# **Use Cases**

for

# <Good4U>

Version 1.0

Prepared by <author>

<organization>

<date created>

# **Revision History**

| Name | Date | Reason For Changes | Version |
|------|------|--------------------|---------|
|      |      |                    |         |
|      |      |                    |         |

# **Guidance for Use Case Template**

Document each use case using the template shown in the Appendix. This section provides a description of each section in the use case template.

## 1. Use Case Identification

#### 1.1. Use Case ID

Give each use case a unique numeric identifier, in hierarchical form: X.Y. Related use cases can be grouped in the hierarchy. Functional requirements can be traced back to a labeled use case.

#### 1.2. Use Case Name

State a concise, results-oriented name for the use case. These reflect the tasks the user needs to be able to accomplish using the system. Include an action verb and a noun. Some examples:

- View part number information.
- Manually mark hypertext source and establish link to target.
- Place an order for a CD with the updated software version.

# 1.3. Use Case History

## 1.3.1 Created By

Supply the name of the person who initially documented this use case.

#### 1.3.2 Date Created

Enter the date on which the use case was initially documented.

#### 1.3.3 Last Updated By

Supply the name of the person who performed the most recent update to the use case description.

#### 1.3.4 Date Last Updated

Enter the date on which the use case was most recently updated.

# 2. Use Case Definition

#### **2.1. Actor**

An actor is a person or other entity external to the software system being specified who interacts with the system and performs use cases to accomplish tasks. Different actors often correspond to different user classes, or roles, identified from the customer community that will use the product. Name the actor(s) that will be performing this use case.

# 2.2. Description

Provide a brief description of the reason for and outcome of this use case, or a high-level description of the sequence of actions and the outcome of executing the use case.

#### 2.3. Preconditions

List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each precondition. Examples:

- 1. User's identity has been authenticated.
- 2. User's computer has sufficient free memory available to launch task.

#### 2.4. Postconditions

Describe the state of the system at the conclusion of the use case execution. Number each postcondition. Examples:

- 1. Document contains only valid SGML tags.
- 2. Price of item in database has been updated with new value.

# 2.5. Priority

Indicate the relative priority of implementing the functionality required to allow this use case to be executed. The priority scheme used must be the same as that used in the software requirements specification.

# 2.6. Frequency of Use

Estimate the number of times this use case will be performed by the actors per some appropriate unit of time.

#### 2.7. Flow of Events

Provide a detailed description of the user actions and system responses that will take place during execution of the use case under normal, expected conditions. This dialog sequence will ultimately lead to accomplishing the goal stated in the use case name and description. This description may be written as an answer to the hypothetical question, "How do I <accomplish the task stated in the use case name>?" This is best done as a numbered list of actions performed by the actor, alternating with responses provided by the system.

#### 2.8. Alternative Flows

Document other, legitimate usage scenarios that can take place within this use case separately in this section. State the alternative course, and describe any differences in the sequence of steps that take place. Number each alternative course using the Use Case ID as a prefix, followed by "AC" to indicate "Alternative Course". Example: X.Y.AC.1.

# 2.9. Exceptions

Describe any anticipated error conditions that could occur during execution of the use case, and define how the system is to respond to those conditions. Also, describe how the system is to respond if the use

case execution fails for some unanticipated reason. Number each exception using the Use Case ID as a prefix, followed by "EX" to indicate "Exception". Example: X.Y.EX.1.

#### 2.10. Includes

List any other use cases that are included ("called") by this use case. Common functionality that appears in multiple use cases can be split out into a separate use case that is included by the ones that need that common functionality.

### 2.11. Special Requirements

Identify any additional requirements, such as nonfunctional requirements, for the use case that may need to be addressed during design or implementation. These may include performance requirements or other quality attributes.

# 2.12. Assumptions

List any assumptions that were made in the analysis that led to accepting this use case into the product description and writing the use case description.

#### 2.13. Notes and Issues

List any additional comments about this use case or any remaining open issues or TBDs (To Be Determineds) that must be resolved. Identify who will resolve each issue, the due date, and what the resolution ultimately is.

# **Use Case Template**

| Use Case ID:   | M1            |                    |  |
|----------------|---------------|--------------------|--|
| Use Case Name: | Main Use Case |                    |  |
| Created By:    |               | Last Updated By:   |  |
| Date Created:  |               | Date Last Updated: |  |

