**Use Cases**

**for**

**<**StudyWithMe**>**

**Version 1.0 approved**

**1lkaqiPrepared by <Alwin, Riaz>**

**<CZ2006 BCS1 StudyWithMe>**

**<27/01/2022>**

**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.

# **Use Case Identification**

## **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.

## **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.

## **Use Case History**

### **Created By**

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

### **Date Created**

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

### **Last Updated By**

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

### **Date Last Updated**

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

# **Use Case Definition**

## **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.

## **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.

## **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.

## **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.

## **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.

## **Frequency of Use**

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

## **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.

## **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.

## **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.

## **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.

## **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.

## **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.

## **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: | UC1.1 | | |
| --- | --- | --- | --- |
| Use Case Name: | Log In | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 27/01/2022 | Date Last Updated: | 27/01/2022 |

| Actor: | User |
| --- | --- |
| Description: | The user must be able to log in to their individual account that has been registered with the application. |
| Preconditions: | 1. The user must either have a registered account with the application or a Google account that is registered with the application. 2. The user is not currently logged in. |
| Postconditions: | The user is successfully logged into the application. |
| Priority: | Medium |
| Frequency of Use: | Low |
| Flow of Events: | 1. The user selects “Me” 2. The user inputs email address and password 3. The user selects “LOGIN” 4. The application validates the user details 5. The application moves to the home page |
| Alternative Flows: | 1.1.AC.4.1: The user’s email address is not registered with the application  1. The application displays the message: “Email address not registered.”.  2. The user is returned to step 2.  1.1.AC.4.2: The user’s password is correct  1. The application displays the message: “Incorrect password.Try again.”  2. The user is returned to step 2 |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | The user has a valid Google account. |
| Notes and Issues: | - |

| Use Case ID: | UC1.2 | | |
| --- | --- | --- | --- |
| Use Case Name: | Log Out | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 27/01/2022 | Date Last Updated: | 27/01/2022 |

| Actor: | User |
| --- | --- |
| Description: | The user must be able to log out of their account. |
| Preconditions: | 1. The user must have an account registered with the application or a Google account must be registered with the application. 2. The user is currently logged in. |
| Postconditions: | The user is successfully logged out of the application. |
| Priority: | Medium |
| Frequency of Use: | Low |
| Flow of Events: | 1. The user selects “Me” 2. The user selects “LOG OUT” 3. The application logs the user out |
| Alternative Flows: | - |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | - |
| Notes and Issues: | - |

| Use Case ID: | UC1.3 | | |
| --- | --- | --- | --- |
| Use Case Name: | Register a new user account | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 27/01/2022 | Date Last Updated: | 27/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user must be able register for an account with the application. |
| Preconditions: | The user has a valid Google account. |
| Postconditions: | 1. The user has a successfully registered account with the application. 2. The user is logged into the application with their new account. |
| Priority: | Medium |
| Frequency of Use: | Low |
| Flow of Events: | 1. The user selects “Me” 2. The user selects “REGISTER” 3. The user inputs their Gmail address and password 4. The application validates their Google account details 5. The user is successfully logged in |
| Alternative Flows: | 1.3.AC.4.1: The user’s email address is not registered with the application  1. The application displays the message: “Email address not registered.”.  2. The user is returned to step 2.  1.3.AC.4.2: The user’s password is correct  1. The application displays the message: “Incorrect password.Try again.”  2. The user is returned to step 2. |
| Exceptions: | - |
| Includes: | UC1.1 - Register |
| Special Requirements: | - |
| Assumptions: | The user has a valid Google account. |
| Notes and Issues: | - |

| Use Case ID: | UC2.1 | | |
| --- | --- | --- | --- |
| Use Case Name: | Set up “Open Study Jio” | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 30/01/2022 | Date Last Updated: | 30/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user shall create a “Jio” session which would allow other users to join. |
| Preconditions: | 1. The user must be logged into the application on a valid account. 2. The user has granted permission to the application to access their current location |
| Postconditions: | The user has created a “Jio” session for other users of the application to join. |
| Priority: | High |
| Frequency of Use: | High |
| Flow of Events: | 1. The user selects a specific location to his or her preference. 2. The user selects “Jio”. 3. The user shall then choose the timing of the session from a drop down scroll menu. 4. The user can then type a short description about their “Jio” session. The description will be limited to 100 words. 5. The application will then create the “Jio” session which will be displayed in the “Jios” tab. The session created will contain information that the user keyed in, as well as information retrieved by the application such as the location’s crowd level and price range. |
| Alternative Flows: | - |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | The location that the user wishes to create a “Jio” session at, is one that is shown by the application. |
| Notes and Issues: | - |

