Temasek Polytechnic
School of Informatics and IT

Diploma in Information Technology (IT)

Project Plan

Project Particulars

Tutor	Mdm Ho Li Ching
Class	P02
Project Title	Delonix Regia Hotel Management System

Project Team's Particulars

Matric Number	Student Name
1403575B	**Chloven Tan Zi Xuan**
1403539H	**Chua Cheng Yu**
1400555G	**Lin Jiamin**
1401557B	**Ngoh Man Ling**

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Project Plan

1   Introduction
1.1   Objectives and scope of the project

The objective of the project is to help both Mr. and Mrs. Wang in bringing   business to their hotel as they are currently not doing well even though their hotel is located at a reasonably good district.

The deliverables of the project is to create a system that will be able to help the clients' issue.

Our group decided to help them with the issue by creating a phone application which will be able to book a room and a meeting room, have a customer management system and also a Restaurant Reservation System. We believe that this system benefits both the customers & staffs. The booking system will be able to attract more customers to the hotel as it is very convenient and efficient for them to use. As for the customer management section is more of a system for the management side to check the different reports to improve customer satisfaction so that the business can prosper even more.

1.2   Assumptions and constraints

We assume that the delivery date of the project will be on time even though there will be some constraint like time management that will affect the project but we are determined to finish the project on time as we have planned and scheduled some of our project time and meetups.

For the hardware and software availability, we might have to discuss again so that all of us are on the same page using similar tools so that at the end of project we will be able to compile together.

We assume that the project plan will be smooth throughout. However, there are some difficulties like the resource given from the client may be too little and we could not really understand what Mr & Mrs Wang really wants for their system. Also, it's a bit hard for us to split the work for the project plan and TOR, hence, we helped each other to add on whichever component is lacking.

In conclusion, we really learn how to work as a team to complete this project together.

1.3 Definitions and acronyms

TOR - Terms of Reference
SDLC - Software Development Life Cycle
STS - Software Test Specification
UAT - User Acceptance Test
Budget - The budget hardware and software that is required for the project including manpower cost.
Deliverables - Any measurable, verifiable outcome or result that must be produced to complete a project or part of a project.

2 Roles and responsibilities

- Ngoh Man Ling: Restaurant Reservation System
- Lin Jia Min: Customer Management System
- Chua Cheng Yu: Meeting Room Reservervation System
- Chloven: Room Reservation System

3 Estimates and project schedule

3.1 Work breakdown structure

Task Name	Duration	Start	Finish	Predecessors	Resource Names
Inception Phase Iter 1	7.25 days	Thu 28/4/16	Mon 9/5/16		Man Ling,Jia Min,Cheng Yu,Chloven
Complete Terms of Reference	1 day	Thu 28/4/16	Fri 29/4/16		Cheng Yu,Chloven,Jia Min[50%],Man Ling[50%]
Complete Project Plan	2 days	Sun 1/5/16	Tue 3/5/16		Jia Min,Man Ling,Cheng Yu[50%],Chloven[50%]
Create Initial use case & domain model	2 days	Tue 3/5/16	Thu 5/5/16		Cheng Yu,Chloven,Jia Min,Man Ling

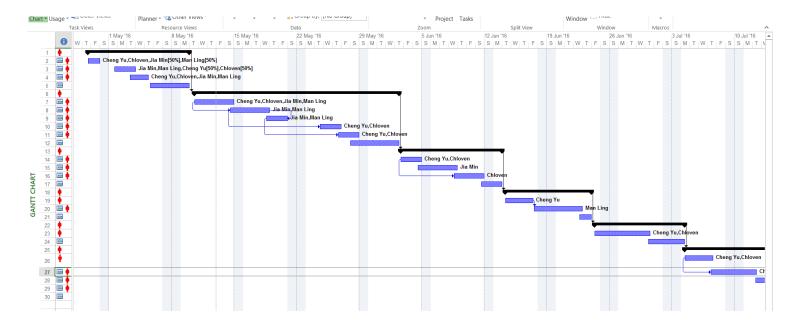|					
Lifecycle Objectives Milestone	2 days	Thu 5/5/16	Mon 9/5/16		Cheng Yu,Chloven,Jia Min,Man Ling
Elaboration Phase Iter 1	16.75 days	Tue 10/5/16	Thu 2/6/16	1	Cheng Yu,Chloven,Jia Min,Man Ling
Complete SRS	4 days	Tue 10/5/16	Sat 14/5/16		Cheng Yu,Chloven,Jia Min,Man Ling
Design Software Architecture	3 days	Sat 14/5/16	Wed 18/5/16	7SS	Jia Min,Man Ling
Prototype and yse software architecture	2 days	Wed 18/5/16	Fri 20/5/16	8FF	Jia Min,Man Ling
Conduct logical database design	2 days	Tue 24/5/16	Thu 26/5/16	8SS	Cheng Yu,Chloven
Prototype user interface	2 days	Thu 26/5/16	Sat 28/5/16	9SS	Cheng Yu,Chloven
Lifecycle Architecture Milestone	4 days	Sat 28/5/16	Thu 2/6/16		
Construction Phase Iter 1	8.25 days	Thu 2/6/16	Mon 13/6/16	6	Cheng Yu,Chloven,Jia Min,Man Ling
Software Test Specification	2 days	Thu 2/6/16	Sat 4/6/16		Cheng Yu,Chloven
Customer Management System testing	3 days	Sat 4/6/16	Wed 8/6/16		Jia Min
Room System testing	3 days	Wed 8/6/16	Sat 11/6/16	14SS	Chloven

