
Use Cases

for



Loo Lah!

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version
Lab 1 Deliverables	10 sep 2023	Use cases implementation	1.0.0

Functional Requirements

- 1. User shall be able to register an account and sign into the application:**
 - 1.1. Users must create an account by entering their email/phone number, username and password.
 - 1.2. Users shall log into their account by entering their respective passwords.
 - 1.3. Users are able to change their password with authentication
 - 1.4. If the user wishes to change their password, the user will be able to do so through the application settings.
 - 1.5. Users will be able to change their username if the desired username is not already taken by another user.
- 2. Users shall be able to personalize their account profiles:**
 - 2.1. Users shall be able to customize their own profiles
 - 2.1.1. Profile picture
 - 2.1.2. Description
 - 2.1.3. Username
- 3. Users shall be able to search for nearby toilets:**
 - 3.1. Users shall be able to search for nearby toilets based on their location
 - 3.2. App will provide navigation guidance to the selected toilet
 - 3.3. App will display toilet pictures, description and toilet rating (1 - 5 stars)
- 4. Users shall be able to rate and review toilets:**
 - 4.1. Users shall be able to rate toilets on a scale(1 - 5 stars) based on their experience
 - 4.2. Users shall be able to rate the cleanliness/design/maintenance and overall user satisfaction
 - 4.3. Users shall be able to post detailed reviews and provide feedback of their overall experience
 - 4.4. Users can like other users' reviews
- 5. Users shall be able to edit their reviews:**
 - 5.1. Users shall have the option to edit their past reviews
 - 5.2. Users shall have the option to delete their past reviews
- 6. Users shall be able to favorite toilets:**
 - 6.1. Users shall have the option to add a toilet to their favorites list
 - 6.2. Users shall have the option to remove a toilet from their favorites list
- 7. Users shall be able to add new toilets:**
 - 7.1. Users shall have the option to submit new toilets to the app
 - 7.2. Users shall have the option to upload images of the toilet to the app
- 8. Users shall be able to view their profile:**

8.1. Users shall be able to view a history of their past reviews and ratings

9. Users shall be able to filter the type of toilets:

9.1. Users shall be able to filter the type of toilets

9.1.1. Type of toilets (Gender, Handicap, Child-friendly)

9.1.2. District (Central, North East, North West, South East, South West)

9.1.3. Distance from user's current location (within 500m)

9.1.4. Rating (1-5 stars)

10. Users shall be able to get directions to their selected toilet:

10.1. Application shall navigate users by providing directions to the selected toilet

Non-functional Requirements

1. User experience:

- 1.1. App must have an intuitive and user-friendly interface
- 1.2. Navigation to different sections must be seamless and intuitive










2. Performance:

- 2.1. App will be able to handle x amount of concurrent users even during peak usage (e.g. during breakfast/lunch/dinner time)
- 2.2. New toilets/Toilet ratings will be updated in real-time
- 2.3. Requests will be processed within 3 seconds

