**SC2006 Software Engineering**

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**Lab#2 Deliverables**

Lab Group SSP1

Group Name: Depressed Elderly

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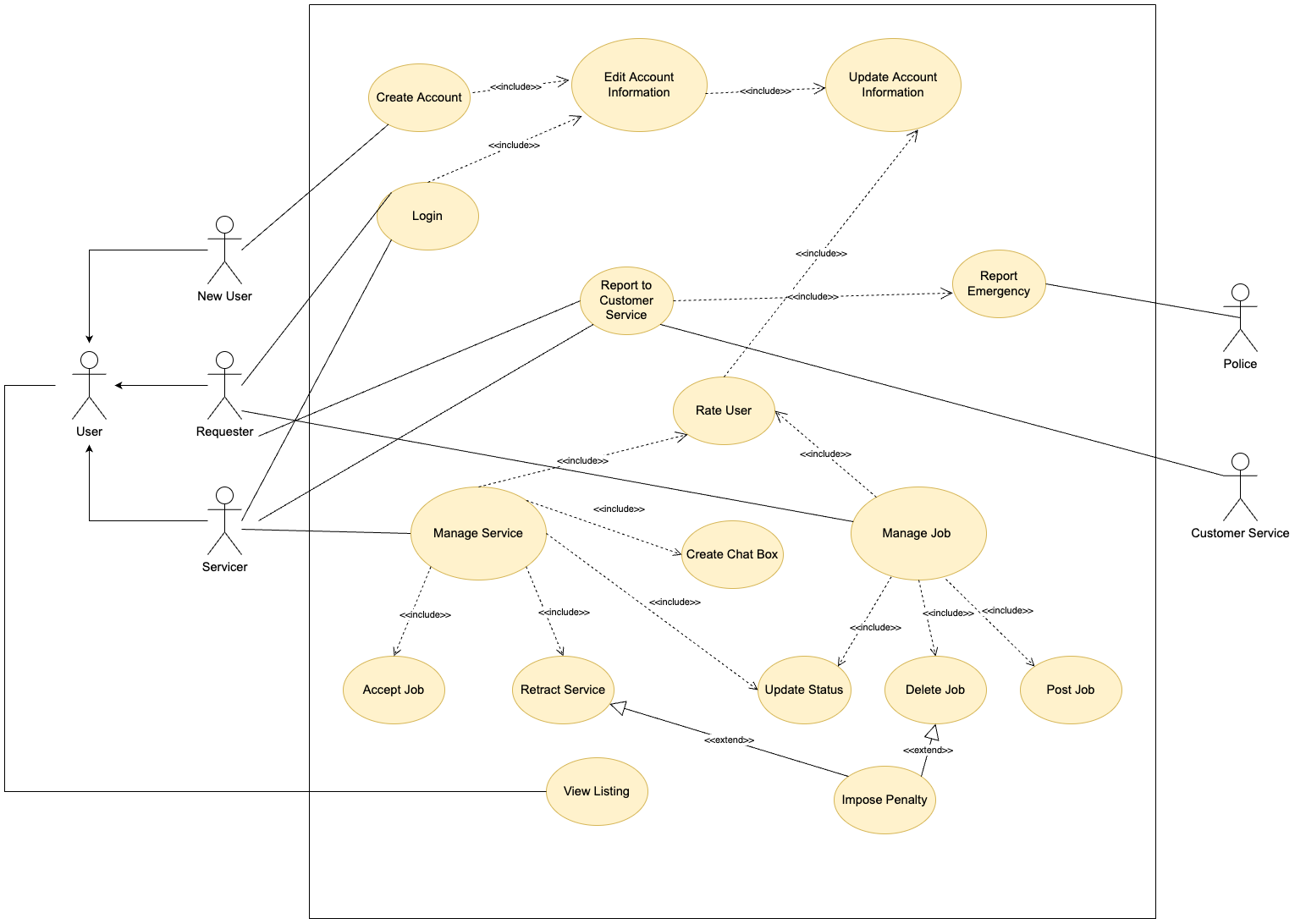
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# 

