

Workshop seminar 3

Comp201 Software Engineering

Software Engineering Requirements use cases

Review Questions

Hotel Booking System.

Start working up a list of Use Cases

Remember the template in the use case lecture

ID **Short ID** (useful for diagrams and reference)

Name **Full name**

Description **Full description**

Pre-condition **What must be true before the use case can proceed**

Event flow **Flow of behaviour that makes up this use case**

Post-condition **What should be true if the use case successfully completes**

Includes **What other use cases are used**

Extensions **Optional behaviour**

Triggers **What makes this use case happen**

Here is an example to get you started: (notice the actor list has also been added in)

Actor list	Any user and external email service
Id	UC12
Name	Password reset
Description	This allows the user to reset the password, using their email address.
Pre-condition	The system has to be operation and have working email service
Event flow	1. The user enters their email address 2. If email invalid, error message, then back to step 1 3. System instructs user to check email 4. The user checks their email inbox and clicks on received link, this opens browser window 5. The user then can enter a new password which must conform to non-functional requirement NFR5. 6. The user's new password is saved and a message is sent via email to the user's email account.
Post-condition	The user's account if valid has a new password assigned.
Includes	None
Extensions	Invalid user account UC20
Triggers	User has pressed/clicked the forgot password button

NFR 5 Non-functional requirement 5

The password must be at least 8 characters long and include both upper case and lower case letters and a numerical digit.

Here are some more:

Actor list	Any user and external email service
Id	UC1
Name	User registration
Description	This allows the user to create an new account
Pre-condition	The system has to be operation and have working email service
Event flow	1. The user enters their email address, proposed username and role (guest, receptionist, manager, cleaner etc), the role may be fixed in the webpage, they also enter a password 2. If email invalid, error message, then back to step 1 3. If username already used, or password does not comply with non-functional requirement 5, then error message and back to 1 4. For new guest accounts, no permission is required, if other account is requested then user must be logged in as system administrator 5. The user checks their email inbox and clicks on received link, this opens browser window, this confirms email possession of user 6. The user is then taken to login window
Post-condition	The new user's account is created
Includes	None
Extensions	None
Triggers	User has pressed/clicked the registration button

Actor list	Any user
Id	UC2
Name	User Login
Description	This allows the user to Login
Pre-condition	The system has to be operation
Event flow	1. The user enters their username and enter a password 2. If the details are incorrect they are taken back to step 1 3. The user is taken to the homepage depending on role, guestHome, receptionistHome, managerHome
Post-condition	If wrong password 5 times account is locked
Includes	None
Extensions	None
Triggers	User has pressed/clicked the login button or has attempted an action that requires authentication and is currently logged out

Actor list	Guest
Id	UC3
Name	Room search
Description	Provides the facility to search for rooms based on occupancy, dates of stay and room and hotel facilities
Pre-condition	The system has to be operation
Event flow	<ol style="list-style-type: none"> 1. The user enters their search details, dates, location, numbers of guests and ages and hotel detail requests (swimming pool etc) 2. If the system finds exact match, it will list the results in order of (depending on user preference) distance to location, price or recommendation level 3. For each possible match the user is shown pictures of the rooms, details of the rooms and hotel 4. If the system cannot find exact match it tries to find rooms which provide closest match to the users requirements, this matching scoring is yet to be decided
Post-condition	None
Includes	None
Extensions	None
Triggers	User has navigated to search room page