| Use Case ID: | UC2.2 | | |
| --- | --- | --- | --- |
| Use Case Name: | Find existing study “Jios” | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 30/01/2022 | Date Last Updated: | 30/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user can view Jios that have been created by other users on the Jio’s tab of the application. |
| Preconditions: | 1. The user is logged into the application on a valid account. 2. The user has granted permission to the application to access their current location |
| Postconditions: | The user can view and select existing Jios in the Jios tab. |
| Priority: | High |
| Frequency of Use: | High |
| Flow of Events: | 1. The user selects the “Jio” tab from the homepage of the application. 2. They can then select any of the Jio’s in the list of displayed Jios. Details such as the location, price range and crowd level of the Jio will be displayed for each Jio. |
| Alternative Flows: | - |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | - |
| Notes and Issues: | - |

| Use Case ID: | UC2.3 | | |
| --- | --- | --- | --- |
| Use Case Name: | Accept Jio Request | | |
| Created By: | Riaz | Last Updated By: | Riaz |
| Date Created: | 30/01/2022 | Date Last Updated: | 30/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user can view and accept a Jio session that has been created by other users on the application. |
| Preconditions: | 1. The user is logged into the application on a valid account. 2. The user has granted permission to the application to access their current location |
| Postconditions: | - |
| Priority: | High |
| Frequency of Use: | High |
| Flow of Events: | 1. After navigating to a Jio session on the Jio tab of the application (refer to UC2.2), the user can view all the existing “jios” and select to view more information. 2. The specific Jio’s location information will be opened and the user can press the “directions” button. 3. User can press the “accept jio” button 4. This will open the user’s Google Maps and give walking directions to the Jio’s location. 5. Simultaneously, the Jioer will be notified that another user has accepted their Jio request. |
| Alternative Flows: | - |
| Exceptions: | - |
| Includes: | UC2.2 - Find existing study Jios |
| Special Requirements: | - |
| Assumptions: | Once the user accepts a Jio invite, they actually go to the Jio’s location at the right timing to meet the Jioer to study. |
| Notes and Issues: | - |

| Use Case ID: | UC3.1 | | |
| --- | --- | --- | --- |
| Use Case Name: | View Jio Details | | |
| Created By: | Alwin | Last Updated By: | Alwin |
| Date Created: | 29/01/2022 | Date Last Updated: | 29/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user makes a Jio selection on Jios tab to query a particular Jio where the application must pull Jio details from the cloud to be displayed (both location and Jio details) to the user. |
| Preconditions: | The user must be viewing Jio from the Jio tab. |
| Postconditions: | The application displays information of a Jio to the user, providing the user the option to (a) exit the Jio Detail Window (“< back”) or (b) accept Jio. |
| Priority: | Medium |
| Frequency of Use: | Medium |
| Flow of Events: | 1. User “Selects” (i.e. click/taps) on a particular Jio in the Jio tab. 2. The application pulls information of that particular Jio from Cloud. 3. The application displays information of Jio to the user. 4. If the user opts to accept Jio, the application will display to the user that they have accepted the Jio. |
| Alternative Flows: | 3.1.AC.4: The user exits the Jio details window by clicking/tapping the “< Back” button and the application will redirect back to the Jio tab. |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | - |
| Notes and Issues: | - |

| Use Case ID: | UC3.2 | | |
| --- | --- | --- | --- |
| Use Case Name: | Search Location | | |
| Created By: | Alwin | Last Updated By: | Alwin |
| Date Created: | 29/01/2022 | Date Last Updated: | 29/01/2022 |

| Actor: | User, Google |
| --- | --- |
| Description: | The user either (a) uses his/her current location or (b) uses a search/pinned location as reference point to seek for study location where the application displays a list of recommended study locations obtained from Google Maps API. |
| Preconditions: | 1. The user has not accepted any existing jios. 2. The user has either:    1. Used his/her current location as reference location or;    2. Searched/pinned a particular location as a reference location. 3. (Optional) The user has input location finding filters {radius (from reference location), price range}. |
| Postconditions: | The application displays a list of study locations that is available for the user to “Select” (by tapping/clicking) to view more details for individual locations and thereafter to confirm the location as destination. |
| Priority: | High |
| Frequency of Use: | High |
| Flow of Events: | 1. The user allows his/her location to be accessed by the application (to be used as reference location). 2. (Optional) The user has input location finding filters {radius (from reference location), price range}. 3. The application queries for a list of locations from Google and displays the list of locations that matches the filter in the form of a locations tab. 4. The application allows users to select individual locations listed on the Locations tab to allow users to check further details of the individual locations . |
| Alternative Flows: | 3.2.AC.1: The user searches for/pins a particular location to seek recommended study locations . |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | - |
| Notes and Issues: | - |