# 1.0 Use Case Diagram



<https://tinyurl.com/amongusbert>

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# 2.0 Use Case Description

Key:

Frequency 1-5, 1 = Low 5 = Very Frequent

Priority 1-5, 1 = Highest Priority 5 = Lowest Priority

| Use Case ID: | **USER\_UC\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Create Account | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Bertranne Lee** |
| Date Created: | **02.09.2022** | Date Last Updated: | **19.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Create Account allows new users to create an account in our system database. To create an account, users must input Display Name, Email, Phone Number, Password.** |
| Preconditions: | 1. **Phone number must not link to an existing account.** 2. **Email must not link to an existing account.** 3. **Passwords must adhere to requirements: at least 1 special character, letters in mixed cases, at least 8 characters.** |
| Postconditions: | 1. **System database holds new user’s account information.** |
| Priority: | **1** |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **System displays empty form fields for Display Name, Email, Phone Number and Password.** 2. **User inputs required information: Display Name, Email, Phone Number, Password.** 3. **User submits a form.** 4. **System validates the information.** 5. **System creates the account in the database.** 6. **System updates account information in database.** 7. **System sends a confirmation link to the user's email account.** 8. **User clicks onto the confirmation link.** 9. **System sends One Time Password to user’s phone number** 10. **User inputs password send to their phone** 11. **System displays the main landing page.** |
| Alternative Flows: | **AF-S4-a. User account already exists: Phone number/ email taken.**   1. **System displays “User account already exists”** 2. **System prompts users to create an account or log in.** 3. **If create account, then continue from main flow step 1.** 4. **If log in, then system directs to log in page to continue from Login (USER\_UC\_2)**   **AF-S4-b. Password does not meet the requirements.**   1. **System displays “Please input a password of at least 1 special character, mixed case and at least 8 characters long” message.** 2. **Continue from main flow step 1.**   **AF-S4-c. Phone number is not valid.**   1. **System displays “Invalid phone number, please input a valid Singapore number.”** 2. **Continue from main flow step 1.**   **AF-S4-d. Email is invalid.**   1. **System displays “Invalid email address, please input a valid Email”** 2. **Continue from main flow step 1.**   **AF-S10-a. Wrong One Time Password from user**   1. **System displays “Wrong OTP, please try again”** 2. **Continue from step 10.** |
| Exceptions: |  |
| Includes: | **Update Account Information (S4)** |
| Extends: |  |
| Special Requirements: | 1. Users must include a phone number and email in the creation of the account. 2. Users must verify their account through an email confirmation link to become a User of the application. |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Remove username from flow.** * **Add confirmation link into normal flow.** * **Add special requirements.** * **Add Assumptions to elaborate on Special Requirements terms.**   **[Update 19.09.2022 - Bertranne]**   * **Add additional alternate flows for wrong phone number and email address** * **Added step for phone number authentication.** |

| Use Case ID: | **USER\_UC\_2** | | |
| --- | --- | --- | --- |
| Use Case Name: | Login | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei (Nicole)** |
| Date Created: | **02.09.2022** | Date Last Updated: | **13.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Login allows users to enter the app to use features catered for registered users of the app. To login to the system, the user must input a unique username and the corresponding password. There will be a maximum of 5 attempts, after which, the user will have to wait for 30 minutes before another attempt.** |
| Preconditions: | **User must have an existing account in the application database** |
| Postconditions: | **System displays the main landing page** |
| Priority: |  |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **System displays a login page with empty fields.** 2. **User enters email and password on login form.** 3. **User submits details.** 4. **System validates the user’s email and password.** 5. **System shows the main landing page.** |
| Alternative Flows: | **AF-S2-a. Invalid Email**   1. **System cannot find the email in the database.** 2. **System displays an error message.** 3. **System prompts user to input username and password or Create Account.** 4. **If the “Create Account” prompt is ignored, use case resumes at main flow step 1.** 5. **If the user wants to “Create Account”, then System resumes from Create Account step 1.**   **AF-S2-b. Invalid Password**   1. **Password does not match for unique email.** 2. **System displays an error message.** 3. **System prompts users to input email and password.** 4. **Use case resumes at main flow step 1.**   **AF-S2-c. Missing Fields**   1. **System displays an error message.** 2. **System prompts user to input into missing fields.** 3. **Use case resumes at main flow step 2.**   **AF-S2-d. Maximum 5 attempts exceeded**   1. **System displays “maximum attempts exceeded, try again in 30 minutes” message.** 2. **System locks the user account for 30 minutes.** |
| Exceptions: |  |
| Includes: | **Validate Account, Verify Account** |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | [Updates 13.09.2022 - Shen Hwei]   * Update AF-S2-c. To “Missing Fields” instead of “Missing Username/ Password” * Remove Username and Add Email instead. |