| A . 4             | Hann Crystone  |
|-------------------|--|
| Actor:            | User, System   |
| Description:      | Used by all first-time users and used everytime existing users who                     |
|                   | log out previously open the app.   |
|                   |  |
|                   | (For new user)   |
|                   | System allows the user to create an account and complete a                             |
|                   | questionnaire regarding their culture, race and religious preferences,                 |
|                   | as well as economical abilities. Upon completing the questionnaire,                    |
|                   | a curated list of recommendations will be given to the user on their                   |
|                   | possible course of actions.  |
|                   | (For oxiging user)   |
|                   | (For existing user) System retrieves information of the existing user and displays the |
|                   | Home screen for the user to select the sections they would like to                     |
|                   | explore/take action on.  |
| Preconditions:    | The user opens the app on his/her mobile phone.  |
| Postconditions:   | After using this function, the application will redirect the                           |
| 1 osteonations.   | user back to case M1   |
| Priority:         | 1  |
| Frequency of Use: | Not frequent(only once per log in/ Sign up)  |
| Flow of Events:   |  |
|                   | (If the user is a first time user)   |
|                   |  |
|                   | <u>Step 1</u>  |
|                   |  |
|                   | System displays "Sign in" and "Sign up" buttons on the Landing                         |
|                   | Screen.  |
|                   |  |
|                   | Step 2   |
|                   | <del></del>  |
|                   | The user selects "Sign up".  |
|                   | ~ ~  |
|                   | Step 3   |
|                   |  |
|                   | System display fields for the user to fill in.   |
|                   |  |
|                   | System register information of the hospice patient into the system,                    |
|                   | through recording his/her name, nationality, NRIC, age, sex, race,                     |
|                   | unough recording morner name, nationality, tyrice, age, sex, race,                     |

religion, occupation and income information into the system, and create a dedicated account for the hospice patient's/the relatives with approval for usage, using a username and password. (This is used for the case in the event of untimely death of the user, a next-of-kin/beneficiary can be nominated to assist in the procedures)

#### Step 4

System verifies the username and the password against the information in the server. If the parameters match, the system approves the sign-up request.

#### Step 5

System redirects the user to the Questionnaire Screen, which is designed to capture the preference of the after death formalities of the hospice patient (in terms of cultural, racial/religious, locality to residence and economical concerns).

#### Step 6

The user selects the "Submit" button upon completion of the questionnaire.

#### Step 7

System redirects the user to the Home Screen, where a list of options will be available to them (shown below).

- a. Make wills
- b. Death Certificate
- c. Funeral
- d. Obituary
- e. Burial and Cremation
- f. Others
- g. Plans

#### <u>Step 8</u>

After using the desired functions, the user selects the "Sign out" button to logout of the account.

Alternative Flows:

If the user has an existing account

|                       | Step 2   |  |  |
|-----------------------|--|--|--|
|                       | <u>Step 2</u>  |  |  |
|                       | The user selects "Sign in".  |  |  |
|                       | Step 3   |  |  |
|                       | The app will request the user to enter his/her username and password.  |  |  |
|                       | Step 4   |  |  |
|                       | System verifies the username and the password against the information in the server. If the parameters match, the system approves the sign-in request.   |  |  |
|                       | <u>Step 5</u>  |  |  |
|                       | Return to Step 7 of Normal Flow (Main Case).   |  |  |
| Exceptions:           | If username and password is keyed in incorrectly 3 times, the system will display the message "Please reset your Username/Password". Thereafter, the user will be redirected to the Username/Password reset screen.  |  |  |
| Includes:             | Subcase 1, Subcase 2, Subcase 3, Subcase 4, Subcase 5, Subcase 6   |  |  |
| Special Requirements: | Security  - System must verify the user's login credentials before enabling the user to proceed.   |  |  |
|                       | Usability - 80% of users must be able to understand and complete the questionnaire without any help.   |  |  |
|                       | Performance  - After the user completes the questionnaire, the system must generate the best recommendations on the course of action within 5 seconds.  - After the user completes the questionnaire, the system must provide at least 2 recommended courses of action for the user to choose between. |  |  |
| Assumptions:          | The user signs in successfully with the correct username and password stored in the system.  |  |  |
| Notes and Issues:     |  |  |  |

| Use Case Name: | Subcase 1 - Make Will |                    |  |
|----------------|-----------------------|--------------------|--|
| Created By:    |                       | Last Updated By:   |  |
| Date Created:  |                       | Date Last Updated: |  |

