Temasek Polytechnic

School of Informatics and IT

**Diploma in Information Technology (IT)**

Project Plan

**Project Particulars**

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| **Tutor** | Qi YUTAO |
| **Class** | P05 |
| **Project Title** | Hotel Management System |

**Project Team’s Particulars**

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| --- | --- |
| **Matric Number** | **Student Name** |
| **1706213D** | **Chia Rui Feng** |
| **1703879E** | **Chang Won Kit** |
| **1704078C** | **Tay Zhun Hang** |
| **1705022J** | **Viswanadham Udaya Chitanya Krishna** |

Revision History

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| --- | --- | --- | --- |
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Project Plan

1 Introduction

1.1 Objectives and scope of the project

**Objectives of the Project**

Our aim is to develop a Hotel Management System that is able to automate some of the functions of the hotel, this can relief some of the jobs that are routinely done and allow staff to focus on the more advanced parts of the job. The jobs currently that can be automated, such as room delegation and even customer service on a general level can be left to automation.

In Here we are trying to obtain a detail solution for Mr. and Mrs. Wang’s problem facing with the current Hotel Management System for their Business. We will develop the system that has Good Design, Functionality, Reliable, Consistency and Durable which combines Advanced Quality Software in a simplified Version. (Krish)

Inside the Hotel Management System will contain four modules with each module performing a critical task which makes up the Hotel Management System. (Rui Feng)

The first module will be a analytical module which mainly gathers data from other databases and creates graphs for easy understanding. (Rui Feng)

The second module is a database that holds all the information regarding the staff. Examples will be the staff’s personal information, the working hours, work allocation, etc.(Zhun Hang)

The third module will be a local area recommendation system that provide suggestions of things to do near the hotel. There will be an automated check-in system deployed into a kiosk.(Won Kit)

The fourth module will be a cloud service that helps in reduce cost of IT and infrastructure for the hotel. Its a popular feature that should include in any developing software.(krish)

All the modules will be explained in greater details under the scope of project.

**Scope of the Project**

The scope of the project will have four main modules.

The first module we’re suggesting is a analytics module built into the software. It’s main functions is to gather information from other databases such as Booking Database and Customer Database. Information like booking dates are collated to display in graphs for easy and fast understanding.(Rui Feng)

The second module will be a staff database which contains their information. With this database, the services provided by the staffs will be more efficient and accurate because they will know what they are supposed to do during their working hours. (Zhun Hang)

The third module will be a local area recommendation system in which the area near the hotel will be recommended places to visit, eat and sightsee based on the preferences of the customer. Recommendations will be suggested daily on the Smart TV allocated in every room, customers can navigate through using the remote controller. During the check-in process the customer has a choice whether to use the system or not. There will be a automated check-in system that will automate the customer service at the front desk. Checking-in , check-out and booking will be done at this kiosk which will be present at the service counter. This makes it easier to manage customers and less staff are needed to man the customer service desk. (Won Kit)

The fourth module we develop is the “Cloud” computing that gives an experience to communicate with the server through a browser rather than physically to access the system. Cloud helps us many advanced features such as Disaster Recovery and Automatic updates so on. It helps reduce Infrastructure for the hotel and cost of IT and it requires Dedicated Infrastructure with additional power and Maintenance.(krish)

1.2 Assumptions and constraints

**Assumptions**

I assume the Wangs do not waste their expenses to hire additional unneeded staff such as analytics staff. There will therefore be an inbuilt analytics module to help them perform simple analytics. (Rui Feng)

Each room in the hotel has a smart TV included that has WiFi connection and constant power supply.(WonKit)

The Wangs are using the traditional and Manuel methods of hospitality. They wish to automate some of these methods and breathe new air into their customer experience. Therefore seeking the experience and expertise of IT experts.(WonKit)

**Constraints**

This is our first major project since entering Student Internship Programme and thus we are unfamiliar with our working environments, therefore our Project may take a longer time for kickstart our project while we familiarise ourselves. A prototype will therefore take a longer time before it can be delivered.(Rui Feng)

There is a constraint on the time we have to implement the creation of the software. We only have 17 weeks to complete the development and implementation of the software therefore the features may not be utilizing the full potential of the software. However they will be operational and is adequate for usage. (Won kit)

