**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 ia 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 amil**  **4. The user checks their email inbox and clicks on received link, this opens browser window**  **5. The user then can enters 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 users 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** |

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| **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** |

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| --- | --- |
| **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** | **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** |

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| --- | --- |
| **Actor list** | **Guest, Paypal system** |
| **Id** | **UC30** |
| **Name** | **Pay bill via Paypal** |
| **Description** | **Allows the guest to pay their bill via Paypal payment service** |
| **Pre-condition** | **The system has to be operation and user must have a valid Paypal account** |
| **Event flow** | **1. The guest is taken to the Paypal website**  **2. The user enters their Paypal login details and confirm the correct amount**  **3. If the Paypal transaction goes through a receipt is sent to the via email** |
| **Post-condition** | **The guests balance is adjusted by the amount paid on Paypal** |
| **Includes** | **None** |
| **Extensions** | **None** |
| **Triggers** | **User has opted to pay account via Paypal in checkout section** |