| Description:  Used by users who would like to make a plan before their passis.  This section allows users to draft a will by filling in his/her particulars required. System will store and save this information the user's future reference. Upon saving the draft, users can pro to select their choice of lawyer to help legalised the will drafted the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use: Often (5 out of every 10 logins per user)  Step 1  System requests the user to enter a will based on the following criterias: |   |  |  |
|---|---|--|--|
| This section allows users to draft a will by filling in his/her particulars required. System will store and save this information the user's future reference. Upon saving the draft, users can pro to select their choice of lawyer to help legalised the will drafted the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use: Flow of Events:  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   | User, System  |  |  |
| particulars required. System will store and save this information the user's future reference. Upon saving the draft, users can pro to select their choice of lawyer to help legalised the will drafted the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated.  The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use:  Often (5 out of every 10 logins per user)  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following  | Used by users who would like to make a plan before their passing. |  |  |
| the user's future reference. Upon saving the draft, users can pro to select their choice of lawyer to help legalised the will drafted the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference w they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect th user back to case M1  Priority: 2  Frequency of Use: Often (5 out of every 10 logins per user)  Step 1  System requests the user to enter a will based on the following  |   |  |  |
| to select their choice of lawyer to help legalised the will drafted the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use: Often (5 out of every 10 logins per user)  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following  |   |  |  |
| the user is not ready to confirm the will, he/she can also choose shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions:  The user's identity has been authenticated.  The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use:  Often (5 out of every 10 logins per user)  Flow of Events:  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   |   |  |  |
| shortlist the lawyers first to compare and for future reference we they are ready to have the will legalised.  Preconditions: The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions: 2. After using this function, the application will redirect the user back to case M1  Priority: 2  Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events: (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following  |   |  |  |
| they are ready to have the will legalised.  Preconditions: The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions: 2. After using this function, the application will redirect the user back to case M1  Priority: 2  Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events: (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   |   |  |  |
| Preconditions: The user's identity has been authenticated. The user selects the "Make Will" button on Home Screen.  Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events:  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   | 11011   |  |  |
| Postconditions:  2. After using this function, the application will redirect the user back to case M1  Priority:  Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events:  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   |   |  |  |
| user back to case M1  Priority: 2  Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events: (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   |   |  |  |
| Priority: 2 Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events: (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following  | e   |  |  |
| Frequency of Use: Often (5 out of every 10 logins per user)  Flow of Events:  (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   | 2   |  |  |
| (If the user is a first time user)  Step 1  System requests the user to enter a will based on the following   |   |  |  |
| Step 1  System requests the user to enter a will based on the following   | (If the user is a first time user)                                |  |  |
| System requests the user to enter a will based on the following   | (11 the user is a first time user)                                |  |  |
| l · · · · · · · · · · · · · · · · · · ·   |   |  |  |
|   |   |  |  |
| A. TESTATOR PARTICULARS (YOU)   |   |  |  |
| B. WORLDWIDE OR SINGAPORE ASSETS ONLY   |   |  |  |
| C. EXECUTORS AND TRUSTEES   |   |  |  |
| D. EXECUTOR 1   |   |  |  |
| E. SUBSTITUTE EXECUTOR(S) (IF ANY)  |   |  |  |
| F. SPECIFIC GIFTS (IF ANY)  |   |  |  |
| G. RESIDUARY OR WHOLE OF MY ESTATE  |   |  |  |
| H. BENEFICIARY 1  |   |  |  |
| I. SPECIAL INSTRUCTIONS (IF ANY)  |   |  |  |
| J. WILLS REGISTRY   |   |  |  |
|   |   |  |  |
| Step 2  | Step 2  |  |  |
| The user selects either the "Submit" or "Cancel" button.  | _   |  |  |
| Step 3  | Step 3  |  |  |

The user selects the "Submit" button

#### Step 4

System displays the message "Despite your submission, all submissions are subject to our review and we are at liberty to reject any application".

#### Step 5

System requests the user to engage one of the lawyers in the database.

#### Step 6

If the user selects one of the lawyers from the database, the system redirects the user to a panel which features information of the particular lawyer such as telephone number, email, speciality and law firm. There are two buttons on the screen: "Contact Lawyer" and "Shortlist Lawyer"

#### Step 7

The user selects the "Contact Lawyer" button.

#### Step 8

System sends an email containing all of the information entered through the app.

#### Step 9

System displays the Confirmation Screen and "Back to Home" button.

#### **Step 10**

The user selects the "Back to Home" button.

#### Step 11

System redirects the user to the Home Screen.

Alternative Flows:

<u>ALT FLOW 1 (If the user has previously saved their uncompleted</u> will. From Step 1 of NORMAL FLOW (Subcase 1 - Make Will))

#### <u>Step 1</u>

System displays information stored previously

#### Step 2

Return to Step 1 of Normal Flow (Subcase 1 - Make Will)

ALT FLOW 2 (If the user wishes to exit in Step 2 of NORMAL FLOW (Subcase 1 - Make Will))

#### Step 3

The user selects the "Cancel" button.

#### Step 4

System displays "Save Draft" and "Delete" buttons in a pop-up message.

#### Step 5

The user selects the "Save Draft" button.

#### Step 6

System stores the information filled in.

#### Step 6

System redirects the user to the Home Screen.

<u>ALT FLOW 3 (If the user does not wish to save the information filled up. From Step 4 of ALT FLOW 2 (Subcase 1 - Make Will))</u>

#### Step 5

The user selects the "Delete" button.