Another constraint for the project is the risk of having a scope creep. A scope creep refers to the incremental expansion of the scope of the project, which may include more requirements that was not part of the initial plan. If [scope creep](https://resources.workfront.com/project-management-blog/best-practices-for-scope-management?proxy=/blog/) happens on the project, it may result in increased time, resources, and potentially reduced quality. And thus increased risk on delivery. (Zhun Hang)

We have 17 weeks for us to finish the project but sometimes fixing the bugs as well as beta testing may take a long time that may extend the submission date.Most of the time developers and IT Professionals works in groups for develop a software that go through the process of Designing, Perform Functions, Bug tests many more. In that case we were lacking of manpower for our project to finish Completely. (krish)

2 Roles and responsibilities

|  |  |
| --- | --- |
| **Analysis** | **Everyone** |
| **Design** | **Everyone** |
| **Coding** | **Everyone** |
| **Testing** | **Everyone** |
| **Meeting with Client** | **Chang Won Kit** |

Everyone in the team is responsible for all of the phases of the software development life cycle. (Zhun hang)

Initially, each team member will be incharge of their individual feature.

* Won Kit will be incharge of Local Area Recommendation system with integrated check-in.
* Zhun Hang will be incharge of Staff Database.
* Rui Feng will be incharge of Analytics System.
* Krishna will be incharge of Cloud Management system

Since we’re doing incremental model where we frequently consult with the Wangs with the prototypes made, the future features that is requested not within the original scope will be assigned according to each member’s strengths and weaknesses

(Rui Feng)

3 Estimates and project schedule

3.1 Work breakdown structure

The incremental model consists of 4 types of phases. Analysis, Design, Code and Test.

The work structure will have everyone focusing on the current phase.

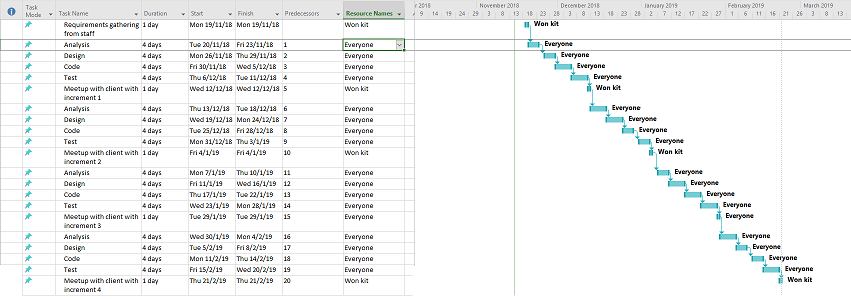
As for time required for each phase, each phase will take up 4 days from analysis all the way to testing.

After each testing phase, our leader, Chang Won Kit shall visit Wangs with our current increment taking up to a day.

The cycle will repeat after we gathered Wangs feedback.

(Rui Feng)

3.2 Project Schedule



(Zhun Hang)

3.3 Budget Summary

|  |  |  |
| --- | --- | --- |
| Product | Per month for 1 employee | Total for 4 employee |
| Microsoft 365 Subscription | $14.80 | $296 |
| Salary | $1500 | $25500 |
| Total Cost |  | $25796 |

4 Risk Management Plan

|  |  |
| --- | --- |
| **Risk** | **Risk Category** |
| **Unforseen Bugs leaking through to final product(Rui Feng)** | **Technical** |
| **Lack Of Time(Zhun Hang)** | **Project** |
| **Unforeseen Future where project specifications are required (Maintenance and expansion) (Won Kit)** | **Technical** |
| **Break down of specifications(Krishna)** | **Project** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Types of Risk** | **Severity of Occurrence** | **Likelihood of Occurrence** | **Risk of Exposure** |
| **Lack Of Time(Zhun Hang)** | **Medium(2)** | **Medium(2)** | **4** |
| **Unforseen Bugs leaking through to final product(Rui Feng)** | **High(3)** | **Low(1)** | **3** |
| **Unforeseen Future where project specifications are required (Maintenance and expansion of software) (Won Kit)** | **Medium(2)** | **Low(1)** | **2** |
| **Break down of specifications(Krish)** | **Low(2)** | **Low(1)** | **3** |