Release 1	1 day	Sat 11/6/16	Mon 13/6/16		
Construction Phase Iter 2	7 days	Tue 14/6/16	Thu 23/6/16	13	Cheng Yu,Chloven,Jia Min,Man Ling
Meeting room system testing	3 days	Tue 14/6/16	Fri 17/6/16		Cheng Yu
Restaurant system testing	3 days	Fri 17/6/16	Wed 22/6/16	19	Man Ling
Release 2	1 day	Wed 22/6/16	Thu 23/6/16		
Construction Phase Iter 3	5.5 days	Fri 24/6/16	Mon 4/7/16	18	Cheng Yu,Chloven,Man Ling,Jia Min
The four sub-system	4 days	Fri 24/6/16	Thu 30/6/16		Cheng Yu,Chloven
Beta Release	2 days	Thu 30/6/16	Mon 4/7/16		
Transition Phase Iter 1	10.38 days	Mon 4/7/16	Wed 20/7/16	22	Cheng Yu,Chloven,Jia Min,Man Ling
Acquisition and installation of Hardware and Software	3 days	Mon 4/7/16	Thu 7/7/16		Cheng Yu,Chloven
Conversion	3 days	Thu 7/7/16	Tue 12/7/16	26SS	Cheng Yu,Chloven
User Training	2 days	Tue 12/7/16	Thu 14/7/16		Jia Min,Man Ling
Documentation	3 days	Thu	Tue		Jia Min,Man Ling

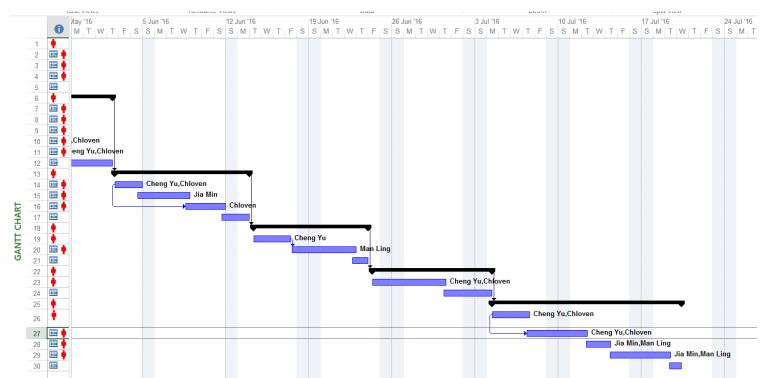|		14/7/16	19/7/16		
Final Release	1 day	Tue 19/7/16	Wed 20/7/16		

3.2   Project Schedule

The graph below shows the project schedule for our team. We included non-working day as well which is Saturday and Sunday. Some of the Saturday are change to working day due to time constraint.