#### Step 6

System clears the information filled in.

|                       | Stan 7  |
|-----------------------|---|
|                       | <u>Step 7</u>   |
|                       | System redirects the user to the Home Screen.   |
|                       | ALT FLOW 4 (If the user wishes to save the lawyer information instead of contacting them immediately. From Step 6 of NORMAL FLOW (Subcase 1 - Make Will))  Step 7 |
|                       | The user selects the "Shortlist Lawyer" button.   |
|                       | Step 8  |
|                       | System stores the information filled into function g. Plans.  |
|                       | Step 9  |
|                       | System redirects the user to the Home Screen.   |
| Exceptions:           |   |
| Includes:             |   |
| Special Requirements: |   |
| Assumptions:          |   |
| Notes and Issues:     |   |

| Use Case ID:   | S2                            |
|----------------|-------------------------------|
| Use Case Name: | Subcase 2 - Death Certificate |
| Created By:    | Last Updated By:              |
| Date Created:  | Date Last Updated:            |

| Actor:       | User, System, Doctor (Lasting Power of Attorney)                         |
|--------------|--|
| Description: | Used by next-of-kin when there is an unfortunate passing of the deceased |
|              | ueceaseu   |
|              | The next of his will need to assess a destante contifu death of          |
|              | The next-of-kin will need to engage a doctor to certify death at         |
|              | home. The doctor will certify the death online and the death will be     |
|              | automatically registered.  |
|              |  |

|                   | Note: The doctor will issue a manual document known as                               |
|-------------------|--|
|                   | Confirmation of Death if the system is unavailable. The                              |
|                   | Confirmation of Death is accepted by NEA and Town Councils for                       |
|                   | funeral, burial or cremation-related applications. If there is                       |
|                   | **   |
|                   | difficulty using this document to apply for the Permit to                            |
|                   | Bury/Cremate, the next-of-kin or funeral service provider should                     |
|                   | contact NEA 24-hour hotline at 6225 5632 for assistance.                             |
|                   |  |
| Preconditions:    | The user's identity has been authenticated.  |
| D - 4 1'4'        | The user selects the "Death Certificate" button on the Home Screen.                  |
| Postconditions:   | 3. After using this function, the application will redirect the user back to case M1 |
| Priority:         | 2  |
| Frequency of Use: | Sometimes (1 out of 10 logins per user)  |
| Flow of Events:   | Step 1   |
|                   | <b>-</b>   |
|                   | System displays "Past Certification(s) of Death" and "Register for                   |
|                   | New Certification of Death" buttons.   |
|                   | <u>Step 2</u>  |
|                   | The user selects the "Register for New Certification of Death" button.               |
|                   | Step 3   |
|                   | System displays the following input fields and "Confirm" button:                     |
|                   | Name of deceased   |
|                   | Sex of deceased  |
|                   | Identity document number of deceased   |
|                   | Date of birth of deceased  |
|                   | Date of death  |
|                   | TC: 0.1 41   |
|                   |  |
|                   | Place/Address where death occurred   |
|                   | Cause of death   |
|                   | Step 4   |
|                   |  |

The user fills in the above mentioned information. Step 5 The user selects the "Confirm" button. Step 6 System redirects the user to the next screen displaying the message "Please select the location where the deceased passed away" and two buttons: "Deaths in Hospital" and "Deaths at Home". Step 7 The user selects the "Deaths in Hospital" button. Step 8 System redirects the user to Info Screen with a set of written information found on: https://docs.google.com/document/d/1B E7bqcOvk q58gTg7TAwP BvTK3w8bxKNglQqRdoXsY/edit#. As the registration is automatically carried out by the doctor, the user would not have to execute anything, but just to obtain information on the retrieval of the death certificate. System displays the "Back to Home" button at the bottom of the Info screen. Step 9 The user selects the "Back to Home" button. **Step 11** System redirects the user to the Home Screen. Alternative Flows: ALT FLOW 1 (If the user wishes to view past Death Certificates he/she has registered previously. From Step 1 of NORMAL FLOW

(Subcase 2 - Death Certificate))

#### Step 2

The user selects the "Past Certification(s) of Death" button.

#### Step 3

System displays a list of past registered Certification(s) of Death.

ALT FLOW 2 (If the user has not registered for any Death Certificates previously) From Step 2 of ALT FLOW 1 (Subcase 2 - Death Certificate))

#### Step 3

System displays the message "You have not registered for any Certification of Death previously" and two buttons: "Add New Certification of Death" and "Back to Home"

#### Step 4

The user selects the "Add New Certification of Death" button.

#### <u>Step 5</u>

Return to Step 3 of NORMAL FLOW (Subcase 2 - Death Certificates)

ALT FLOW 3 (If the location of the deceased's death is home. From Step 6 of NORMAL FLOW (Subcase 2 - Death Certificate))

#### Step 7

The user selects the "Death at Home" button.