Data Dictionary

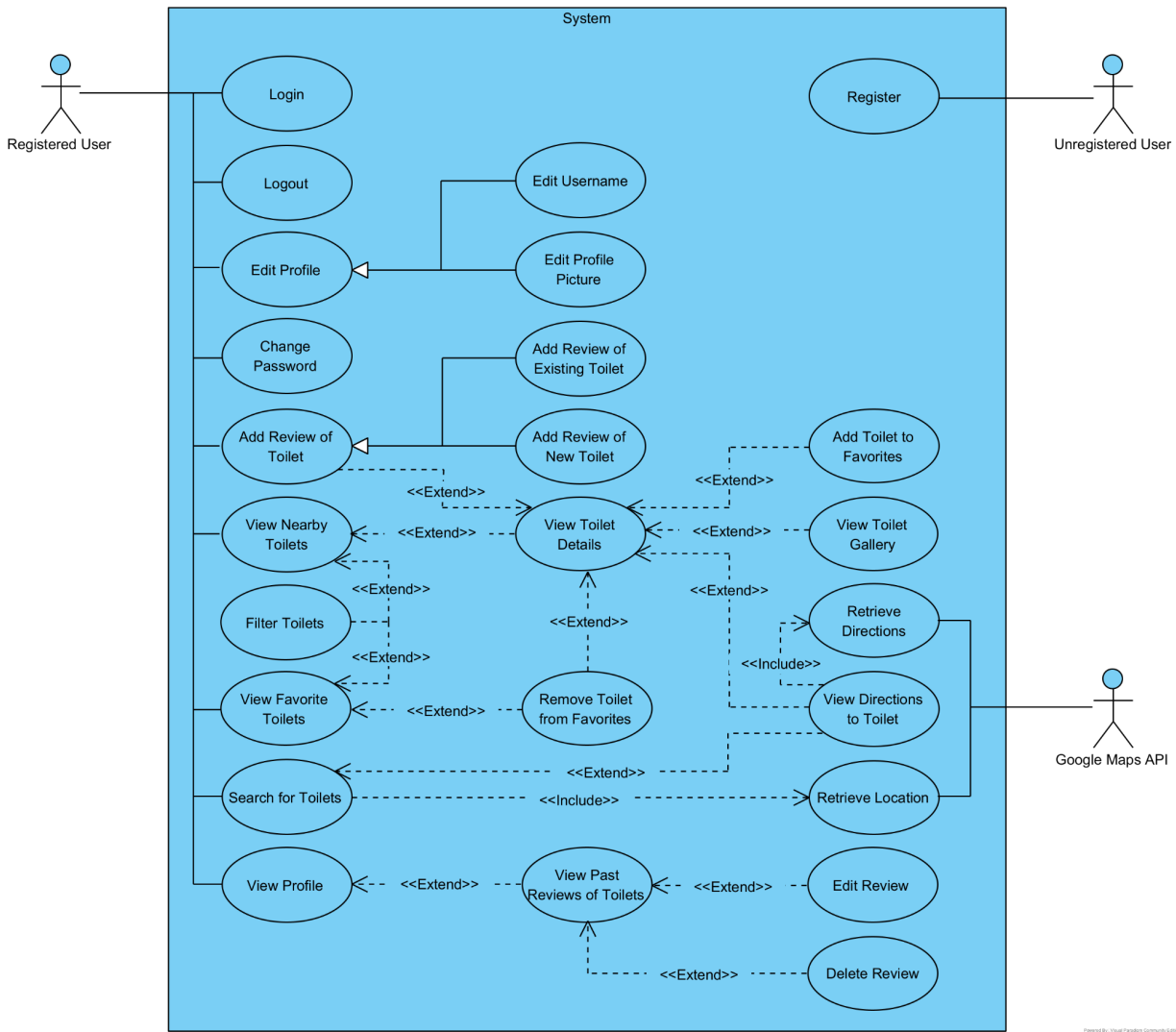
Term	Definition
Username	An accounts unique identification, can be used to search for user, acts as a link to account's profile
Profile	A page containing user's profile picture and past toilet reviews
Profile Picture	A jpeg file uploaded by user for personalization
Review	300 words or less describing the overall toilet experience
Locate Toilet	A function to aid the user in locating nearby toilets
Navigate	A function to help the user to get to the desired location in the fastest way
Like	A function to assist user to mark selected post, so that similar posts will be recommended to the user
Rating	A classification ranking of the toilet based on the assessment of its cleanliness, quality and overall user satisfaction
District	The general locations where the toilets are found in Singapore (Central, North East, North West, South East, South West)
Toilet Type	The types of toilets that are available (Gender, Handicap, Child-friendly)
Favorite list	A page containing user's favorited toilets
Page	An interface containing corresponding information with regards to the subject(E.g. "Toilet Details" page shows the necessary information of the selected toilet)



- Legend:
-  Home
 -  Map
 -  Add Review
 -  Favorites
 -  Profile
 -  Image Gallery
 -  Directions
 -  Back
 -  Heart



Use Case Diagram



1. Register
2. Login
3. Logout
4. Edit profile
5. Change password
6. View profile
7. Add review of toilet
8. View nearby toilets
9. View toilet details
10. View toilet gallery
11. Filter toilets
12. Edit review
13. Delete review
14. Search for toilets
15. View direction to toilet
16. Add toilet to favorites
17. Remove toilet from favorites
18. View favorite toilets

Use Case Description

Use Case ID:	1		
Use Case Name:	Register		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Unregistered User (Initiating Actor)
Description:	Unregistered user registering for an account
Pre-conditions:	<ol style="list-style-type: none">1. User does not have a registered account, based on their email2. User is at the login page
Post-conditions:	<ol style="list-style-type: none">1. Account is successfully created
Priority:	High
Frequency of Use:	1 - 3 times per lifetime
Flow of Events:	<ol style="list-style-type: none">1. Unregistered User selects "Sign Up" on the login page2. Application redirects user to register page3. User inputs the required information<ol style="list-style-type: none">a. Emailb. Usernamec. Passwordd. Confirm Password4. User clicks the "Register" button5. System validates the entered information<ol style="list-style-type: none">a. Email: Valid and not linked to existing accountsb. Username: Unique and meets any specified requirements (e.g., length, characters allowed)c. Password: Meets security criteria (e.g., length, complexity)d. Confirm Password: Matches password entered6. If the information is successfully validated, the system creates an account with the entered information7. Application redirects the user back to the login page with a success message "Account successfully created." shown