| Use Case ID: | **USER\_UC\_3** | | |
| --- | --- | --- | --- |
| Use Case Name: | Edit Account Information (User) | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei (Nicole)** |
| Date Created: | **02.09.2022** | Date Last Updated: | **19.09.2022** |

| Actor: | **Existing User** |
| --- | --- |
| Description: | **Edit Account Information allows a user to edit account information such as Display Name, Email, Phone Number, Profile Picture, Password.** |
| Preconditions: | **User must have an existing account in the application database** |
| Postconditions: | **System displays the profile page with updated details.** |
| Priority: |  |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **User clicks on the “edit account” button on the interface.** 2. **User selects a field to update.** 3. **Users input new updates on selected fields.** 4. **User confirms changes.** 5. **System receives new changes.** 6. **System updates database.** 7. **System updates user interface to reflect the changes in database.** |
| Alternative Flows: | **AF-S3-b. Update Email Address**   1. **If the user selects the email field to update, the user must input a valid email address.** 2. **System validates the email address.** 3. **User confirms changes.** 4. **System sends OTP to the phone number of the user to verify the user.** 5. **User inputs correct OTP.** 6. **System validates OTP.** 7. **Flow resumes from S5.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | [Updates 14/09/2022]   * Change description, further discussion about description needs to be made.   [Updates 18/09/2022]   * Changed to split into two use cases: “Edit Account Information” (for user initiated) and “Update Account Information” (system’s job) * Updated Flow.   [Updates 19/09/2022 - Shen Hwei]   * Updated alternative flow to include validation.   [Updates 20/09/2022 - Shen Hwei]   * Added “System confirms changes” to cater for special cases like update password, update email and update phone number. |

| Use Case ID: | **USER\_UC\_3\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Edit Password | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei** |
| Date Created: | **20.09.2022** | Date Last Updated: | **20.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Edit password is an extended use case to Edit Account Information.** |
| Preconditions: |  |
| Postconditions: |  |
| Priority: |  |
| Frequency of Use: | **3** |
| Flow of Events: | 1. **System directs the user to the “edit password” page.** 2. **System prompts the user to input an old password and new password.** 3. **System validates the new password field (at least 1 special character, letters in mixed cases, at least 8 characters. )** 4. **User clicks onto confirm.** 5. **System verifies the old password.** 6. **Flow resumes at Edit Account Information USER\_UC\_3 S6.** |
| Alternative Flows: | **AF-S5-a. Wrong Old Password Input**   1. **System displays “Wrong old password, please try again”.** 2. **System directs the user to the same “edit password” page with empty input fields for old and new passwords.** 3. **Flow continues from S3.** |
| Exceptions: |  |
| Includes: |  |
| Extends: | **Edit Account Information** |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 20/09/2022 - Shen Hwei]**   * **Created: to accommodate for edit account information -> if user selects password.** |