#### <u>Step 8</u>

System displays a map of the doctors in the vicinity and ways of communicating with the doctor (Phone, social media platforms(live)). There would be a copy-paste function screen to retrieve the information the user entered for the deceased and paste into their preferred social media platforms.

|                       | Step 9   |
|-----------------------|--|
|                       | The doctor certifies the death online.  Step 10  |
|                       | System registers the death automatically into the Past Certification(s) of Death Screen. |
|                       | <u>Step 11</u>   |
|                       | System displays the Certification of Death and "Back to Home" button.                    |
|                       | <u>Step 12</u>   |
|                       | The user selects the "Back to Home" button.  |
|                       | <u>Step 13</u>   |
|                       | System redirects the user to the Home Screen.  |
| Exceptions:           |  |
| Includes:             |  |
| Special Requirements: |  |
| Assumptions:          |  |
| Notes and Issues:     |  |

| Use Case ID:   | S3                  |                    |  |
|----------------|---------------------|--------------------|--|
| Use Case Name: | Subcase 3 - Funeral |                    |  |
| Created By:    |                     | Last Updated By:   |  |
| Date Created:  |                     | Date Last Updated: |  |

| Actor:          | User, System, Funeral Director                                  |  |
|-----------------|---|--|
| Description:    | Used by next-of-kin when there is an unfortunate passing of the |  |
|                 | deceased.   |  |
| Preconditions:  | 1) The user's identity has been authenticated.                  |  |
|                 | 2) User selects "Funeral" button on Home Screen                 |  |
| Postconditions: | 1) System successfully saves the plan into the database.        |  |

|                    | 2) System displays the contact information of the service   |
|--------------------|---|
| Priority:          | provider selected by the user.  Medium  |
| Frequency of Use:  | Medium (1 out of 10 logins per user)  |
| Flow of Events:    | Step 1  |
|                    | System calls for Query Map Use Case.  |
|                    | Step 2  |
|                    | System displays the best selections/recommendations section, which is curated based on the user's inputs regarding price range, cultural customs and locality from the questionnaire. System will also display the Other Choices section for the user who might be unsatisfied with the current recommendations provided by the system. |
|                    | Step 3  |
|                    | System displays a list of funeral parlours facilities (depending on the options chosen in Step 2) available in Singapore in the form of a map   |
|                    | Step 4  |
|                    | System displays contact information of the funeral service provider for the user to find out more information and book an appointment.  |
| Alternative Flows: | ALT FLOW 1 (If the user chooses not to book an appointment immediately) From Step 2 of NORMAL FLOW (Subcase 3 - Funeral)  |
|                    | <u>Step 3</u>   |
|                    | The user saves the funeral service provider, with the specific packages that the user desires, into one of the plans.   |
|                    | Step 4  |
|                    | System displays "Save New Plan" and "Replace Existing Plan" buttons.  |
|                    | <u>Step 5</u>   |

|                       | Th  |  |  |
|-----------------------|---|--|--|
|                       | The user selects the "Save New Plan" button.  |  |  |
|                       | Step 6  |  |  |
|                       | System calls for Update Database Use Case to store the new plan under Plans.  |  |  |
|                       | ALT FLOW 2 (If the user chooses to replace existing plan) From Step 4 of ALT FLOW 1 (Subcase 3 - Funeral)           |  |  |
|                       | <u>Step 5</u>   |  |  |
|                       | The user selects the "Replace Existing Plan" button.  |  |  |
|                       | Step 6  |  |  |
|                       | System displays a list of existing plans.   |  |  |
|                       | <u>Step 7</u>   |  |  |
|                       | The user selects the existing plan that he/she would like to replace.   |  |  |
|                       | Step 6  |  |  |
|                       | System calls for Update Database Use Case to delete the selected existing plan and store new plan under Plans.      |  |  |
|                       | None  |  |  |
| Exceptions:           |   |  |  |
| Includes:             | Query Map Use Case (in Step 1)  |  |  |
| Special Requirements: | Reliability   |  |  |
|                       | The system must be updated regularly to ensure information on sites and facilities provided to users is up-to-date. |  |  |
| Assumptions:          |   |  |  |
| Notes and Issues:     |   |  |  |

| Use Case Name: | Subcase 4 - Obituary |                    |  |
|----------------|----------------------|--------------------|--|
| Created By:    |                      | Last Updated By:   |  |
| Date Created:  |                      | Date Last Updated: |  |

