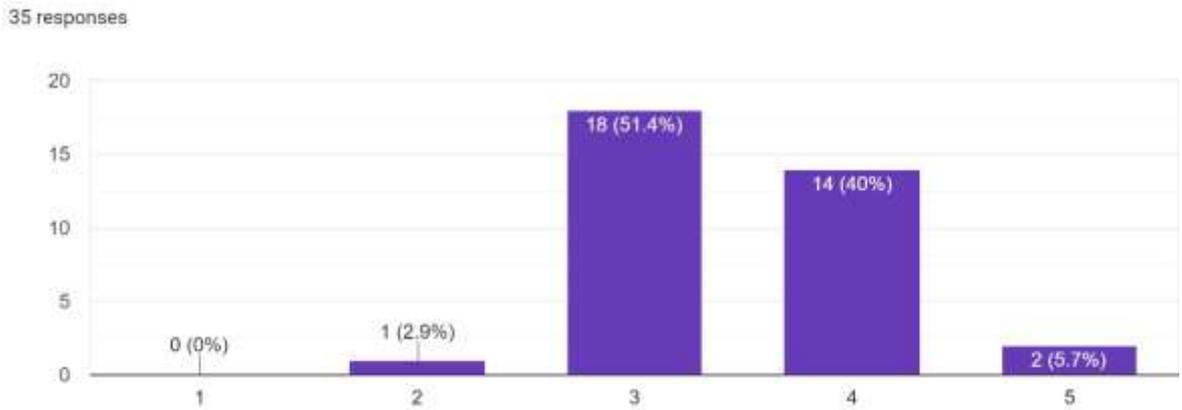


FIGURE 17. Skills to integrate with the database

Figure 17 shows that 5.7% strongly agree and 40% agree that they have the skills to develop projects that are integrated with databases. While 51.4% less agree and 2.9% disagree have skills in integrating projects with databases.

COMPONENT 3: Project presentation

- i) I will have no difficulty in preparing the presentation slides.

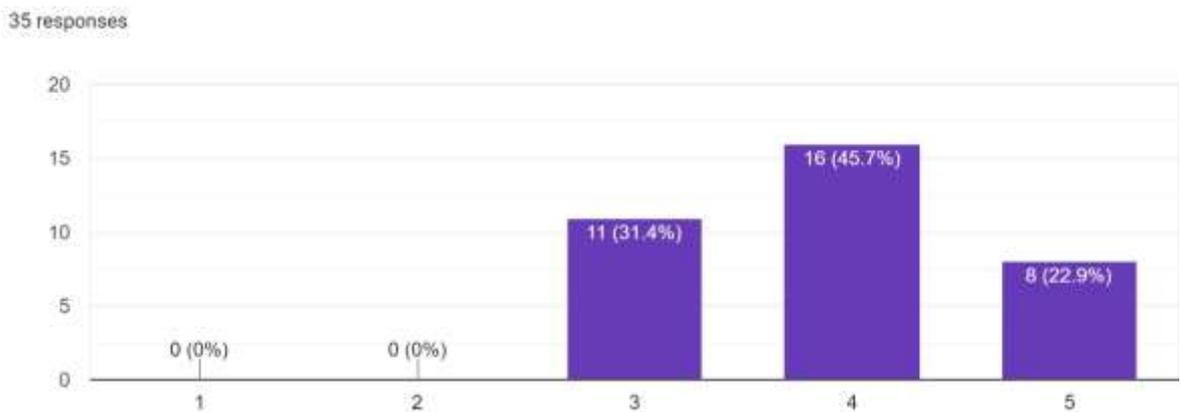


FIGURE 18. Difficulty in preparing the presentation slides

Figure 18 shows that the respondents will not face difficulties in preparing presentation slides. A total of 22.9 strongly agreed and 45.7% agreed stating that they had no difficulty in preparing presentation slides. While 31.4% disagreed with difficulty in preparing presentation slides.

- ii) I will have no difficulty in making a project presentation in front of the judging panel.

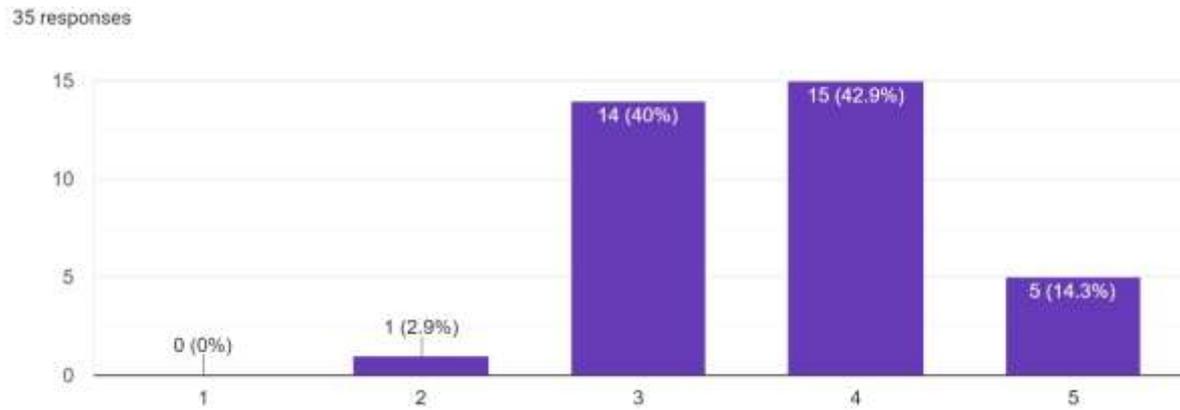


FIGURE 19. The difficulty of presenting a project in front of an evaluation panel

Figure 19 shows that 14.3% strongly agree and 42.9% agree that they do not face difficulties in making a project presentation in front of the evaluation panel. While 40% disagreed and 2.9% disagreed that they did not face any difficulty in presenting the project in front of the evaluation panel.

CONCLUSION

From the study that has been conducted, we have concluded that the students for this semester have faced not a big issue regarding final year project course. Most of students have given positive perception related to FYP. This might cause by a few courses that the students have taken before might have prepared them for final year project course. This study should be continued to be conducted for the future however, set of questionnaires should be replaced with interview to ensure that more open-ended answers can be gathered.

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