| Use Case ID: | **USER\_UC\_3\_2** | | |
| --- | --- | --- | --- |
| Use Case Name: | Edit Email/ Phone Number | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei** |
| Date Created: | **20.09.2022** | Date Last Updated: | **20.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Edit email/ phone number is an extended use case to Edit Account Information.** |
| Preconditions: |  |
| Postconditions: |  |
| Priority: |  |
| Frequency of Use: | **3** |
| Flow of Events: | 1. **System validates email/phone fields (whichever selected to edit).** 2. **System verifies email/ phone fields.** 3. **User confirms changes.** 4. **System sends OTP to the linked phone number.** 5. **System prompts users to enter OTP.** 6. **User inputs OTP.** 7. **System verifies OTP.** 8. **Flow continues from Edit Account Information USER\_UC\_2 S6.** |
| Alternative Flows: | **AF-S7-a. Wrong OTP Input**   1. **System displays “Wrong OTP”.** 2. **System refreshes filled OTP field.** 3. **System prompts user to enter OTP again.** |
| Exceptions: | **E-S5-a. OTP not used for 3 minutes.**   1. **System invalidates the current OTP.** 2. **System directs the user to the “Edit Account Information” page.** |
| Includes: |  |
| Extends: | **Edit Account Information** |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 20/09/2022 - Shen Hwei]**   * **Created: to accommodate for edit account information -> if user selects edit email/ phone number** |

| Use Case ID: | **USER\_UC\_4** | | |
| --- | --- | --- | --- |
| Use Case Name: | View Listing | | |
| Created By: | **Shen Hwei** | Last Updated By: | **Shen Hwei** |
| Date Created: | **05.09.2022** | Date Last Updated: | **05.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **View Listing allows only existing users to view the ad-hoc jobs available.** |
| Preconditions: | **Users must be on the main landing page.** |
| Postconditions: |  |
| Priority: | **1** |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **System displays the main landing page to the user.** |
| Alternative Flows: | **AF-S1-a (Servicer Mode).**   1. **Users can accept jobs on the main landing page.** 2. **Use case continues from Accept Job (S1).**   **AF-S1-b (Requester Mode).**   1. **Users can request jobs.** 2. **System changes user mode to “Requester”** 3. **System directs the user to a job listing form page.** 4. **Use case continues from Post Job (S1).** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Remove condition of “any users, regardless of whether logged in or not can view listing”. Only existing users can view listings.** * **Add AF-21-b** |

| Use Case ID: | **USER\_UC\_5** | | |
| --- | --- | --- | --- |
| Use Case Name: | Update Job Status | | |
| Created By: | **Koh Jia Wei** | Last Updated By: | **Shen Hwei** |
| Date Created: | **05.09.2022** | Date Last Updated: | **14.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **The status of the job/ service will be shown as incomplete When a user is in “Requester” mode, they can update the status of the job to “completed” when Requester deems that Servicer has finished his/ her service.**  **When a user is in “Servicer” mode and is willing to take up the job, the servicer can update the status to “Servicing”.**  **When the servicer has finished the job, the servicer can update the status to “Awaiting confirmation” and wait for the requester’s approval.** |
| Preconditions: | 1. **Requester has already submitted a request** 2. **Servicer has done the ad hoc job** 3. **Requester confirms the ad hoc job** |
| Postconditions: |  |
| Priority: |  |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **The servicer updates the status of the job to “Servicing”, and this is reflected in the system for all to see.** 2. **The job is successfully done by the servicer.** 3. **The servicer updates that the job is done, the status of job is now “Awaiting confirmation”, and this is reflected in the system.** 4. **The requester is satisfied with the job and the status is now updated to “Done”** |
| Alternative Flows: | **AF-S6 The requester is dissatisfied with the job and the status is updated to “Incomplete” and the job is listed on the listings page again. The servicer and requester are given the option to rate each other.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: |  |

