

**BSc (Hons) Computer Science and Software**

**Engineering**

UNIVERSITY OF BEDFORDSHIRE

HireBuddy : Online Automobile Service Platform

**REFLECTIVE REPORT**

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# 1.Introduction

1.1 Background

In recent years there has been a significant increment of the vehicle accidents due to the high vehicle population. As well as lots of people were suffering from the vehicle breakdowns and the tire punctures. This reality may waste the valuable time of the general population and also the neglect to oversee and to complete their daily tasks. Therefore people need a decent answer for this issue.

Most insurance providing agents offer some arrangements, yet the most of them are not practical. This project aims to develop a mobile application depends on Android and that guides people to get the help of an appropriate person in the area to recuperate the vehicle's disappointment. And it is not just to get the assistance of the person but also it gives lots of opportunities to the user by offering many features. The proposed system will be beneficial for every person to increase their efficiency while reduce the workload.

1.2 Motivation

The reason I chose this project is that I was a part of the company. Currently I’m working in L.N.D. Graphics (PVT) Ltd, as an intern and one of my main duties is handling customer emails. Since the company uses traditional email handling method I always had to be aware of the incoming emails which are requesting for quotations and notify the Managing Director about the customer’s request. Since company has two email addresses and customers use different subject headings as their preferences I had to face many issues when managing the emails. Moreover, it was very tiring and stressful to search through mail boxes and to stare at the computer all day with the intention of without missing any of the quotations. I felt that there should be a proper organized system to handle customers’ quotation requests to provide them with a better service.

According to the manger’s perspective he also wanted to re-create the process of quoting in an organized manner. Further he faced greater difficulties when obtaining the prices for material due to not maintaining a proper database. It consumed more time than required. Also, company couldn’t use a traditional quoting system because some of the customers had the benefit of getting special prices based on their customer relationship.

Hence all the above matters motivated me to work on a customized, user friendly, economical quotation generating system which can be developed until a Customer Relationship Management system.

1.3 Overview of the report

This report contains 4 chapters.

From the first chapter, it gives you an idea of how I was motivated to do this project and its back ground.

From next two chapters I critically discuss about the issues I faced and how I overcome them during different phases of System Development Life cycle, and also the progress of the project up to now and the future tasks that is yet to be completed.

Final chapter includes an overview of the final thesis report mentioning what will be included in it.

2.Reflection

2.1 Requirement Gathering and Analysis

**2.1.1 Task**

I gathered primary data by interviewing the manager and another employ who is handling the customer emails. Rather than discussing a questionnaire was given to them in order to get a precise idea of the requirements.

* What are the complaints that you’ve been blamed for by most by customers?
* Do you enjoy working with the current system or do you think you need a separate system for quotations?
* What do think will be a better method to notify a customer request? A text message on your mobile? Or a pop-up message in your working PC?

When analyzing the requirements, I used my experiences as well as the further discussion with the manager.

Secondary data was gathered by WWW, from researched papers, patent papers, books on data mining and python.

**2.1.2 Issues**

a) Couldn’t identify the exact idea of the customer (manager of the company).

b) Customer couldn’t explain his requirements since he was not familiar with computers and terminology.

c) It seemed like customer had some implicit requirements.

d) There were some changes in his requirements with the time.

**2.1.3 Solutions**

a) I had to have several meetings with the customer in order to make sure that I’m fulfilling his requirements.

b) First, I suggested my ideas and got customer’s feedback and ideas to enhance the system.

c) I did a self-reflection and identified some implicit requirements that customer didn’t mention.

d) Since I’m going to be a user of this system I always cared about my perspective and feasibility of each and every requirement

2.2 Designing

**2.2.1 Task**

With the details I gathered from interviewing the manager I started to design the interfaces for customers and the company. Also created the database. Further I started to create a sorting algorithm for select quotations and an algorithm for defining prices.

**2.2.2 Issues**

a) Data mining is a complete new area of studying.

b) Changing the developing language: After several meetings and during the research period my supervisor suggested that “PYTHON” will be more helpful when it comes to data mining since it has more libraries than JAVA to work with data mining.

c) Python is a complete new language for me.

**2.2.3 Solutions**

a) I made data mining as a part of my research study and did further reading and studying to get an idea about data mining and its uses in business.

b) Did further reading on python and I followed an online course on python at Coursera.com.

c)Get to learn Python while working with it.

2.3 Implementation and testing

**2.3.1 Task**

I decided to follow prototype methodology since this is an Enterprise based system and the issues can be found only when using the system. The task is to develop the first prototype version and to test with the customer before the final product. And after fixing the errors and bugs implement the final product and continue with maintainability testing.

**2.3.2 Issues**

a) My main issue is time. The initial Gantt chart was not appropriate. It was created according to incorrect dates.

b) Couldn’t follow the time line and Gantt chart.

c) Had to work in a rush since the first prototype must be completed and tested before the final product.

