

**Module:** UFCF8S-30-2 - Advanced software development 21sep\_1

**Module Leaders:** Dr Mehmet Aydin & Dr Abdur Rakib

**Assignment:** UWE Accommodation System – Part 2 – Group Report

**Submission deadline:** 12 January 2022

**Demonstration Date:** 20 January 2022

**Students:**

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**Tutor:** James Lear

**Practical Session:** Thursdays 15:30-19:30

**Contents:**

- Introduction
- Strategy planning
- Continuous team iterations
- Simplicity
- Testing

## Group Joint Report:

### Introduction:

This is the phase of developing the UWE Accommodation system as requested by the client. We have established that Requirements and Design have been done already in part 1. In this part, we will discuss Strategy, Implementation and then Testing.

### Strategy Planning:

In an initial meeting, the members of the team met face to face to discuss the software development method that will be used. As recommended, we ended up using Agile methods throughout the strategy planning. In this meeting we also decided to take on roles to divide responsibilities. We have decided the roles as follows:

- Omar Aratuc: Team leader and main developer
- Suleima Abbara: Strategy and plan manager
- Haroun Aiouadj: Assistant developer

We also discussed a timeline for how to implement this system. Looking at the design document from part 1, we decided to break down the system into smaller pieces. By doing so, we had to look at the requirements to split the system into parts.

we identified the system users, in this case we had the accommodation staff; Managers, Wardens, and a super user "All". We then identified what each user can do:

**Manager:** add/update lease, delete lease, view room details

**Warden:** update cleaning status (clean, dirty, offline)

**All:** add/edit and delete lease, update cleaning status

The system consists of halls and rooms and leases, and will require a window which shows the details requested by the client, and what each user can access and view. we ended up dividing the work equally between us, as each of us was in charge of developing a certain part. the breakdown was as follows, with each part given an estimate of progress percentage to keep track of how much is finished and how much is left.

implementation part	percentage
main window design	10%
database	10%
login and registration	15%
all-user window implementation	15%
warden window implementation	10%
manager window implementation	10%
function: Update Lease	10%
function: delete lease	10%
function: update cleaning status	10%
total	100%

FIGURE 1 – PARTS AND PERCENTAGES

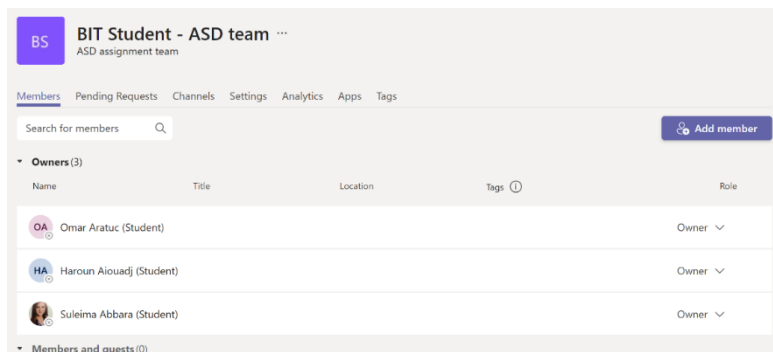


FIGURE 2 - ASD TEAMS CHANNELS

Those parts were not to be implemented in order, simply to give a general structure of the parts that needed to be done, and which member would do which part. we then decided to arrange for weekly meetings, as well as the weekly practical sessions that we attended. We arranged a MS Teams to keep track of all that was being done.