| Use Case ID: | **USER\_UC\_5** | | |
| --- | --- | --- | --- |
| Use Case Name: | Rate User | | |
| Created By: | **Shen Hwei** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **13.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Rate User allows a user to rate either the Servicer or the Requester after a job/service completion. If it’s service completion, implying that the user is a Servicer, then the user rates the Requester. Otherwise, if it’s a job completion, implying that the user is a Requester, then the user rates the Servicer.** |
| Preconditions: | 1. **Job/ Service must be completed and accepted by both the Requester and the Servicer.** |
| Postconditions: | 1. **Average Rating is updated in the account database.** 2. **System displays average rating on user profile.** |
| Priority: |  |
| Frequency of Use: |  |
| Flow of Events: | 1. **System prompts the user to rate the other user.** 2. **User performs rating.** 3. **System records the rating for the user for the specified Job/Service.** 4. **System calculates the average rating for users.** 5. **System updates account information.** 6. **Both User gets points based on the rate score.** |
| Alternative Flows: |  |
| Exceptions: |  |
| Includes: | **Update Account Information (S5)** |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Refine Flow** |

| Use Case ID: | **USER\_UC\_6** | | |
| --- | --- | --- | --- |
| Use Case Name: | Report Emergency | | |
| Created By: | **Shen Hwei** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **05.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Report Emergency allows users who are participants of a contract to contact Police directly through the application.** |
| Preconditions: | 1. **Reporters must be users who are participants of a contract.** |
| Postconditions: | 1. **Case escalates to local police.** |
| Priority: | **3** |
| Frequency of Use: | **1** |
| Flow of Events: | 1. **User clicks onto a “Report Emergency” interface on the application.** 2. **System initiates a call to the police authority immediately.** |
| Alternative Flows: |  |
| Exceptions: |  |
| Includes: | **Report to Customer Service** |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Polish use case.**   **[Updates 18.09.2022 - Shen Hwei]**   * **Updated Includes** |

| Use Case ID: | **USER\_UC\_7** | | |
| --- | --- | --- | --- |
| Use Case Name: | Report to Customer Service | | |
| Created By: | **Shen Hwei** | Last Updated By: | **Bert** |
| Date Created: | **05.09.2022** | Date Last Updated: | **19.09.2022** |

| Actor: | **Reporter, Reported, Customer Service (Secondary)** |
| --- | --- |
| Description: | **Report To Customer Service allows users (Reporter) to contact and report a user (Reported) to customer service if the reported is not behaving in a satisfactory way.**  **The Reporter are able to input images as evidence of another user’s inappropriate behaviour.** |
| Preconditions: | 1. **Reporters must be users.** |
| Postconditions: | 1. **System notifies Customer Service regarding the case.** 2. **System approves/ disproves report.** 3. **System updates report count of user if System approves of the report.** |
| Priority: | **3** |
| Frequency of Use: | **1** |
| Flow of Events: | 1. **Reporter clicks onto a “Report To Customer Service” button on the application.** 2. **System redirects use to a form input page to report misbehaving user (Reported)** 3. **Reporter fills out form and submits** 4. **System shows a submission completed message** 5. **Customer Service reviews legitimacy of the submitted report** 6. **Customer service deems the report to be legitimate.** 7. **Customer service will increment the report count value on the Reporter's account to show that they have been reported for misbehaviour.** 8. **Customer Service notifies the Reporter of the state of the report** |
| Alternative Flows: | **AF - S5 Customer service deems the report to be illegitimate.**   1. **Customer service deems the Reported is not breaking any rules** 2. **Customer service notifies the Reporter about the outcome of the investigation.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Polish use case.**   **[Update 19.09.2022 - Bertranne Lee]**   * **Reduced ambiguity and clarified use case** |

| Use Case ID: | **REQUESTER\_UC\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Manage Job | | |
| Created By: | **Shen Hwei** | Last Updated By: | **Shen Hwei** |
| Date Created: | **05.09.2022** | Date Last Updated: | **14.09.2022** |

| Actor: | **Requester** |
| --- | --- |
| Description: | **Encapsulates the following functions**   1. **Post Job** 2. **Delete Job** 3. **Update Status** 4. **Edit Job** 5. **Rate User** |

| Use Case ID: | **REQUESTER\_UC\_2** | | |
| --- | --- | --- | --- |
| Use Case Name: | **Post Job** | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei (Nicole)** |
| Date Created: | **02.09.2022** | Date Last Updated: | **14.09.2022** |