| Actor:            | 1) User  |  |
|-------------------|--|--|
|                   | 2) System and Database Administrator                                     |  |
|                   | 3) Obituary Service Provider   |  |
| Description:      | Used by next-of-kin when there is an unfortunate passing of the          |  |
| I Provide         | deceased.  |  |
|                   |  |  |
|                   | This section allows users to register for a death certificate regardless |  |
|                   | of whether the deaths of the deceased took place in hospital or at       |  |
|                   | home. If the death took place at home, upon filling in the required      |  |
|                   | particulars of the deceased, the user will be recommended a list of      |  |
|                   | doctors to help verify the death.  |  |
|                   | . ,  |  |
|                   | This section also stores digital copies of previously registered         |  |
|                   | Certification(s) of Death for user's reference and use for other         |  |
|                   | after-life procedures such as Funeral and Burial & Cremation.            |  |
| Preconditions:    | The user's identity has been authenticated.                              |  |
|                   | User selects "Obituary" button on Home Screen                            |  |
| Postconditions:   | 4. After using this function, the application will redirect the          |  |
|                   | user back to case M1   |  |
| Priority:         | 2  |  |
| Frequency of Use: | Sometimes (1 out of 10 logins per user))                                 |  |
| Flow of Events:   | <u> </u>   |  |
|                   | <u>Step 1</u>  |  |
|                   |  |  |
|                   | System displays a list of newspaper options and a link at the bottom     |  |
|                   | of the screen to redirect users to the specific website in charge of     |  |
|                   | such procedure for more information.                                     |  |
|                   | •  |  |
|                   | https://www.nea.gov.sg/our-services/after-death/post-death-matters/      |  |
|                   | <u>placing-an-obituary</u>   |  |
|                   | 0. 4   |  |
|                   | <u>Step 2</u>  |  |
|                   |  |  |
|                   | System requests the user to fill up the necessary details of the         |  |
|                   | deceased and upload required documents.                                  |  |
|                   |  |  |
|                   | <u>Step 3</u>  |  |
|                   |  |  |
|                   | System displays "Contact Now", "Save New Plan" and "Replace              |  |
|                   | Existing Plan" buttons.  |  |
|                   |  |  |
|                   | Step 4   |  |
|                   |  |  |
|                   | The user selects the "Contact Now" button.                               |  |
|                   |  |  |
|                   |  |  |

|                       | <u>Step 5</u>   |
|-----------------------|---|
|                       | System compiles the particulars entered in Step 2 into a PDF file and sends to selected publications via email plugin within the app. |
| Alternative Flows:    | ALT FLOW 1 (If the user chooses not to contact the publications immediately) From Step 3 of NORMAL FLOW (Subcase 4 - Obituary)        |
|                       | Step 4  |
|                       | The user selects the "Save New Plan" button.  |
|                       | <u>Step 5</u>   |
|                       | System calls for Update Database Use Case to store the new plan under Plans.  |
|                       |   |
|                       | ALT FLOW 2 (If the user chooses to replace existing plan) From Step 3 of NORMAL FLOW (Subcase 4 - Obituary)                           |
|                       | Step 4  |
|                       | The user selects the "Replace Existing Plan" button.  |
|                       | Step 6  |
|                       | System displays a list of existing plans.   |
|                       | <u>Step 7</u>   |
|                       | The user selects the existing plan that he/she would like to replace.   |
|                       | <u>Step 8</u>   |
|                       | System calls for Update Database to delete the selected existing plan and store new plan under Plans.                                 |
| Exceptions:           |   |
| Includes:             |   |
| Special Requirements: | Performance   |

|                   | - The system must retrieve previously stored Death Certificate(s) for user's reference when required within 2 seconds. |
|-------------------|--|
|                   | Reliability  |
|                   | - The system must be updated regularly to ensure information on sites and facilities provided to users is up-to-date.  |
| Assumptions:      |  |
| Notes and Issues: |  |

| Use Case ID:   | S5                             |                    |  |
|----------------|--------------------------------|--------------------|--|
| Use Case Name: | Subcase 5 - Burial & Cremation | on                 |  |
| Created By:    |                                | Last Updated By:   |  |
| Date Created:  | D                              | Date Last Updated: |  |

| Actor:            | User, System, Burial Service Provider, Cremation Service Provider,     |
|-------------------|--|
|                   | Ash Scattering Service Provider  |
| Description:      | Used by next-of-kin when there is an unfortunate passing of the        |
|                   | deceased. Also used by users who would like to plan in advance for     |
|                   | their after-life   |
|                   |  |
|                   | (Next-of-kin users)  |
|                   | This section allows users to find out the available modes of           |
|                   | after-life procedures and the booking information of each of these     |
|                   | facilities, including the contact information of the service provider. |
|                   |  |
|                   | (Users planning for after-life procedures)                             |
|                   | This section allows users to browse through the available modes of     |
|                   | after-life procedures and save their preferred choices, Next-of-kin    |
|                   | will then be able to retrieve the information from the system when     |
|                   | the user has passed on. This aids in giving users a greater autonomy   |
|                   | of their preferred after-life procedures and conveying it to their     |
|                   | next-of-kin to better carry out the process.                           |
| Preconditions:    | The user's identity has been authenticated.                            |
|                   | User selects "Burial & Cremation" button on Home Screen                |
| Postconditions:   | After using this function, the application will redirect the user back |
|                   | to case M1   |
| Priority:         | Medium   |
| Frequency of Use: | Medium (5 out of every 10 logins per user)                             |
| Flow of Events:   |  |
|                   | Step 1   |
|                   |  |

System displays "Burial", "Cremation" and "Ash Scattering" buttons.

#### Step 2

The user selects either the "Burial", "Cremation" or "Ash Scattering" button.

#### Step 3 (include Case Q1)

System calls for Query Map use case.