We then created a timeline of all the weeks we had before the delivery date. We planned to have two meetings each week, on Mondays we met in the library, and on Thursdays we met in our practical session. Therefore, our meetings

as recommended by the Agile method, were mostly face to face. Once all of that was done, we divided the parts between us so we can have an idea of what we needed to do.

roles:	team leader and developer	strategy and planning manager	assistant developer
names:	Omar	Suleima	Haroun
implementation part:	database	log in and registration	main window design
	All-user window implementation	manager window implementation	warden window implementation
	function: Update Lease	Function: Delete Lease	Function: Update cleaning status

FIGURE 3 - ROLES AND PARTS

Scrum Questionnaire

1. What have I done since last week? \*

Enter your answer

2. What problems have I encountered? What did I do to solve them? \*

Enter your answer

3. What will I do until the next meeting? \*

Enter your answer

4. What problems am I expecting to encounter? What is my plan to solve them? \*

Enter your answer

We also planned to follow the **Scrum Questionnaire** provided in the slides to ensure everyone knew their role before the next meeting. The questions included:

- What have I done since last meeting?
- What problems have I encountered?
- What will I do until next meeting?
- What problems do I expect to encounter?

A form on teams was created so that members can finish it before each meeting, which helped to keep it all recorded.

FIGURE 4 - SCRUM QUESTIONNAIRE

Name	What have I done since last week?	What problems have I encountered? What did I do to solve them?	What will I do until the next meeting?	What problems am I expecting to encounter? What is my plan to solve them?
Suleima Abbata	This week I worked on creating the log in system	implementing the log in was difficult, I looked at the lab examples and found that week 9's was a good example that guided me through the process	until next week i will work on adding more features to the log in to make it suit the system more	I think I will struggle without a working database, will contact my team member to see if they have worked on that yet
Omar Aratuc	This week I worked on creating the database for the system	Joining each tables was difficult as i made each table of each class like inner joining the data on the lease,hall, room and student table	for next week i will organize the database to make it easier to access and update when it is finally connected to the system	I was expecting to have a hard time connecting or getting data from other tables to join them together to be in one table and also I expected to encounter some problems creating unique keys and setting some constraints on each table
Haroun Aiouadj	This week i worked on the warden window tab	access prevent editing data the warden is not supposed to edit	find out how to only edit the cleaning status	how to implement it with the other windows
Omar Aratuc	For this week i as working on the tabs for all user which is all the tabs	Making each tabs update or refresh each tables on their own tabs whenever i update the tables on other tabs was a problem I encountered	I need to make a refresh button to make sure all the tables in each tabs update whenever it gets changed from other tabs	Im expecting to struggle with putting constraints on each tabs making sure only a specific user type can access each tabs
Haroun Aiouadj	i was working on update cleaning status for warden and all user	the problem i have found was on how to make it update the database	working more on updating my code to make the function work	implementing my code with my team members
Suleima Abbata	i was working on implementing the manager window	giving access to the manager to update the lease when changes are made	working on updating the database when changes are made	

FIGURE 5 - SOME SCRUM QUESTIONNAIRE ANSWERS

## Continuous team iterations:

The plan discussed above gave us a very flexible structure of implementing code and editing as we went along, which allowed for any change in the requirements to be added with no problem. In each week we decided what we will work on individually and how to implement it, so it easily iterated between planning and implementation, as shown in our week-by-week completed planning and implementation table:

timeline	meeting 1 - mondays (planning)	meeting 2 - thursdays (implementing)	progress:
22/11/2021	finishing touches to part 1 - use case diagram, class diagram, and sequence diagrams	deadline for part 1, practicing for presentation and planning roles and breakdown of system	design finished, implementation strategy planned
29/11/2021	practicing python skills, practicing GUI and how it works	looking at SQLite and how to use it for the system (database design)	preparing and practicing and learning the skills needed before strating the implementation
06/12/2021	splitting tasks between us: Log in and registration, main window design, and database all worked on seperately	implementing all three parts and making sure they wrok together - testing what's been done so far	35% done
13/12/2021	splitting tasks: designing the windows for manager, warden, and All-user	implementing the tabs and how they work with the log in system - testing whats done so far	70% done
27/12/2021	splitting the functions between us: (update lease, delete lease, update cleanin status)	implementing the functions and making sure they work well	100% done
03/01/2022	testing, and creating the group report	working on the individual reports, practicing for the presentation	testing and group report are done

FIGURE 6 - TIMELINE TABLE

## Team communication:

Our team has maintained regular communication on MS teams as well as on WhatsApp for quick meeting updates, which allowed us all to keep on top of our tasks and our meeting were successful because of the Scrum questionnaire which made it clear what our next task is. We had both face-to-face meeting as well as online when needed. Our communication was always quick reliable, and it was all documented.