| Actor: | **User (Requester), User (Servicer)** |
| --- | --- |
| Description: | **When a user is in “Requester” mode, they can post ad-hoc jobs for Servicers to take up. To post a job, the Requester will have to input the location, title of job, description of job, date and time of job and salary. Requester must also have a verified phone number linked to the Requester’s account.** |
| Preconditions: | 1. **User must be logged in to post a job.** 2. **User must have GPS location enabled.** 3. **User must be in “Requester” mode.** |
| Postconditions: |  |
| Priority: |  |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **Requester fills up job information: exact location of job, title of job, description of job, date and time of job and salary.** 2. **System identifies the type of job based on schedule (now or future).** 3. **If job is now, System sets a timer of 3 minutes.** 4. **System records job into database.** 5. **System adds the job to the job listing page.** |
| Alternative Flows: |  |
| Exceptions: | E-S1-a. Requester cancels job before submission   1. System deletes any saved information on job form about job. 2. System directs user to Main Landing Page.   E-S4-a. Requester deletes job.   1. System interrupts recording of job: 2. If job already added to database    1. Delete from database. 3. If job is not in database yet:    1. Stop the post request to database.    2. Delete post request to database. 4. System directs user to Main Landing Page. |
| Includes: | **Validate Account, Verify Account, Schedule Job** |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: | **E-S4-a. Assumes that database will NOT take longer than 3 minutes to update the database.**  **If job has already been posted for more than 3 minutes, refer to REQUESTER\_UC\_3 (Delete Job).** |
| Notes and Issues: | **[Updates 14/09/2022 - Shen Hwei]**   * **Removed Alt Flow and put into exceptions.** * **Updated Exceptions.** |

| Use Case ID: | **REQUESTER\_UC\_3** | | |
| --- | --- | --- | --- |
| Use Case Name: | Delete Job | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **19.09.2022** |

| Actor: | **User (Requester)** |
| --- | --- |
| Description: | **Delete Job allows Requester to remove the job that has been posted into the database. If the job has been accepted by a servicer(s) the system will notify them about the job deletion. If the job is deleted 3 minutes after a servicer has been assigned to the job a plentality will be imposed on the requester.** |
| Preconditions: | 1. **User must be in Requester mode.** 2. **Job must exist.** |
| Postconditions: | **Job deleted from database.** |
| Priority: |  |
| Frequency of Use: |  |
| Flow of Events: | 1. **Requester selects the job for deletion.** 2. **System validates that there’s no assigned servicer to the job.** 3. **System updates status of job to “deleted”.** 4. **System removes job from database.** 5. **System updates interface and listings.** |
| Alternative Flows: | **AF-S2-a. Requester deletes Servicer who has been assigned to the job for more than 3 minutes.**   1. **System notifies the Servicer assigned to job.** 2. **System displays “We are sorry, but the job has been deleted” to the servicer.** 3. **System deletes job from database.** 4. **System updates interface and listings.** 5. **Use case continues from Impose Penalty (S1).**   **AF-S2-b. Requester deletes Servicer who has been assigned to the job for less than 3 minutes.**   1. **System notifies the Servicer assigned to job.** 2. **System displays “We are sorry, but the job has been deleted” to the servicer.** 3. **System deletes job from database.** 4. **System updates interface and listings.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **Normal flow assumes that no Servicer has taken up the job yet.**  **[Updates 14.09.2022 - Shen Hwei]**   * **Updated Alt. Flow**   **[Updates 19.09.2022 - Bertranne]**   * **Updated wording on when the penalty will be imposed on the requester.** |

| Use Case ID: | **REQUESTER\_UC\_4** | | |
| --- | --- | --- | --- |
| Use Case Name: | Edit Job | | |
| Created By: | **Bertranne Lee** | Last Updated By: | **19.09.2022** |
| Date Created: | **19.09.2022** | Date Last Updated: | **19.09.2022** |