Alternative Flows:	<p>1-AF-5a: Invalid email entered</p> <ol style="list-style-type: none"> 1. Application displays an input error message “Please enter a valid email.” 2. System returns to step 3 <p>1-AF-5a: Existing email entered</p> <ol style="list-style-type: none"> 1. Application displays input error message “An account with this email already exists. Please register using a different email address.” 2. System returns to step 3 <p>1-AF-5b: Username is already taken</p> <ol style="list-style-type: none"> 1. Application displays input error message “This username is already taken. Please enter another username.” 2. System returns to step 3 <p>1-AF-5c: Password Strength is too low</p> <ol style="list-style-type: none"> 1. Application displays input error “Password is too weak.”. The application will then provide guidance on improving password strength (e.g., length, complexity, or combination of upper and lower - case letters) 2. System returns to step 3 <p>1-AF-5c: Entered passwords do not match</p> <ol style="list-style-type: none"> 1. Application displays an input error message “Passwords do not match.” 2. System returns to step 3
Exceptions:	1-EX-1: User chooses to abandon the registration process at any point and navigates away from the registration page
Includes:	-
Special Requirements:	-
Assumptions:	<ol style="list-style-type: none"> 1. User has an email and username that is not linked with a registered account
Notes and Issues:	-

Use Case ID:	2		
Use Case Name:	Login		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating actor)
Description:	Registered user logging into the application
Pre-conditions:	<ol style="list-style-type: none"> 1. User has an existing account 2. User has a username/email and password associated to an existing account 3. User is at the login page
Post-conditions:	<ol style="list-style-type: none"> 1. User logs in successfully
Priority:	High
Frequency of Use:	0 - 3 times per 3 months
Flow of Events:	<ol style="list-style-type: none"> 1. User inputs their username/email and password 2. User clicks the "Login" button 3. System verifies the username/email and password with existing accounts in the database 4. If the account is successfully verified, the application directs the user to the home page
Alternative Flow:	2-AF-3: Invalid username and password <ol style="list-style-type: none"> 1. The application displays the error message "Invalid username and password" 2. Application returns to step 1
Exceptions:	2-EX-1: User forgets their username/password 2-EX-2: User receives error message that login is unsuccessful
Includes:	-
Special Requirements:	-
Assumptions:	<ol style="list-style-type: none"> 1. User knows their username/email and the corresponding password
Notes and Issues:	-

Use Case ID:	3		
Use Case Name:	Logout		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user logging out of the application
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is at the account settings page
Post-conditions:	<ol style="list-style-type: none"> 1. User successfully logged out 2. Application directs the user to the login page
Priority:	Low
Frequency of Use:	0 - 3 times per 3 months
Flow of Events:	<ol style="list-style-type: none"> 1. Users clicks the "Sign Out" button in account settings page 2. Application displays a prompt "Are you sure you want to logout?" 3. User clicks the "Confirm" button 4. Application redirects the user to the login page
Alternative Flows:	-
Exceptions:	<p>3-EX-1: User decides not to logout when prompted by the application</p> <ol style="list-style-type: none"> 1. User clicks the "Cancel" button 2. Application prompt is closed and user is back at the account settings page
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	4		
Use Case Name:	Edit Profile		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can edit username or edit profile picture
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is at the settings page
Post-conditions:	<ol style="list-style-type: none"> 1. User's profile is updated successfully
Priority:	Low
Frequency of Use:	3 - 5 times per 3 months
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks the "Settings" button 2. User clicks the "Edit Profile" button 3. Edit Username (Optional): User enters a new username 4. Edit Profile Picture (Optional): User clicks on the "Upload" button and selects an image from their device 5. User clicks on the "Save" button 6. System validates the entered information: <ol style="list-style-type: none"> a. Username: Unique and meets any specified requirements (e.g., length, characters allowed) b. Profile Picture: Within size and format constraints 7. If the information is successfully validated, the system updates the user's profile with the new information 8. Application redirects user back to profile page with success message "Successfully updated." and updated information
Alternative Flows:	<p>4-AF-6: Username is already taken</p> <ol style="list-style-type: none"> 1. Application displays input error message "This username is already taken. Please enter another username." 2. System returns to step 3

