# Curtin University – Department of Computing

# Assignment Cover Sheet / Declaration of Originality

Complete this form if/as directed by your unit coordinator, lecturer or the assignment specification.

			,
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Date of submission:	16/05/2019	Which assignment?	Sprint Report Three

#### I declare that:

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- The work I am submitting is *entirely my own*, except where clearly indicated otherwise and correctly referenced.
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- I have *not previously submitted* this work for any other unit, whether at Curtin University or elsewhere, or for prior attempts at this unit, except where clearly indicated otherwise.

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- Even with correct referencing, my submission will only be marked according to what I have done myself, specifically for this assessment. I cannot re-use the work of others, or my own previously submitted work, in order to fulfil the assessment requirements.
- It is my responsibility to ensure that my submission is complete, correct and not corrupted.

Signature:	Poornami Wijekoon	Date of Signature:	16 th of May 2019
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(By submitting this form, you indicate that you agree with all the above text.)

# **Property Management System**

**Sprint Report Three** 

Capstone Computing Project 1(Semester 1 2019 Sri Lanka Inst Info Tech)

Group No - SD07

Submitted by:

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16th of May 2019

# **Table of Contents**

1.PROGRESS REPORT	5
1.1.Tasks Completed	5
1.2.Tasks Planned	5
1.3.DIFFICULTIES	5
2.TASK BREAKDOWN	6
2.1.TASK 2	6
2.2.TASK 3	10
2.3.TASK 7	11
2.4.Task 11	15
3.DEVELOPMENT METHODOLOGY	16
3.1.MINUTES	16
3.2.Burndown Chart	16
3.3.SPRINT RETROSPECTIVE	17
3.4.TASK SUMMARY	18
3.5.TIME MANAGEMENT	18

# 1.Progress Report

Sprint Three	3 <sup>rd</sup> May 2019 – 16 <sup>th</sup> May 2019
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# 1.1 Tasks Completed

Task 2.1, 2.3

Task 3.4, 3.5

Task 7.1, 7.2

Task 11.1

# 1.2 Tasks Planned

Task 2.3 – Designing high level diagrams for system

Task 4.1 – Studying design techniques and designing requirements of the system

Task 7.3 – Designing GUIs for selected requirements and specifications.

Task 7.4 – Selecting appropriate color codes and icons for GUIs

Task 11.3 – Designing GUIs for Search management function

Task 11.4 – Selecting appropriate color codes and icons for GUIs

# 1.3 Difficulties

View the Sprint Retrospective for a more detailed reflection on the sprint

# 2. Tasks Breakdown

#### Task 2

#### **Task 2.1**

Estimated Time: 6 Hours

Actual Time: 5 Hours

Actual Time (This Sprint): 5 Hours

# Description

Designing usecase diagrams for functions.

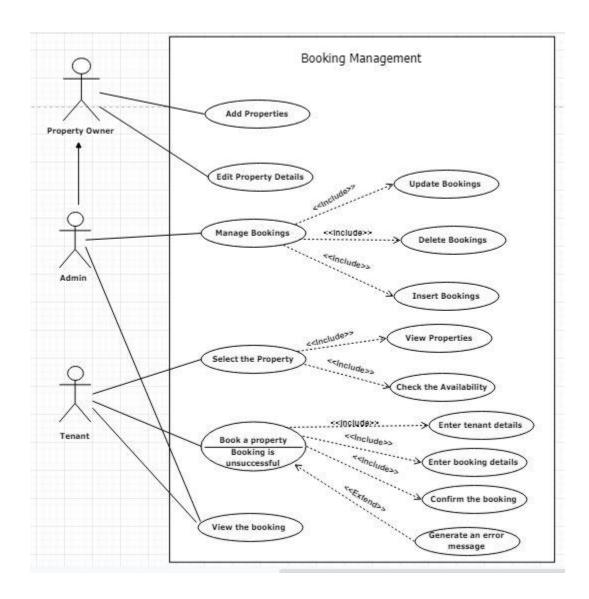
#### **Implementation**

Inorder to recognize exactly what I want to build I designed usecases. In this sprint I designed usecases for the two functions I'm working on which are Booking Management and Search Management. The usecase models below describes the functionality of our system Property Management System. The purpose of designing usecase models is to graphically represent an overview of the functionalities provided by our system. Also it helps to demonstrate the requirements. These diagrams consists of actors, relationships and usecases. Actors represents the roles related with the system. In my functions main roles are Admin, Tenant and Property Owner. Usecases represent the activities done by the actors. And relationships represents the links between actors and the usecases.

