Temasek Polytechnic

School of Informatics and IT

**Diploma in Information Technology (IT)**

Terms of Reference

**Project Particulars**

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| **Tutor** | Mr Mel Goh |
| **Class** | P03 |
| **Project Title** | Delonix Regia Hotel Management System |

**Project Team’s Particulars**

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| **Matric Number** | **Student Name** |
| 1403530g | **Shannon Sim Jun Hao** |
| 1405591G | **Joycelyn Nge** |
| 1401811C | **Vivian Neo Wen Ting** |

**1. Introduction**

The purpose of this project is to help improve the hotel management system for Delonix Regia which is run by a middle-aged couple, Mr and Mrs Wang . Despite being located at a reasonable good district, the hotel have not been doing well. To solve the problem, the couple has recruited our team to help improvise the management system in hope that it can help the hotel improve its business. After observing the hotel management system, our team have derived the problems that the management system is facing.

The problems that the hotel management system is facing are

* Outdated system
* System does not run real-time
* Different department have different databases
* Does not have an online mangement system
* Database is not efficient nor flexible
* Slow response time

Hence, through these problems, we have enough reasons to believe that the errors and incapabilities of the hotel management system are why the hotel is not doing well.

**2. Objectives of the Project**

The objectives of the project is to develop an efficient and effective hotel management system to solve the problems that the management system is currently facing.

Measures taken to solve the problems:

* Ensure that the system runs on real-time
* Implement standardise database
* Implement online management system
* Ensure managemet system response time is fast
* Ensures that various department database are linked together

**3. Scope of the Project**

The key features of the software system we are developing are

Security feature

-The security features that we are going to implement is that users of the software system willl be given a account with a unique password and encryption will be added to strengthen the security .

Online booking system

-The hotel will have a new online booking system which will be running on I-cloud so that the system will be real-time which means that there will not be an occurence of double booking.

Data entry system

-The hotel will have a new data entry system where by we will integrate various department databases together so that it will systems will communicate together.

Automated database system

-The hotel will have a new database entry system which will update itselfs and other databases linked to it whenever a new or existing data is added or edited.

**4. Distribution of Workload**

*Determine which members of the team will be responsible for what areas of project work. Individual’s responsibilities should be clearly spelt out.*

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| **Objectives/Deliverables** | **Members** |
| Automated database system/Data entry/Maintainence of system | Joycelyn Nge |
| Online booking system/Automated database system/Maintainence of system | Vivian Neo Wen Ting |
| Security feature/Data entry system/Maintainence of system | Shannon Sim Jun Hao |

**5. Constraints**

* CCA - Our team comprises of team members with different CCAs hence whenever we end lessons either one of us might be tied down to out commitment.
* Part-Time Jobs - Some of our team members have part-time jobs after school which makes meeting together more difficult.
* Meeting place - During our meet-ups, finding a location to continue on our project is a problem as most of the time many of the labs are taken up for lessons. Hence we will have to make do with the student hub.

**6. Resources**

Human Resources

-Customer

-Team Members

-Support Staff

-System Maintenance

-Hotel staff

The human resources makes up the members who developed the system , staff who are going to use the system and the maintenance of the system.

Capital Resources

-Activity Resource

-Schedule Model

-Resource Breakdown

-Opportunity Cost

The capital resources consist on the product expenditure . In other words capital resources is the source of capital for all the systems needed expenditure.

Tools Resources

-Software

-Hardware

The tools resources are split into two category which are the software and hardware category. The software consists on the programs that we will be using for the hotel management system for example cloud-computing etc. While the hardware consist of the tools required to run and maintain the system such as desktop etc.

**7. Product Positioning in the Market/Company**

Our hotel management system that we have came up with is easy to use, flexible and solves most of the problems that we have identified in the old hotel management system. Apart from that, out hotel management system functions are also user-friendly which makes it easy to use. For example, we have came up with a simple booking process which replaces the long and complicated reservation procedures. Through this booking process, it ensures that the hotel will not lose guests unlike the old hotel management system. In addition, we identified that the hotel have various databases for different departments in the hotel, therefore we have integrated all the hotel departments into one database. This will replace the old management system which use manual data entry which will result in human error .

Our product that we have created will have a competitive pricing structure which means that the hotel will not have to pay so much in the long run which will help hotel save money and make the management system a valuable tool. Apart from that, we noticed that maintainence was also a key problem in the old management. Therefore, the hotel management system that we have came up with will need annual maintenance which will cost the hotel lesser money instead of monthly maintenance.

**8. Approach and Methodology of the Project**

For the hotel management system , our team approach and methods towards this project is using the waterfall model. The waterfall model consist of six stages which are the requirement analysis, system design , implementation, testing , deployment and maintaing the management system. Waterfall model which is also known as linear-sequential cycle model. In the SDLC , the waterfall model is the most fundamental stage. Before we start the project, we have to observe the old hotel management system and find out what is wrong with the system and what is affected by it. Apart from that, we must also find out from the owners of the hotel management system on what do they expect from the new hotel management system. Moving on from the information that we have gathered, we will then move on to the system design , where else we will design the layout of the system and we will do a prototype and show it to the client which is the hotel owners. If the client is alright with the prototype, we will then carry on the next step of the waterfall model which is the implementation of the system , we will add in all the codes and software needed for the system and check for any further errors . This leads us to the next step which is testing, testing is when the system is implemented and we will be checking for any possible errors and the system response time. Last but not least when all the steps are done, we will run through a final check and send the managemen system online . In other words , the hotel management system will be fully functional for the hotel to use. Apart from that, we will be maintaining the system annually , making sure all software will be up to date and there will be no bugs.

Therefore the approach to this project is to make sure that when the project is deployed, enough information and testing is gathered and done.

However there are several constraints and restrictions that we have considered when doing the project. The constraints that we have considered is that the integration of various department might clash when there are several foreign keys not allowing it to integrate without error. Apart from that ,there might be restrictions when there are too many users using the hotel management system.The above restrictions and constraints that we have mentioned might affect us when we start to implement the system .However with sufficient testing and integration, i believe that we will be able to overcome the constraints and restrictions.