	<p>4-AF-6: Uploaded picture does not fit constraints</p> <ol style="list-style-type: none"> 1. File size: Application displays input error “Image is too large. Maximum image size is 2Mb.” 2. File extension: Application displays input error “Image could not be uploaded. Only files with the following extensions are accepted: jpg, png, jpeg.” 3. System returns to step 4
Exceptions:	<p>4-EX-1: User chooses to abandon the edit profile process at any point and navigates away from the edit profile page</p> <ol style="list-style-type: none"> 1. User clicks the “Back Arrow” button 2. Application redirects user to the account setting page <p>4-EX-2: User made no changes to the username and profile picture</p> <ol style="list-style-type: none"> 1. User clicks on the “Save” button 2. Application redirects user back to profile page with information message “No changes made.”
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	5		
Use Case Name:	Change Password		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can change password
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is at the settings page
Post-conditions:	<ol style="list-style-type: none"> 1. User's password is updated successfully
Priority:	Low
Frequency of Use:	3 - 5 times per 3 months
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks the "Change Password" button 2. User enters their current password and then the new password twice for confirmation 3. System validates the entered information: <ol style="list-style-type: none"> a. Current Password: Matches user's password in database b. New Password: Meets security criteria (e.g., length, complexity) c. Confirm Password: Matches entered new password 4. If the information is successfully validated, the system updates the user's profile with the new information: <ol style="list-style-type: none"> a. If the user changed their password, it updates the password with the new one. 5. Application redirects user back to profile page with success message "Successfully updated."
Alternative Flows:	<p>5-AF-3a: Invalid current password</p> <ol style="list-style-type: none"> 1. Application displays an input error message "Incorrect password entered." 2. System returns to step 2 <p>5-AF-3b: New password strength is too low</p>

	<ol style="list-style-type: none"> 1. Application displays input error “Password is too weak.”. The application will then provide guidance on improving password strength (e.g., length, complexity, or combination of upper and lower - case letters) 2. System returns to step 2 <p>5-AF-3c: Entered passwords do not match</p> <ol style="list-style-type: none"> 1. Application displays an input error message “Passwords do not match.” 2. System returns to step 2 <p>5-AF-3: Empty input fields for username or new password</p> <ol style="list-style-type: none"> 1. Username: Application displays an input error message “Username is required. Please enter a valid username.” 2. New Password: Application displays an input error message “Please enter a new password.” 3. System returns to step 2
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	6		
Use Case Name:	View Profile		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can view their profile
Pre-conditions:	1. User is logged into the application
Post-conditions:	1. System directs the user to their profile page
Priority:	Low
Frequency of Use:	0 - 3 times every month
Flow of Events:	<ol style="list-style-type: none"> 1. User selects "Account" in the application's navigation bar 2. Application redirects the user to the profile page 3. User is shown the profile page with: <ol style="list-style-type: none"> a. Profile Picture b. Username c. Posted Reviews d. Number of Photos e. Number of Reviews f. Number of Likes g. Past reviews
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	7		
Use Case Name:	Add Review of Toilet		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered User adds a review to a toilet
Pre-conditions:	1. User is logged into the application
Post-conditions:	1. A review is successfully added to a toilet
Priority:	High
Frequency of Use:	0-1 times a day
Flow of Events:	<ol style="list-style-type: none"> 1. User selects the "Add Review" button on the application's navigation bar 2. Application directs the user to the Add review page 3. Add review page displays: <ol style="list-style-type: none"> a. Number of stars (1-5) b. Textbox (300 words or less) c. Upload Photos d. Add Location 4. User clicks the "Add Location" button 5. Application directs the user to the location search page 6. User enters a keyword into the search bar and selects an existing toilet 7. User enters their review in the textbox and chooses a rating 8. Optional: User clicks the "Upload Photos" button and selects photo(s) of the toilet 9. User selects the "Save" button 10. Application will send a ticket to the review team to evaluate the validity of the user's request
Alternative Flows:	<p>7-AF-1: Add review for new toilet</p> <ol style="list-style-type: none"> 1. User inputs the address of a new toilet 2. Application displays "Current location does not have a listing yet." and "Add New Location button"