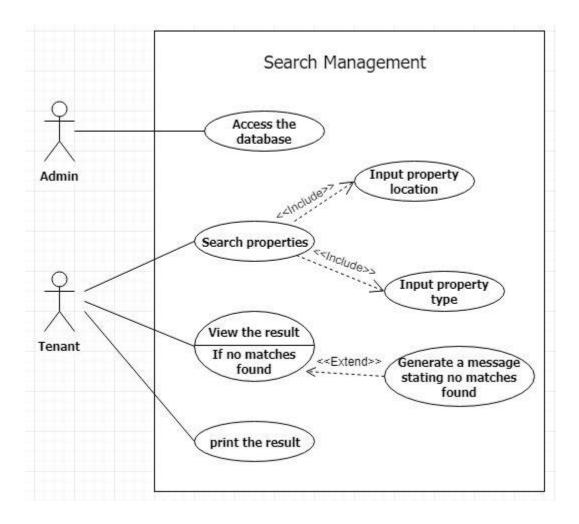
Simply in the Booking Management usecase diagram, it represents the functionality of booking a property. A tenant can first select a property by viewing the properties and by checking the availability. After that booking can be done by entering relavent details. If the details are not correct or if there is an error with the booking an error message will be displayed. Finally after confirming the booking it can be viewed by the Tenant as well as by the Admin. And Admin has access to the database where he can update, delete and insert booking details. Also Property owner can add properties and edit the details of the properties published on the system which can be done by the Admin as well.

In the Search Management usecase diagram, it represents the functionality of the searching function. The actors related to this function are Tenant and the Admin. Tenant can search properties by filtering the location and the property type. Then search results will be displayed. If there are no matches a message will be displayed. Likewise tenant can search and view properties easily.

Figures 1



Figures 2



#### **Task 2.3**

Estimated Time: 5 Hours

Actual Time : 5 Hours

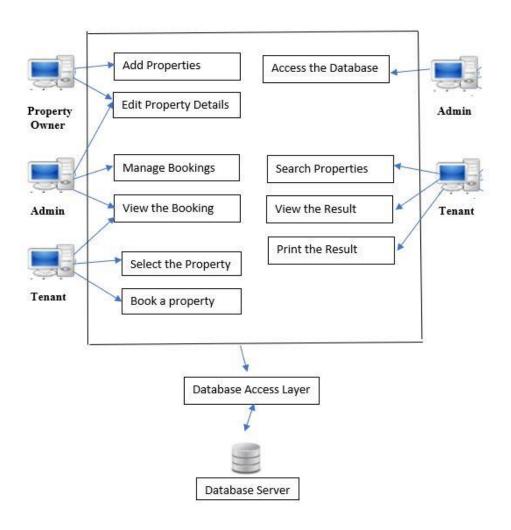
Actual Time (This Sprint): 5 Hours

# Description

Designing high level diagrams for functions

# **Implementation**

High level diagrams give an overview of the interaction between actors realted to system functions. It helps to understand the main components that can be developed for interfaces. Therefore I designed a high level diagram for my two functions; Booking Management and Search Management. Actors involved in this diagram are Admin, Tenant and Property Owner. The diagram below signifies a suitable model for coding. By designing this diagram I could understand how to develop and model GUIs for my functions.



#### Task 3

#### **Task 3.4**

Estimated Time: 7 Hours

Actual Time: 5 Hours

Actual Time (This Sprint): 3 Hours

#### Description

Learning development technologies (mobile+web).

# **Implementation**

Since web development technologies are changing and upgrading rapidly we decided to learn about web development technologies. We hope to build a web application for our system using PHP framework which is responsive on both web and mobile. We chose PHP as it is a powerful and deep enough to run large social networks. And is basically used to build web based software applications. Hence we did researches on PHP frameworks. While working on technologies we found a new PHP framework called Laravel PHP framework which is open source. It comes with some modern and important features. It has object-relational mapping, routing, authentication and etc...

#### **Task 3.5**

Estimated Time: 4 Hours

Actual Time: 4 Hours

Actual Time (This Sprint): 3 Hours

#### Description

Learing language development technologies.

#### **Implementation**

In order to recognize the long term impact of our web application we spent some time to add some knowledge on language development technologies. We will be using html, css for our front end which means in our client side coding. This is one of the core technologies used in every web application. By using html/css we could design the front end structure of our application. And our backend will be implemented using PHP. Other than that we learnt about AJAX technology and how it can be used in web applications.

#### Task 7

#### **Task 7.1**

Estimated Time: 8 Hours

Actual Time: 7 Hours

Actual Time (This Sprint): 4 Hours

# Description

Studying required coding technologies and gather tenant requirements

## **Implementation**

In this sprint I studied about the requirements of the tenants of the Booking Management function. According to my studies to attract tenants we or the system need to satisfy the requirements of the tenants. Therefore our properties should be priced at reasonable amounts, property details should be stated properly in the system, properties should have enough facilitilies and most of all the process of booking a property should be understandable by any user which means it should be user friendly.

Apart from that I studied coding technologies used by different booking systems and decided how to make use of them in our system.

#### **Task 7.2**

Estimated Time: 6 Hours

Actual Time: 5 Hours

Actual Time (This Sprint): 4 Hours

# Description

Designing wireframes for Booking Management GUIs.

