

ASSIGNMENT 2 FRONT SHEET

Qualification	BTEC Level 5 HND Diploma in Computing		
Unit number and title	Unit 13: Computing Research Project		
Submission date		Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	
Student Name		Student ID	
Class		Assessor name	
Student declaration I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.			
		Student's signature	

Grading grid

P6	P7	M4	D3

☐ Summative Feedback:

☐ Resubmission Feedback:

Grade:

Assessor Signature:

Date:

Internal Verifier's Comments:

Signature & Date:

I. Introduction

In my first report, I completed research on IoT applications in smart home in Vietnam and gave suggestions for users to use, I did primary research and secondary research to do how smart home is developing in Vietnam. In this report I will evaluate how I do step-by-step research and the strengths and weaknesses of each of my methods in the research process, thereby giving lessons and experiences to improve more of my research in the coming time

II. Reflection on the project

1. Research proposal

In the research proposal section, I have to set up a research proposal and ask questions to clarify the problem that I need to study. Through the implementation process, I see this as the first important step before undertaking the next research steps. Its role is really necessary, it helps me to clearly define the issues that I need to study and learn, then collect the necessary questions to clarify the issues to study on.

Difficulty encountered

In the process of making research proposal, there are some difficulties that I have encountered, which are incorrect identification and lack of some research questions and have not yet met my request to answer research. Specifically, at first I did not clarify the market for smart home development and famous brands in Vietnam. This took me a lot of time because I had to fix it many times and find the answer for a long time but the question was unknown.

Improve

Through the process of making research proposals, I draw lessons that need to clearly identify the problem of the project topic to be researched. Thereby, it is necessary to carefully prepare and give the questions in the research protocol carefully and need to give it to teachers or people with knowledge to check whether it is correct, then we will begin to find answers to the research proposals.

2. Project plan

After I had prepared a research protocol, I began to make a plan to research the project. First, I need to define the purpose of the project based on the research protocol, then I design the WBS to formulate the research steps of the project. Then, design a gantt chart to determine the exact process and progress of the project to avoid over time to complete the project.

Difficulties encountered

During the WBS design process I still design unclear and incorrect steps in the diagram, which causes me to develop the project in the wrong direction and redundant things. Regarding the gantt chart I drew was still wrong due to the error of the software application in the machine that made me unable to connect the steps together, besides, due to the wrong WBS, my gantt chart design was also difficult and affected time. and project progress

Improve

Thereby, I learned from the experience that I need to carefully define and carefully design WBS because it mainly forms the framework of my project and affects a lot of things in the project such as the way to learn in the research process because Therefore, it is necessary to properly design and define and give it to experienced people such as teachers and lecturers to check carefully. After I had prepared a research protocol, I began to make a plan to research the project. First, I need to define the purpose of the project based on the research protocol, then I design the WBS to formulate the research steps of the project. Then, design a gantt chart to determine the exact process and progress of the project to avoid over time to complete the project.

3. Literature review

During the Literature review process, with the aim of clarifying what is a smart home? How do IOT devices work in a smart home? Smart home development like? Famous smart home brands in Vietnam. The advantages and disadvantages of smart home. So I used a number of research methods in my project research process. Specifically, I use 2 main research methods to learn and clarify my research topic, that is primary research method, secondary research, besides, I also use qualitative research methods to clarify the data I have gathered. In which my secondary research is done first and primary research is done later

Difficulty encountered

In the process of implementing the difficulties I encountered were too much documentation and complicated IOT technology techniques that made it difficult for me to learn and in the process of finding out information was not clear

3.1. Secondary research

Using the secondary research method applied to the project, I learned what smart homes are, how smart home devices are designed and how they work. Besides, I learned about the smart home development market in Vietnam and the famous smart home brands in Vietnam. The information I find out through books, information on the Internet and through the classroom from the teachers.

Difficulty encountered

During the implementation of secondary research, the difficulties I encountered were that at first in the implementation process I did not know how to select information clearly, the information was not specific for the question to study, the information. While wandering about not focusing on an issue and just the concept of question problems makes data collection unclear and difficult to analyze.

Improve

Through the process of using secondary research methods, I draw lessons that need to focus on the main ideas and answers of the questions of the proposed protocol to avoid rambling in the learning process will help the collection more accurate data

3.2. Primary research

During my primary research, I actually interviewed some smart home people who knew about smart homes and IOT technicians. Besides, I created an open questionnaire and suggested a few answers to survey a specific group of people or some people to find out how they know how smart homes are developing in Vietnam. Finally, in the process of using primary research, I went directly to a specific place to observe the study of smart homes and IoT devices there. The place where I do the observation project is a showroom of lumi brand at 38 Do Duc Duc in Hanoi. There I have directly observed, tested the operation and photographed the smart devices there for analysis.

Difficulties encountered

In the process of conducting primary research, some difficulties I encountered were that in the interview process, some people did not enthusiastically answer my questions and answered untruthfully, mainly people and people. people who used to live in smart home. Observing at showrooms has some main problems I have: they don't let me test the equipment there, making my observations take longer because I have to travel many different places. During the group survey I did my questions a bit of English, so during

the survey some people did not understand the question well, so they incorrectly answered my survey question.

Improve

During the research process, I have learned from experience, about interviewing, I need to focus on specific subjects to make the interview easy, for example, I need to talk and introduce myself to others first to see the attitude of paying. What is the interviewee's words, if they feel uncomfortable or forced, we will change to another person to avoid wasting time. As for the survey, sometimes there are English questions, we should leave Vietnamese annotations next to them so that the survey subjects can easily understand and answer correctly in their questions.

4. Process of research

5. Improvements for future project

5.1. The lesson

5.2. The mistake

5.3. Improvements

6. Conclusion