		Task Name	Duration	Start	Finish	Pred	Resource Names
1		▲ Inception Phase Iter 1	7.25 days	Thu 28/4/16	Mon 9/5/16		Man Ling,Jia Min,Cheng Yu,Ch
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4		Create Initial use case & domain model	2 days	Tue 3/5/16	Thu 5/5/16		Cheng Yu,Chloven,Jia Min,Man Lin
5		Lifecycle Objectives Milestone	2 days	Thu 5/5/16	Mon 9/5/16		
6		▲ Elaboration Phase Iter 1	16.75 days	Tue 10/5/16	Thu 2/6/16	1	Cheng Yu,Chloven,Jia Min,Mar
7		Complete SRS	4 days	Tue 10/5/16	Sat 14/5/16		Cheng Yu,Chloven,Jia Min,Man Lin
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13		▲ Construction Phase Iter 1	8.25 days	Thu 2/6/16	Mon 13/6/16	6	Cheng Yu,Chloven,Jia Min,Mar
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15		Customer Management System testing	3 days	Sat 4/6/16	Wed 8/6/16		Jia Min
16		Room System testing	3 days	Wed 8/6/16	Sat 11/6/16	14SS	Chloven
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18		▲ Construction Phase Iter 2	7 days	Tue 14/6/16	Thu 23/6/16	13	Cheng Yu,Chloven,Jia Min,Mar
19		Meeting room system testing	3 days	Tue 14/6/16	Fri 17/6/16		Cheng Yu
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23		The four sub-system	4 days	Fri 24/6/16	Thu 30/6/16		Cheng Yu,Chloven
24		Beta Release	2 days	Thu 30/6/16	Mon 4/7/16		
25		▲ Transition Phase Iter 1	10.38 days	Mon 4/7/16	Wed 20/7/16	22	Cheng Yu,Chloven,Jia Min,Mar
26		Acquisition and installation of Hardware and Software	3 days	Mon 4/7/16	Thu 7/7/16		Cheng Yu,Chloven
27		Conversion	3 days	Thu 7/7/16	Tue 12/7/16	26SS	Cheng Yu,Chloven
28		User Training	2 days	Tue 12/7/16	Thu 14/7/16		Jia Min,Man Ling
29		Documentation	3 days	Thu 14/7/16	Tue 19/7/16		Jia Min,Man Ling
30		Final Release	1 day	Tue 19/7/16	Wed 20/7/16		

3.3 Budget Summary

	Budget
Salary	$28 000
Software cost	
Microsoft visual studio	-
Microsoft project	-
Rational functional tester	$5000

There will be four of us working on this project and will be completing it in two months. The salary for each of us are $3500 for each month.

4 Risk Management Plan

We will be focusing on four projects risks that might happen which are time risks, technology risk, operational risk and financial risk.

Time risk are one of the risk we might face. For instance, we change too much of our system, in the end some of the components is being changed to not meet the original requirement and more time is wasted in fixing all the problems faced. We might not be able to meet the deadlines for each task also which will result in the delay of implementing the system. The later the system are implemented, the more losses Mr and Mrs Wang will have to incurred as their business are not doing well.

What we can do is that we can research first if what the client wants is feasible and discuss with them to find the best possible way before getting down to work first. Furthermore, we can spit into smaller components to evaluate so that we can reduce the chances of not meeting the client requirements. Moreover, we should also strictly follow the deadline for each task.

We may face hardware or software failure when trying to build the system which will result in losing our data. Natural disasters such as fire will also damage the hardware and software of the system. In the worst case scenario, we will have to build up the system again if we did not back up the files. Other than that, viruses might also infect our system which will disrupt computer operation. If that happens, the whole hotel system will be down and their business will have to be suspended temporarily. To add on, hackers might also hack into our system, stealing customer's confidential information such as bank account number. They might also inject malicious code in our website or system to cause it to malfunction.

To prevent theses technology risk from happening, we can consider signing up for Norton Secured seal. They will be able to help to scan for malware in your system and also did vulnerability testing. They also provide improved SSL tools for certificate checking to prevent viruses from entering the system. Other than that, we also need to back up our data and program to prevent the worst case scenario. We suggest you to use Tivoli Storage Manager where it let you back up files on a scheduled basis.

Financial risk happens when we did not have enough funding. To build up a functional and robust system, we might need certain resources such as the software that needs to be paid and software engineer. If the engineer want their salary to be higher and it over exceeded our budget, we will have to decrease other parts of the project cost just for the engineer which might have a drop of quality in the other part of the project. We might not be able to purchase some of the software also if we did not have enough funding.

The risk reduction strategy would be that to find another software engineer that would accept the salary cost within our budget. Another way is to do a detailed research of the price of the hardware and software needed. With the budget all plan out, we will be able to have enough funding to complete this project.

Operational risks occur during execution of the business function. These risks can be cause by human, system or external events. For example, if our system are not well- coded, they are likely to malfunction or causes error. It will also give hacker a chance to attack our system. User's satisfaction and sales will then decrease.

We will need to plan out the code that we will be using beforehand first. Operational risk management software are available to prevent operational risk from happening. This will be needed when the system are already been deployed. One of the software are MetricStream ORM App. They help business identify risk and make important decisions with the graph report of their data and losses.

5 References

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