## **Implementation**

This is a continuation of Sprint 2.In this sprint I developed my function wireframes more clearly without limiting it to one wireframe. Hence I could get a proper idea about my functions. In here in the Booking Management function firstly tenant gets a screen with list of properties. From this list tenant can find out available properties. And tenant can view the facilities of each property by clicking on the property name. then a small window will be opened including peoperty details like in figure 2. By clicking the next button in figure 1 tenant is directed to next step of the booking process. Then tenant is allowed to enter tenant details; figure 3. Afterwards by clicking on the next button in figure 3 tenant steps into the last step. That is to enter booking details as stated in figure 4. Finally tenant can complete and confirm the booking.

Figures 1



Figure 2



Figure 3



Figure 4



#### Task 11

#### **Task 11.1**

Estimated Time: 9 Hours

Actual Time: 6 Hours

Actual Time (This Sprint): 3 Hours

# Description

Gathering Search Management function details and requirements

## **Implementation**

For the Search Management function I'm responsible for, I gathered details and requirements. Search function plays an important role in any web application. In any web application there are large no of data. Hence it is somewhat hard to find the exact data you want. Through a search function user can quickly find the data his/her want without a lot of effort. According to the details I gathered search function should make the process of searching properties easy for the tenant. This function should provide the best results to the tenant, less time consuming, fast and etc....

# 3. Development Methodology

#### 3.1 Mintues

A document containing our team's chat (Whats app) for the Sprint 3 is available in <a href="https://github.com/PoornamiW/CCP1/bLob/master/TeamChat-Sprint3.pdf">https://github.com/PoornamiW/CCP1/bLob/master/TeamChat-Sprint3.pdf</a>

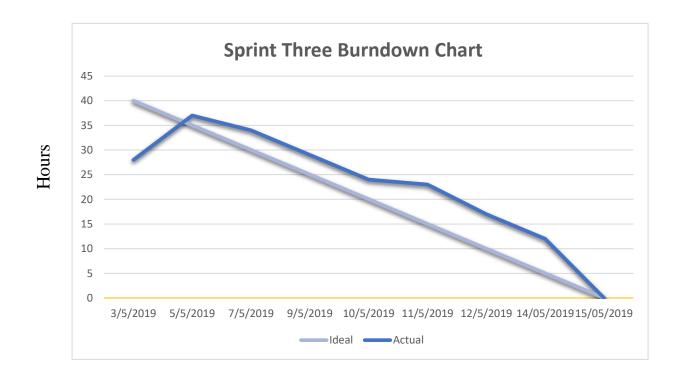
There was one meeting with the client in this sprint to disscuss how the system should be built and how the diagrams should be designed. The meeting was on 9<sup>th</sup> of May 2019. The minutes for this meeting and more details are available in

HTTPS://GITHUB.COM/POORNAMIW/CCP1/BLOB/MASTER/MEETING\_09\_05\_19.PDF

#### 3.2 Burndown Chart

# **Description**

Update sprint burn down charts.



# **3.3 Sprint Retrospective**

Estimated Time : 6 Hours

Actual Time : 6 Hours

Actual Time (this sprint) : ~ 4.5 Hours

# **Description**

Reflection on the sprint retrospective.

### What went well during the sprint?

I would say that all the work related to Sprint 3 went pretty much well. We could balance most of the work on time. Since this sprint has few diagrams, making of this sprint was an interesting task for me. Basically I'm satisfied with the output.

#### What went wrong during the sprint?

According to my point of view we had to struggle a bit to arrange meetings with the group due to our country's current situation. Other than that all other taks went smoothly.

#### What could we do differently to improve?

We could have drawn a diagram for the overall system in order to get an idea of the entire Property Managemnt Ssystem.

# 3.4 Task Summary

Estimated Time: 45 Hours

Actual Time: 27 Hours

Actual Time (this sprint): ~3.5 Hours

# Description

In this sprint most of the tasks are individual tasks. And I designed several diagrams. In order to understand the activities, components and relationships between actors I designed usecase diagrams for Booking Management and Search Management functions. And I designed high level diagrams to get an idea about the work flow, interfaces and etc....

Wireframing is an important step in any software development process and it is a backbone to the entire system. I designed wireframes for my functions and it helped me to plan the layout of my GUIs as well as I could get a better understanding about how to build my interfaces.

Apart from these tasks I studied about my function details, software development technologies and software development languages.

# 3.5 Time Management

Sub Task	Estimated Time	Actual Time
Task 2.1	6	5
Task 2.3	5	5
Task 3.4	7	3
Task 3.5	4	3
Task 7.1	8	4
Task 7.2	6	4
Task 11.1	9	3

Note: Final Task Allocation Document can be viewed in

HTTPS://GITHUB.COM/POORNAMIW/CCP1/BLOB/MASTER/SD07-TA.PDF