#### Step 4

System displays further details of the afterlife service at the respective facility selected in Step 4, such as booking hours, procedures needed to be followed, payment mode, other necessary information and a link at the bottom of the screen to redirect users to the specific website in charge of such procedure for more information.

https://www.nea.gov.sg/our-services/after-death/post-death-matters/burial-cremation-and-ash-storage

#### Step 4

System displays "Contact Now", "Save New Plan" and "Replace Existing Plan" buttons.

#### Step 5

The user selects the "Contact Now" button.

#### Step 6

System compiles the particulars entered in Step 2 into a PDF file and sends to selected publications via email plugin within the app

#### Alternative Flows:

ALT FLOW 1 (If the user chooses not to directly contact the service providers) From Step 3 of NORMAL FLOW (Subcase 5 - Burial & Cremation)

#### Step 4

The user can save the service providers, with the preferences of the users being recorded, into one of the plans.

|                       | 4) The user selects the "Save New Plan" button.   |
|-----------------------|---|
|                       | <u>Step 5</u>   |
|                       | The user can choose one of the two options: Create a new plan, or write into an existing plan (Refer to Sub Case 6 for more details)  |
|                       | 5) System calls for Update Database use case.   |
|                       | ALT FLOW 2 (If the user chooses to replace existing plan) From Step 3 of NORMAL FLOW (Subcase 5 - Burial & Cremation)  4) The user selects the "Replace Existing Plan" button.  5) System displays a list of existing plans.  6) The user selects the existing plan that he/she would like to replace.  7) System calls for Update Database use case. |
| Exceptions:           |   |
| Includes:             |   |
| Special Requirements: | Reliability   |
|                       | - The system must be updated regularly to ensure information on sites and facilities provided to users is up-to-date.   |
| Assumptions:          | - The   |
| Notes and Issues:     | TBD whether the app will contain chat function  |

| Use Case ID:   | S6                |                    |  |
|----------------|-------------------|--------------------|--|
| Use Case Name: | Subcase 6 - Plans |                    |  |
| Created By:    |                   | Last Updated By:   |  |
| Date Created:  |                   | Date Last Updated: |  |

| Actor:       | 1. User   |
|--------------|---|
|              | 2. System and Database Administrator                              |
|              | 3. Database   |
| Description: | Used by users who would like to make a plan before their passing. |

| Preconditions:  Postconditions: | This section enables the user to plan in advance on their preferred choice of action before their deaths, enabling their family members/social workers to access the plan and aid them in planning for the after-death procedures with the user's choices being respected and taken into consideration.  1. The user's identity has been authenticated. 2. The user selects the "Plans" button on the Home Screen.  5. The user's plan is updated to the latest version in the database  6. After using this function, the application will redirect the user back to case M1 |
|---------------------------------|---|
|                                 |   |
| Priority:                       | Medium  |
| Frequency of Use:               | Medium (5 out of every 10 logins per user)  |
| Flow of Events:                 | (If the user has plans saved previously)  |
|                                 | <ol> <li>System displays a list of plans that the user has saved previously and a set of "View" and "Edit" buttons for each plan.</li> <li>The user selects the "View" button for the preferred plan he/she wishes to view.</li> <li>System redirects the user to the respective screens based on the plan selected.</li> </ol>   |
| Alternative Flows:              | ALT FLOW 1 (If the user does not have any plans saved previously)   |
|                                 | <ol> <li>System displays the message "You have not saved any plans previously" and the list of buttons for the plans available: "Make Will" and "Burial, Cremation and Funeral Parlour" buttons.</li> <li>The user selects the "Make Will" or "Burial, Cremation and Funeral Parlors" button.</li> <li>System calls for the respective use case: Make Will, Burial &amp; Cremation, Funeral</li> </ol>  |
|                                 | ALT FLOW 2 (If the user want to amend one of the instances in his/her plan) From Step 2 of NORMAL FLOW (Subcase 6 - Plans)  3) The user selects the "Edit" button of the preferred plan he/she wish to edit.  |

|                       | 4) System calls for respective use case  |
|-----------------------|--|
|                       | System redirects the user to the respective section/screens with previously stored information displayed and to carry out the editing process. (For example, if the user wants to change a funeral parlor, system redirects user to return to Step 1 of NORMAL FLOW (Subcase 3 - Funeral)) |
|                       | ALT FLOW 3 (If the user want to delete his/her plan) From Step 2 of NORMAL FLOW (Subcase 6 - Plans)  |
|                       | Step 3   |
|                       | The user swipes left on the selected plan he/she wishes to remove.   |
|                       | Step 4   |
|                       | System deletes the selected plan.  |
| Exceptions:           |  |
| Includes:             | Subcase 1, Subcase 3, Subcase 4, Subcase 5   |
| Special Requirements: | Performance  |
|                       | - After the user login successfully, the system must retrieve previously stored user data within 2 seconds.  |
| Assumptions:          |  |
| Notes and Issues:     |  |