	<ol style="list-style-type: none"> 3. User clicks the “Add New Location” button 4. System returns to step 7 <p>7-AF-2: Add review of existing toilet from “Toilet Details” page</p> <ol style="list-style-type: none"> 1. User selects the review button in the “Toilet Details” page 2. Application directs the user to the Add review page 3. Add review page displays: <ol style="list-style-type: none"> a. Number of stars (1-5) b. Textbox (300 words or less) c. Upload Photos d. Cancel 4. System returns to step 7
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	Review team will evaluate the validity of the user’s request to add a new toilet
Notes and Issues:	-

Use Case ID:	8		
Use Case Name:	View Nearby Toilets		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can view toilets within 500m radius of their current location
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User turns on location function and permission is allowed for application to use their current location
Post-conditions:	<ol style="list-style-type: none"> 1. User views a list of toilets within 500m radius of their current location
Priority:	High
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User selects "Home" button on the application's navigation bar 2. Application redirects the user to Home page showing the list of toilets near the user 3. Home page displays a list of toilets within 500m radius of the user's current location <ol style="list-style-type: none"> a. Location of the toilet b. Distance of nearby toilets from current location c. Toilet Ratings d. Type of toilet e. District of toilet
Alternative Flows:	<p>8-AF-1: No nearby toilets within 500m radius of user current location</p> <ol style="list-style-type: none"> 1. Application displays the message "There are no toilets nearby."
Exceptions:	-
Includes:	-

Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	9		
Use Case Name:	View Toilet Details		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can view additional details of toilets
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is on the search page, map page, favorites page or profile page
Post-conditions:	<ol style="list-style-type: none"> 1. User views the specific details of a toilet
Priority:	Medium
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the specific toilet they want to view the details of 2. Toilet detail page displays the following details: <ol style="list-style-type: none"> a. Type of toilet (Gender, Handicap, Child-friendly) b. Rating of toilet (Number of stars) c. Reviews of toilet d. Images of the toilet
Alternative Flows:	<p>9-AF-1: User is on the profile page</p> <ol style="list-style-type: none"> 1. User clicks a past review that they have made 2. System returns to step 2 <p>9-AF-1 : User is on the map page</p> <ol style="list-style-type: none"> 1. User clicks on a specific toilet pin on the map 2. System returns to step 2 <p>9-AF-1 : User is on the search page</p> <ol style="list-style-type: none"> 1. User clicks on a specific toilet in the search page 2. System returns to step 2 <p>9-AF-1 : User is on the favorites page</p> <ol style="list-style-type: none"> 1. User clicks on a specific toilet that they have favorited 2. System returns to step 2
Exceptions:	-

Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	10		
Use Case Name:	View Toilet gallery		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can
Pre-conditions:	1. User is on the "Toilet Details" page
Post-conditions:	1. User views the image gallery of the selected toilet
Priority:	Medium
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User selects the "Image gallery" button 2. Application directs user to the selected toilet's gallery page
Alternative Flows:	10-AF-1: No images found for selected toilet 1. Toilet gallery page displays "No images found."
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	11		
Use Case Name:	Filter Toilets		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can filter toilets based on <ol style="list-style-type: none"> Type of toilet (Handicap/Gender/Child-friendly) District (Central, North East, North West, South East, South West) Distance Rating(up to 5 stars)
Pre-conditions:	<ol style="list-style-type: none"> User is logged into the application User has a list of toilets displayed on the map page
Post-conditions:	<ol style="list-style-type: none"> User views the filtered list of toilets
Priority:	Low
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> User clicks on the specific filter(s) they would like to apply <ol style="list-style-type: none"> Type District Distance Rating Application displays the updated list of toilets after applying filters selected
Alternative Flows:	11-AF-1: If no toilets are found after applying filter(s) <ol style="list-style-type: none"> The application displays "No toilets found!"
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-

Notes and Issues:	-
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Use Case ID:	12		
Use Case Name:	Edit review		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can edit reviews that they have written
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is in the "Toilet details" page
Post-conditions:	<ol style="list-style-type: none"> 2. User successfully edited the review that they have written
Priority:	Low
Frequency of Use:	0 - 1 times every 3 months
Flow of Events:	<ol style="list-style-type: none"> 1. User selects the past review that they want to edit 2. Application redirects the user to "Edit review" page 3. Application then display the following: <ol style="list-style-type: none"> a. Textbox with their review b. Attached images 4. User can select the textbox to edit their comment 5. User can delete previously attached image 6. User selects the "Save" button to save all changes made
Alternative Flows:	<p>12-AF-3b : Instead of deleting previously attached image, user can choose to attach more images to the review</p> <ol style="list-style-type: none"> 1. User attaches more images 2. System returns to step 6
Exceptions:	<p>12-EX-1 : In the "Edit review" page, if the user decides not to make changes to their review, the user has the option to return back to the "Toilet Details" page by selecting the "Back" button</p>
Includes:	-
Special Requirements:	-
Assumptions:	User has attached images to their review