| Actor: | **User (Requester)** |
| --- | --- |
| Description: |  |
| Preconditions: | 1. **User must be in Requester mode.** 2. **Job must exist.** |
| Postconditions: | **Contract’s information is updated in the database. If the job has a Servicer assigned to it, the requester is unable to change the description of the job as a contract has already been formed.** |
| Priority: |  |
| Frequency of Use: | **3** |
| Flow of Events: | 1. **Requester selects job to edit** 2. **Requester submits the new information for the job.** 3. **System updates the job description with the new information.** 4. **System updates interface and listing** |
| Alternative Flows: | **AF-S2-a. Job already has a Servicer assigned to it.**   1. **System notifies Requester that a Servicer has accepted the job and that they are unable to change the job description.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **Normal flow assumes that no Servicer has taken up the job yet.**  **[Updates 19.09.2022 - Bertranne Lee]**   * **Created use case.** |

| Use Case ID: | **SERVICER\_UC\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Manage Service | | |
| Created By: | **Jia Wei** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **05.09.2022** |

| Actor: | **User** |
| --- | --- |
| Description: | **Encapsulates the following functions**   1. **Accept Job** 2. **Retract Service** 3. **Update Status** 4. **Rate User** 5. **Create Chatbox** |

| Use Case ID: | **SERVICER\_UC\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Accept Job | | |
| Created By: | **Shen Hwei (Nicole)** | Last Updated By: | **Shen Hwei (Nicole)** |
| Date Created: | **02.09.2022** | Date Last Updated: | **13.09.2022** |

| Actor: | **User (Servicer), User (Requester)** |
| --- | --- |
| Description: | **When a user is on Servicer mode, they can browse the listing of ad hoc jobs to accept jobs that they wish to take up. Upon accepting the job, the servicer (primary actor) will receive details of the requester (secondary actor). The servicer will only receive pseudo information of the requester. For example, the name is not displayed as the requester’s full name; phone number will be hidden, any communication between the servicer and requester must be done through the application.** |
| Preconditions: | 1. **User must have GPS location enabled.** 2. **User must be in “Servicer” mode.** |
| Postconditions: | 1. **System creates a chat box between the Servicer and Requester.** |
| Priority: |  |
| Frequency of Use: | **5** |
| Flow of Events: | 1. **System checks for preconditions.** 2. **System creates a contract between the servicer and the requester to indicate agreement.** 3. **System sets a timer of 3 minutes.** 4. **Precise location information of requester displayed to Servicer.** 5. **System creates a chat box with call functions between the servicer and requester.** |
| Alternative Flows: | **AF-S1-a. User does not have GPS location enabled.**   1. **System prompts user to turn on GPS.**   **AF-S3-a. Servicer retracts service**   1. **Use case continues from Retract Service (S1).** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 13.09.2022 - Shen Hwei]**   * **Remove Phone Number Verification and User not Logged in Alt. flows as accepting a job implies existing user which implies phone number already verified upon create account.** |

| Use Case ID: | **SERVICER\_UC\_2** | | |
| --- | --- | --- | --- |
| Use Case Name: | Retract Service | | |
| Created By: | **Shen Hwei** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **05.09.2022** |

| Actor: | **Servicer** |
| --- | --- |
| Description: | **Retract Service allows a Servicer to remove themselves from being assigned to a particular job. If the servicer retracts his service 3 minutes after the contract has been created they will be imposed a penalty.** |
| Preconditions: | 1. **User must be in Servicer mode** |
| Postconditions: | **Job Assignment removed from database.** |
| Priority: |  |
| Frequency of Use: |  |
| Flow of Events: | 1. **Servicer chooses the contract to retract from.** 2. **System removes the servicer's assignments from the database.** |
| Alternative Flows: | **AF-S1-a.**   1. **If Servicer retracts 3 minutes after contract has been made, use case continues from Impose Penalty (S1) on Servicer.** 2. **System removes the servicer's assignment from the database.** |
| Exceptions: |  |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | **[Updates 19.09.2022 - Bertranne Lee & Shen Hwei]**   * **Updated the wording of the use case** * **Update alt flow** |