| Use Case ID:  | U1                |                    |  |
|---------------|-------------------|--------------------|--|
| Use Case      | Updating Database |                    |  |
| Created By:   |                   | Last Updated By:   |  |
| Date Created: |                   | Date Last Updated: |  |

| Actor:         | <ol> <li>System or Database Administrator</li> <li>Database</li> </ol> |
|----------------|--|
| Description:   | Database to be updated once the user completes the questionnaire or    |
|                | saves a plan.  |
| Preconditions: | 1. The application database is running and connected to the            |
|                | application  |

| Postconditions:       | 1.<br>2.       | The application database contains formatted data of users questionnaire responses and plans.  The application database is updated with new values, if any, with an updated timestamp.                 |
|-----------------------|----------------|---|
| Priority:             | High           |   |
| Frequency of Use:     | Low            |   |
| Flow of Events:       | 1.<br>2.<br>3. | The administrator initiates the database update operation. The application checks for differences in local database and user input. The application formats the data and stores it into the database. |
| Alternative Flows:    | None           |   |
| Exceptions:           | None           |   |
| Includes:             | None           |   |
| Special Requirements: | None           |   |
| Assumptions:          | The dat        | ta inputted by the user is error-free.  |
| Notes and Issues:     |                |   |

| Use Case ID:  | U2              |                    |  |
|---------------|-----------------|--------------------|--|
| Use Case      | Search Database |                    |  |
| Created By:   |                 | Last Updated By:   |  |
| Date Created: |                 | Date Last Updated: |  |

| Actor:            | System or Database administrator  |  |
|-------------------|---|--|
|                   | 2. Database   |  |
| Description:      | 1. The user can query the database to search for their plans/questionnaire responses.   |  |
|                   | <ol> <li>The user can update their plans/questionnaire responses if desired.</li> </ol> |  |
| Preconditions:    | 2. The application database must already contain user data.                             |  |
| Postconditions:   | 3. The application will show data of users questionnaire responses and plans.           |  |
|                   | 4. The application will give the user the option to edit existing information.          |  |
| Priority:         | High  |  |
| Frequency of Use: | Moderate - Users will use this when they wish to review their                           |  |
|                   | information.  |  |

| Flow of Events:       | <ol> <li>The user will search for their questionnaire or plans made.</li> <li>The application will extract information from the database.</li> <li>The application will display the information for the user.</li> <li>The application offers users the option to modify their existing data.</li> </ol>   |
|-----------------------|--|
| Alternative Flows:    | <ol> <li>User's search does not exist within the database.         <ul> <li>Application will prompt the user to re-enter their search.</li> <li>If search is still unsuccessful, move to Exception 1</li> </ul> </li> <li>User chooses to modify existing data.         <ul> <li>Application will bring up fields for the user to change/add information into their questionnaire or plans.</li> <li>Update database function will be called.</li> </ul> </li> </ol> |
| Exceptions:           | Exception 1:  Searched item does not exist within database - Application will display an error notification.   |
| Includes:             | Extends Update Database.   |
| Special Requirements: | None   |
| Assumptions:          | The database search commands are successful and do not return any errors.  |
| Notes and Issues:     |  |

| Use Case ID:   | U3         |                    |  |
|----------------|------------|--------------------|--|
| Use Case Name: | Query maps |                    |  |
|                |            |                    |  |
| Created By:    |            | Last Updated By:   |  |
| Date Created:  |            | Date Last Updated: |  |

| Actor: | Funeral parlour/crematorium/cemeteries locations API |
|--------|--|
|--------|--|

| Description:             | This use case describes the steps taken for the application to display the locations of the afterlife services.  |  |
|--------------------------|--|--|
| Preconditions:           | The user must be in the one of the following use cases:     Funeral     Burial and cremations  |  |
| Postconditions:          | <ol> <li>The application displays a map displaying the locations of the services.</li> <li>The user must be able to zoom out the map to view a map detailing all the available crematoria throughout Singapore.</li> </ol>   |  |
| Priority:                | High   |  |
| Frequency of Use:        | High - Multiple times per application access   |  |
| Flow of Events:          | <ol> <li>System retrieves the user's home address from the database</li> <li>The application calls the respective API and retrieves the map and information of the after life services in the form of pins on the map.</li> <li>System displays a list of burial sites/crematoria/ash scattering facilities (depending on the options chosen) available in Singapore in the form of a map</li> <li>The user selects the preferred sites by clicking the respective pin on the map</li> </ol> |  |
| Alternative<br>Flows:    | None   |  |
| Exceptions:              | Exception 1:  Failure in connecting to the data.gov API  - Notify system administrator of the failed connection  |  |
| Includes:                | None   |  |
| Special<br>Requirements: | The application must return data from the respective API and database within 5 seconds.  |  |
| Assumptions:             | System successfully connects with the respective API and database and displays the map.  |  |
| Notes and Issues:        | None   |  |