**2.3.3 Solutions**

a) Re-created the Gantt chart accordingly.

b) Spent less time on designing and other phases as much as possible.

c) Consulted a Python expert to help me with the development phase.

2.4 Documentation

**2.4.1 Task**

As the part of the evaluation process I had to submit 4 main documents together with 4 progress reports.

1. Project proposal
2. Contextual report
3. Reflective report
4. Final thesis report

Due dates were fixed covering the whole period of project’s timeline.

**2.4.2 Issues**

a) There was a huge problem of fitting the document into its relevant template.

b) referencing the sources.

c) Find enough research papers that support your research.

d) Download papers from licensed sites.

**2.4.3 Solutions**

` a) followed the templates given by UOB

b) Used “Cite this for me” for proper Harvard style referencing.

c) Got the guidance from supervisor to select papers.

d) Downloaded papers via the university computers and sometimes lecturer in-charge did it for some commercial sites.

3.Future Work

3.1 Current Progress

Up to now requirement gathering phases are completed and it seems that customer won’t change any of his requirements until he tests the prototype. Database is designed, and the GUIs are also designed.

Currently I’m at the last stages of developing the first prototype version. It can be implemented within a week and I hope to test it for another week with the customer.

Since I couldn’t catch up with the initial Gantt chart and their dates were wrong, I was careful to follow the new Gantt chart properly. By the time of 30th July 2018, I could manage my work according to the Gantt chart

3.2 To be completed

Final steps of the first prototype version will be completed by 2nd of August 2018. It will be implemented and tested with the customer by 10th of August 2018. During next 10-15 days the final product will be completed by fixing the errors and bugs found in the prototype version and relevant modifications will be done as per customer’s feedback.

By the first week of September the final product will be implemented, and customer will be able to use it.

Further as a part of evaluation process, Final Thesis report is to be submitted.

3.3 Conclusion

By the end of this report I realized that to maintain the quality of my project I have to manage the triple constraints: ‘Scope’, ‘Time’ and ‘Cost’. Among these three, time is the most critical constraint that is hard to manage.

4.Detailed Thesis Content

Title page **–**  First page of the document, will include the name of the university along with the logo of the university., name of the submission, student ID, and Student Name

Abstract- This will include a summary of how the system will works and the need for such system.

Acknowledgement**-** This will include a vote of thanks for each and every individual who helped through the entire process to make it a success.

Content Page/List of figures/ List of tables/ Acronyms/Abbreviations.

**Chapter 1: Introduction**

1.1Project Background **–** I will include the reasons behind this project and how the system will fulfil customer’s requirements

1.2Project Aim and Objectives **–** The aim of the project and the objectives of this system is given under this chapter.

1.3Project Realisation**-**  This chapter will include how the requirements are gathered and how the system development is done as an overall summary.

1.4Structure of the Report **–** This will give an idea about the final thesis report including what each chapter is about.

**Chapter 2: Literature Review**

2.1 Quotation generation in printing industry-This chapter will include and describe how the quotation generating is done in printing industry

2.2Common Quotation generation systems **–** This chapter will include of different quotation generating systems.

2.3 Data Mining**-**  This chapter will describe about data mining strategies.

2.4 Customer Relationship Management- This chapter will include of Customer Relationship Management and currently used software for CRM.

2.5 Similar systems**-** This chapter will include of the similar systems as the developed systems.

2.6 Research Significance**-** This chapter will include an optimum comparison of current similar systems and the new system.

**Chapter 3: Methodology**

3.1 Methodology – This chapter will explain the methodology chosen to develop the system.

3.2 Planning **–** This chapter will explain the planning phase of the project with relevant charts and diagrams.

3.3 Requirement Gathering & Analysis **–** This chapter will explain how the primary and secondary data gathering and analysis were taken place.

3.4 Design **–** This chapter will include the relevant system diagrams and the initial design of the system

3.5 Implementation & testing- This chapter will include all the details about the implementation and the testing of the prototype of the system further it will include code segments.

**Chapter 4: Results and Discussion**

This chapter will include the test cases and their results. As evidences required screenshots during and after testing and debugging will be included to show the results obtained.

**Chapter 5: Evaluation**

This chapter will include how the evaluation is done and the critical discussion is done based on the evaluations of the system.

**Chapter 6: Conclusion**

6.1 Conclusion **–** This chapter will give an overall idea about the importance of the project and its progress.

6.2 Limitations **–** This section will include the limitations I faced throughout the time period of this project.

6.3 Future work **–** This chapter will conclude the report and will include any future development that can be added to the system in future

**References -** The external sources that have referred will be cited here according to Harvard style.

**Appendices –** other supportive materials which supports the document will be mentioned here.