Temasek Polytechnic

School of Informatics and IT

**Diploma in Information Technology (IT)**

Terms of Reference

**Project Particulars**

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| --- | --- |
| **Tutor** | Mr Qi Yutao |
| **Class** | T04 |
| **Project Title** | Hotel Management System |

**Project Team’s Particulars**

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| --- | --- |
| **Matric Number** | **Student Name** |
| **1703208G** | **Berwin Leong Jun Wen** |
| **1702625C** | **Soo Yuan** |
| **1700803H** | **Ting Chao Chong** |
| **1704144C** | **Muhammad Ismail B.M.I** |

**1. Introduction**

A hotel management web application that will allow Mr and Mrs Wang to manage the hotel facilities, bookings,finance,hotel offers,customer reviews,security and hotel staff easily.

Since only 2 of them are operating the hotel, this application will simplify the management process as everything would be on a web application and they would not have to be physically there to operate the hotel. Having an interactive GUI makes the application flexible and convenient for hotel management.

They have too many bookings are unable to process the bookings and enquiries as old system requires them manage these bookings at the hotel physically, making them lose guests.

**2. Objectives of the Project**

Web application that allows Mr . and Mrs Wang to operate the hotel system from anywhere, and to be able to manage the hotel facilities, bookings,finance,hotel offers,customer reviews,security and managing hotel staff easily so to achieve a better reliable and convenient system for customers.

**3. Scope of the Project**

Firstly, to allow customers to book their hotel online through room booking system

Secondly, manage hotel staff so that employee detailed will be kept and organise,

Thirdly, hotel facilities where any people can book its hotel facilities through online,therefore earning extra money for their hotel.

Fourthly,Finances,to have a accounting page to keep track all the income and expenses so that Mr and Mrs Wang can know whether is their hotel earning in a healthy state.

Next .hotel offers. This will allow more customers to stay in their hotel which can increase the revenue of the hotel.

Lastly,Customers Reviews,allow customers to make comments during their period of stay in the hotel,this will help Mr and Mrs Wang to know what can they improve for their hotel to make it better.

**4. Distribution of Workload**

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| **Objectives/Deliverables** | **Members** |
| Manage Hotel facilities and staff,  Introduction for TOR,  Introduction for PP,  Objective of Project,  Constraint,  Roles and Responsibilities in PP,  Work breakdown structure in PP | Berwin |
| Security,  Approach and Methodology of the Project,  Risk and Management Plan,  Roles and Responsibilities in PP | Chao Chong |
| Finance and hotel offers,  Introduction for PP,  Scope of the Project,  Constraint,  Resources,  Roles and Responsibilities in PP,  Project Schedule | Soo Yuan |
| Booking of Hotel and Customer reviews,  Product Positioning in the Market/Company,  Roles and Responsibilities in PP,  Budget Summary | Ismail |

**5. Constraints**

* Resources availability.
  + Due that it is a small family base hotel business,there are plenty of restrictions while purchasing the resources such as facilities.
* Delivery of resources
  + By a truck or a van
* Time constraint
  + 1 year
* Finance
  + As the economy status of the hotel isn't doing well, there will be times where the owners will face difficulties to maintain the facilities and making the hotel better.Therefore there is a constraint in spending.

**6. Resources**

Hardware:

1. Server Machine ( to sustain the hotel system)
   1. dell poweredge t20
      1. Small and Reliable
      2. Affordable
      3. Compact mini-tower with easy access to internals

# Laptop ( to check for business accounting, customers review as well as check records of online booking by customers)

* 1. ACER A114-32-C79Z (BLACK) 14 IN INTEL CELERON N4100 4GB 64GB EMMC WIN 10
     1. Affordable
     2. Mobilise
     3. Contain a good operating system of Window 10 S mode

1. Wifi Router (To give customers an additional reasons of staying in their hotel)

# TP-LINK - Talon AD7200 Multi-Band Wi-Fi Router

* + 1. Affordable
    2. 802.11ad Wi-Fi Network Standards
    3. Up to 7200 Mbps Wi-Fi Data Throughput
    4. Multi-Band 2.4 GHz / 5 GHz / 60 GHz
    5. 4 x Gigabit Ethernet Ports
    6. 8 x External / 1 x Internal Antennas
    7. 1.4 GHz Dual-Core Processor
    8. 4-Streams for Increased Overall Speed
    9. Dual USB 3.0 Ports

Software:

1. CloudBeds(all-in-one hotel management system )
   1. All-in-one platform
   2. Integrates easily with third parties and credit card processing
   3. Lots of features
   4. 24/7 customer support
   5. Easy to use
   6. Easy User Interface
   7. Allow to keep track of bookings and customers record
   8. Able to keep track using phone( convenient)
2. Microsoft excel( Keep track finance)
   1. Easy to store data:
   2. Analysis of large amounts of data
   3. Used for Formulas
   4. Graphical Representations of data
   5. Secure

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

Our Hotel Management System is very efficient and easy to use as our customers that uses our system will be able to physically be anywhere to manage the hotel. Our Hotel Management System is very diverse and allows our customers to manage all kinds of things from security to managing staffs and customer reviews. This will allow our customers to fully utilize our web application to the best of its abilities and built up the perfect hotel for their customers to enjoy and be comfortable in.

In addition, the hardware we used in the hotel itself is top notch and can sustain heavy duty operating system like our hotel management system. Thus, the probability of the system failing is very low and thus there will be less disruptions in bookings and staffs will always be up to date.

Our Hotel Management System is all-in-one. This means that customers can use our hotel management system for all things hotel and does not need anything else to manage the hotel perfectly other than our system. This also means that there will be maximum efficiency and customers do not need to be finding things in other places. This will ease the customer and make the customer’s life more easier, thus having less stress when managing a hotel.

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

The Development model that my team will be adopting for the project will be waterfall. Waterfall, often referred to as SDLC is a project management methodology theme with a very simple approach that values solid planning, doing it once and doing it right, rather than the agile approach of incremental and iterative delivery. It is really simple make a good plan, and execute on it.

The project manager will most properly be in charge, and work is planned before then it will be executed. It usually needs to be deliver a single and very long cycle. Requirements are defined in full at the beginning, at the top of the waterfall, before any of the work can start. Work will then cascades downwards like a waterfall through phases of the project. In a waterfall model, each phase must be completed before starting the next phase can begin and there cannot be any overlapping in the phases. Typically, in a waterfall approach, the outcome of that phase acts like a input for the next phase. After the plan is approved, there will a need to adapt the plan unless changes are absolutely necessary. The project will then flows through the process from requirements, through design, implementation, testing and into maintenance.

A potential risk that may happen is because in a waterfall project, the cycle approach is in singles , hence there’s little time to reflect, revise and adapt once you have completed something, once you are in the testing stage, it is very difficult to go back and change something that was not well designed in the concept stage. There is also nothing to show and tell the client as you go along. You have to complete the project with a big fanfare and pray that the client likes it. That is potentially very risky.

Overall Waterfall is generally regarded with some disdain within agencies as an inefficient and more of a traditional project management approach. However waterfall can be useful and predictable approach if requirements are fixed, well documented and clear, the agreement is understood and mature, the project is short or no additional value are gained. A waterfall approach can actually provide more predictable end result for budget, timeline and scope.