| Use Case ID: | UC3.3 | | |
| --- | --- | --- | --- |
| Use Case Name: | View Location Details | | |
| Created By: | Alwin | Last Updated By: | Alwin |
| Date Created: | 29/01/2022 | Date Last Updated: | 29/01/2022 |

| Actor: | User, Google |
| --- | --- |
| Description: | The user makes a location selection to query a particular recommended location where the application must pull location details from Google to be displayed to the user. |
| Preconditions: | 1. The user intends to be a Jioer who has not accepted any existing Jios by other users (Jioer). 2. The user has either used their current location or chose to pin a particular location to query for available study location and has “Selected” a particular location to view more details. |
| Postconditions: | 1. The application must display details of the location selected. 2. The application must then allow the user to either:    1. Select another location for more details by going back to the Jio tab (“< Back” Button).    2. Confirm location as destination where the user can opt to open a Jio. |
| Priority: | Medium |
| Frequency of Use: | High |
| Flow of Events: | 1. The application user selects (i.e. taps/clicks) on a recommended location from the Locations tab. 2. The application pulls information of that particular location from Google which includes address, opening hours, ratings phone number and live crowd status. 3. The application displays the information in (2) to the user with the option for the user to select another location by tapping on the “< Back” button or confirm the selected location as destination.    1. The user can opt to set up Jio in the location details window where they will be prompted to input details: Start Time, End Time and Description of the Jio for that particular location. |
| Alternative Flows: | 3.3.AC.3: If “< Back” button clicked/tapped instead of confirming the selected location   1. The application closes the window that displays selected location details to display the original list of locations recommended. |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | The user has an account created, has initiated the process to search for study places, did not accept any existing jio. |
| Notes and Issues: | - |

| Use Case ID: | UC3.4 | | |
| --- | --- | --- | --- |
| Use Case Name: | Get Location Directions | | |
| Created By: | Alwin | Last Updated By: | Alwin |
| Date Created: | 29/01/2022 | Date Last Updated: | 29/01/2022 |

| Actor: | User, Google |
| --- | --- |
| Description: | The application will open the user’s Google Maps and initially show walking directions to the user’s selected location from their current location. |
| Preconditions: | The user must allow location access to the application and has confirmed a particular study location or confirmed to participate in a particular Jio. |
| Postconditions: | The application redirects to Google Maps with the study location as destination and current location as starting-point. |
| Priority: | Low |
| Frequency of Use: | Medium |
| Flow of Events: | 1. The user “Selects” (by clicking/tapping) on “Directions” on the location details tab. 2. The application redirects to Google Maps with current location as starting point and study location as destination. |
| Alternative Flows: | - |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | - |
| Notes and Issues: | - |

| Use Case ID: | UC3.5 | | |
| --- | --- | --- | --- |
| Use Case Name: | Review/Rate Visited Locations | | |
| Created By: | Alwin | Last Updated By: | Alwin |
| Date Created: | 29/01/2022 | Date Last Updated: | 29/01/2022 |

| Actor: | User, Cloud |
| --- | --- |
| Description: | The user can opt to input a review (Character String) and/or leave a rating (scale of 1 - 5) to describe his/her experience at the study location which input information (ratings/reviews) must be stored in Cloud with reference to study location. |
| Preconditions: | 1. The user has either: 2. confirmed a particular study location as destination or, 3. has accepted a particular Jio indicated on the Jio tab. 4. The time the user chooses to review the location must be within 24-hours after confirming location. |
| Postconditions: | The application must update cloud ratings and reviews of that particular location and must display a message that “Thanks” the user for providing review. |
| Priority: | Low |
| Frequency of Use: | Low |
| Flow of Events: | 1. The application prompts the user to provide review/rating for prior location destination upon log-in. 2. The user chooses to provide their review/ratings. 3. The application stores the review & ratings and updates the cloud database by inserting a new record. |
| Alternative Flows: | 3.5.AC.1: The user can visit his/her location history and tap on individual past locations to leave a review/rating.  3.5.AC.2: The user does not choose to provide their review/rating by clicking/tapping “X” top-X   1. The review pop-up window is terminated. |
| Exceptions: | - |
| Includes: | - |
| Special Requirements: | - |
| Assumptions: | User has turned up at location as per indicated and would provide a fair review that reflects their experience. |
| Notes and Issues: | - |