Meeting Summary	
Total Number of Participants	3
Meeting Title	General
Meeting Start Time	04/01/2022, 13:11:57
Meeting End Time	04/01/2022, 13:56:42
Meeting Id	7a20df89-5dd5-4996-8661-17f8de365a05
Full Name	Join Time
Suleima Abbara (Student)	04/01/2022, 13:11:57
Haroun Aiouadj (Student)	04/01/2022, 13:12:12
Omar Aratuc (Student)	04/01/2022, 13:12:31

FIGURE 7 - A MEETING ATTENDANCE REPORT

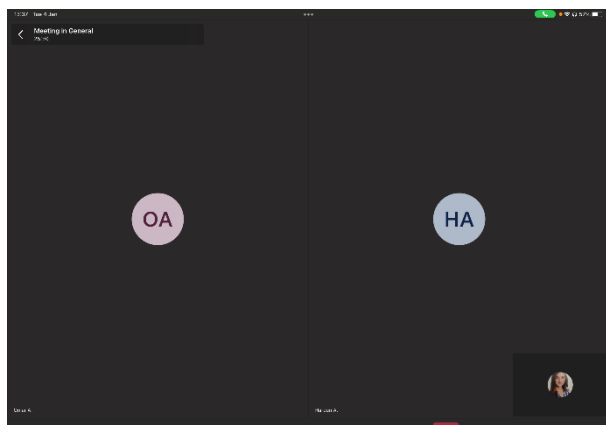


FIGURE 8 - TEAMS MEETING EXAMPLE



FIGURE 9 - WHATSAPP COMMUNICATION EXAMPLE

### Simplicity:

Our plan intended to keep the structure simple and to avoid over-complication. We followed the specification and the requirements, without adding too much complicated parts. Our implementation included many comments, and our variable names were all clear.

### Testing:

Test case	purpose	Expected result
Registration & Log in	To register the staff as Manager, Warden, or All-user	Depending on your staff type, you can only view the page you are allowed to access, except the All-user can view both manager's and warden's
View room details	User can view all room details and available leases, occupancy status, cleaning status, and lease duration	User can view lease number, hall name, hall number, room number, student name occupying the room, occupancy status, cleaning status, and lease duration.
Change room's cleaning status (clean)	Warden and All-user can change a room's cleaning status to "Clean"	Warden and All user click on a room and can switch cleaning status to "Clean" then click on refresh to apply changes in database
Change room's cleaning status (dirty)	Warden and All-user can change a room's cleaning status to "Dirty"	Warden and All user click on a room and can switch cleaning status to "Dirty" then click on refresh to apply changes in database
Change room's cleaning status (offline)	Warden and All-user can change a room's cleaning status to "Offline"	Warden and All user click on a room and can switch cleaning status to "Offline" then click on "refresh" to apply changes in database and view the changes

Edit room details: Update Lease	Manager and All-user can Update lease details for a room	Manager and All-user tabs:  Occupied room: if the room is Occupied, they can edit name, edit lease number, and edit lease duration  Unoccupied room: they can add a lease number, add a student name, add a lease duration, and change occupancy to "Occupied"  Once user presses "update" and "refresh" they will be able to view the changed details and it will be updated on the database
Edit room details: Delete Lease	Manager and All-user can delete a lease	Manager or All-user can click on a lease and delete it from the database
View Applications	Manager and All-user can view applications	"View Applications" will open a window with a couple of applications of students applying to UWE Accommodation which shows student name, student ID, and lease duration.