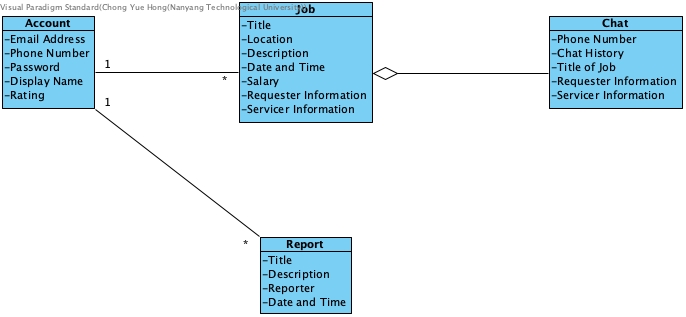
| Use Case ID: | **SERVICER\_UC\_3** | | |
| --- | --- | --- | --- |
| Use Case Name: | Create Chat Box | | |
| Created By: | **Shen Hwei** | Last Updated By: | **05.09.2022** |
| Date Created: | **05.09.2022** | Date Last Updated: | **20.09.2022** |

| Actor: | **Servicer** |
| --- | --- |
| Description: | **Create Chat Box allows the servicer and the requester to communicate with each other. The chat box will be created immediately after the servicer accepts the job. Chat Box also has a call function for users to call one another.** |
| Preconditions: |  |
| Postconditions: |  |
| Priority: | **3** |
| Frequency of Use: | **1** |
| Flow of Events: | 1. **Servicer accepts job.** 2. **System creates chat box under “chats”** 3. **System updates job status.** 4. **System updates interface.** |
| Alternative Flows: |  |
| Exceptions: | **E-S1-a. Servicer Retracts Service**   1. **Flow continues from** 2. **System deletes the chat box from database.** 3. **System removes the chat box from interface.**   **E-S1-b. Requester Deletes Job**   1. **Flow continues from REQUESTER\_UC\_3 (Delete Job) S2.** 2. **System deletes the chat box from database.** 3. **System removes the chat box from interface.** |
| Includes: |  |
| Extends: |  |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: | [Updates 13.09.2022 - Shen Hwei]   * **Created** |

| Use Case ID: | **CS\_UC\_1** | | |
| --- | --- | --- | --- |
| Use Case Name: | Impose Penalty | | |
| Created By: | **Shen Hwei** | Last Updated By: | **Shen Hwei** |
| Date Created: | **05.09.2022** | Date Last Updated: | **14.09.2022** |

| Actor: | **Customer Service** |
| --- | --- |
| Description: | **Impose penalty reduces the points of the user. The points can be deducted to negative.** |
| Preconditions: | **Jobs must be deleted, or Service must be retracted.** |
| Postconditions: |  |
| Priority: |  |
| Frequency of Use: |  |
| Flow of Events: | 1. **System deducts 50 points from the user.** 2. **System updates account information.** 3. **System notifies the user.** 4. **System updates interface.** |
| Alternative Flows: |  |
| Exceptions: |  |
| Includes: | **Update Account Information (S1).** |
| Extends: | **Delete Job, Retract Service.** |
| Special Requirements: |  |
| Assumptions: | **Job deleted implies that the user is Requester.**  **Service Retracted implies that the user is a Servicer.** |
| Notes and Issues: | **[Updates 14.09.2022 - Shen Hwei]**   * **Updated description and flow.** * **Need more clarification.** |

# 3.0 Class Diagram Of Entity Classes



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# 4.0 Key Boundary Classes & Control Classes

# 

# 5.0 Sequence Diagrams

### Create Account

### 

### Login

### 

### Update Account Information

### 

### View Listing

### 

### Report Emergency

### 

### Rate User

### 

### Impose Penalty

### 

# 6.0 Initial Dialog Map

# 

# 

# 7.0 Appendix

For clearer images for all our diagrams please check the respective folders in the Github Repository or the SVN space.