Notes and Issues:	-
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Use Case ID:	13		
Use Case Name:	Delete review		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can delete reviews that they have written
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is in "Edit Review" page
Post-conditions:	<ol style="list-style-type: none"> 1. User successfully deleted the review that they have written
Priority:	Low
Frequency of Use:	0 - 1 times per month
Flow of Events:	<ol style="list-style-type: none"> 1. User selects the past review that they want to delete 2. Application redirects the user to "Edit review" page 3. User selects the "Delete" button to delete this review 4. Application displays a "Confirm Delete" prompt 5. User selects the "Confirm" button 6. System deletes the review
Alternative Flows:	-
Exceptions:	<p>13-EX-1 : In the "Edit Review" page, if the user decides to make changes to their review instead of deleting it, the user has the option to do so in the same page</p> <p>13-EX-2 : In the "Edit Review" page, if the user decides not to delete the review, user has the option to return back to the "Toilet Details" page by selecting the "Back" button</p> <p>13-EX-3 : In the "Confirm Delete" prompt, if the user decides not to delete the review, user has the option to return back to the "Edit Review" page by selecting the "Cancel" button</p>
Includes:	-
Special Requirements:	-

Assumptions:	-
Notes and Issues:	-

Use Case ID:	14		
Use Case Name:	Search for toilets		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can search for toilets near desired destination / current location
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is on the map page
Post-conditions:	<ol style="list-style-type: none"> 1. Application displays list of toilets near specified location
Priority:	High
Frequency of Use:	1 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User enters location into search bar 2. Map page displays a list of toilets near the specified location
Alternative Flows:	-
Exceptions:	14-EX-1: Searched location does not exist
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	15		
Use Case Name:	View Directions to Toilet		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Provide navigation guidance to user using google maps
Pre-conditions:	<ol style="list-style-type: none"> 1. List of nearby toilets available 2. User turns on location function and allows application to use their current location
Post-conditions:	<ol style="list-style-type: none"> 1. Application redirects user to Google Maps
Priority:	High
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on "Directions" button 2. System redirects user to Google Maps
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	<ol style="list-style-type: none"> 1. User has google maps installed in their device
Notes and Issues:	-

Use Case ID:	16		
Use Case Name:	Add Toilet to Favorites		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can add a toilet to favorites
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User is at the "Toilet Details" page
Post-conditions:	<ol style="list-style-type: none"> 1. User successfully adds toilet to the list of favorites
Priority:	Medium
Frequency of Use:	0-3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the "Favorites" button on the Toilet Detail Page 2. Application adds the toilet to the list of favorites 3. Application displays "(Name of toilet) successfully added to list of favorites"
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	17		
Use Case Name:	Remove Toilet from Favorites		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can add a toilet to favorites
Pre-conditions:	1. User is logged into the application
Post-conditions:	1. User successfully adds toilet to the list of favorites
Priority:	Medium
Frequency of Use:	0 - 3 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Favorites” button on the application navigation bar 2. Application displays “Favorites” page which has a list of user’s favorites toilets 3. User taps on “Heart” button to remove toilet from “Favorites” page 4. Application removes specified toilet from “Favorites” page 5. Application displays “(Name of toilet) successfully removed from favorites.”
Alternative Flows:	17-AF-1: User is on the “Toilet Details” page <ol style="list-style-type: none"> 1. User clicks on the “Favorites” button on the Toilet Detail Page 2. System returns to step 4
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-

Notes and Issues:	-
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Use Case ID:	18		
Use Case Name:	View Favorite Toilets		
Created By:		Last Updated By:	
Date Created:		Date Last Updated:	

Actor:	Registered User (Initiating Actor)
Description:	Registered user can view their list of favorite toilets
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the application 2. User has a toilet added to their list of favorites
Post-conditions:	<ol style="list-style-type: none"> 1. User successfully views their list of favorite toilets
Priority:	Medium
Frequency of Use:	0 - 2 times per day
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the "Favorites" button on the application navigation bar 2. Application displays "Favorite Toilets" list
Alternative Flows:	-
Exceptions:	18-AF-1: User has no favorite toilets
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-