
Use Cases

for

StudyBuddy

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version
Jared Pek	30/1/2024	First Draft	1.0

Use Cases

Use Case ID:	R1		
Use Case Name:	Register		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	New User
Description:	First-time users will be able to register an account at StudyBuddy, either as a Host, or as a Regular user.
Preconditions:	User should not have previously registered an account.
Postconditions:	User would have successfully created an account and logged in.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Register” on the navigation bar. 2. User will be redirected to the “register” page, where he is prompted to enter the username, email, password, password confirmation, first name, last name and mobile number. 3. User enters all the required information and clicks “Register”. 4. System verifies all the information and registers a new user, then authenticates the new user to the platform. 5. User is redirected to the home page.
Alternative Flows:	<p>R1-A1 → If user enters an existing username</p> <ol style="list-style-type: none"> 1. Error message “username already exists” will be displayed. 2. System returns to Step 2. <p>R1-A2 → If user enters an existing email</p> <ol style="list-style-type: none"> 1. Error message “account already exists” will be displayed. 2. System returns to Step 2.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection.
Notes and Issues:	NIL

Use Case ID:	L1		
Use Case Name:	Login		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, Host
Description:	All users must login to view study areas, manage bookings, and purchase items from the store.
Preconditions:	User has previously registered an account.
Postconditions:	User is successfully authenticated to the system.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Login” on the navigation bar. 2. User will be redirected to the “login” page, where he is prompted to enter the username and password. 3. User enters all the required information and clicks “Login”. 4. System verifies all the information and authenticates the user to the platform. 5. User is redirected to the home page.
Alternative Flows:	L1-A1 → If user credentials are incorrect <ol style="list-style-type: none"> 1. Error message “username or password is incorrect” will be displayed. 2. System returns to Step 2.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection.
Notes and Issues:	NIL

Use Case ID:	SA0		
Use Case Name:	Manage Study Areas		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	Host
Description:	Host users can manage the study areas that he is responsible for, by creating, deleting or editing study areas.
Preconditions:	Host user is already logged in to the system.
Postconditions:	Host user can view available study areas, or select “Create”, “Delete” or “Edit” features for study areas.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. Host user can view a list that corresponds to the available study areas, where he could select “Edit” or “Delete” the respective study areas. 2. Host user can select “Create” to create new study areas.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	<ol style="list-style-type: none"> 1. Create Study Area 2. Delete Study Area 3. Edit Study Area 4. Login
Special Requirements:	NIL
Assumptions:	Host user has internet connection
Notes and Issues:	NIL

Use Case ID:	SA1		
Use Case Name:	Create Study Area		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	Host, Google Maps API
Description:	Host users can create new study areas for regular users to use.
Preconditions:	<ol style="list-style-type: none"> 1. Host user is already logged in to the system. 2. No study areas exist at the same location.
Postconditions:	Host user creates a new study area.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. Host user clicks on the “Create” button. 2. User is redirected to a form that prompts the user for the address and postal code of the study area, unit number, description, capacity and opening hours etc of the study area. 3. User enters all the required data, then clicks on the “Create” button. 4. The system will verify that the area has not yet been created, then creates the new study area with the specified inputs.
Alternative Flows:	SA1-A1 → Study Area already exists <ol style="list-style-type: none"> 1. Error message “study area already exists” will be displayed. 2. System returns to Step 2.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	SA2		
Use Case Name:	Delete Study Area		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	Host
Description:	Host users can delete existing study areas.
Preconditions:	<ol style="list-style-type: none"> 1. Host user is already logged in to the system. 2. Selected study area already exists.
Postconditions:	Host user deletes an existing study area.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. Host user clicks on the “Delete” icon for the study area that he wants to delete. 2. Host user is redirected to another page that prompts him to confirm the deletion by clicking the “Confirm” button. 3. Once the host user clicks on “Confirm”, the system deletes the study area
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	SA3		
Use Case Name:	Edit Study Area		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	Host
Description:	Host users can update existing study areas.
Preconditions:	<ol style="list-style-type: none"> 1. Host user is already logged in to the system. 2. Selected study area already exists.
Postconditions:	Host user successfully updates an existing study area.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. Host user clicks on the “Edit” icon for the study area he wants to update. 2. Host user will be redirected to a form prompting him to enter the study area’s new status, unit number, capacity, description or opening hours. 3. Host user will enter the changes to the study area, then click on the “Confirm” button. 4. System updates the study area
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	B0		
Use Case Name:	Manage Bookings		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	Regular users can manage the bookings for study areas that he has made, by creating or deleting his bookings.
Preconditions:	User is already logged in to the system.
Postconditions:	User can view available study areas, then choose to book.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. User can view a list that corresponds to the available study areas, with a “Book” button where users can create a booking for the respective study area. 2. User can also view a list of his current bookings, and can select “Edit” to edit or “Delete” to delete the booking.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	<ol style="list-style-type: none"> 1. Create Booking 2. Delete Booking 3. Edit Booking 4. Login
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	B1		
Use Case Name:	Create Booking		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	<ol style="list-style-type: none"> 1. Users can create a new booking at a study area. 2. User must not have booked any study area at the same time.
Preconditions:	User is already logged in to the system.
Postconditions:	User successfully makes a booking at a study area.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Book” for the selected study area. 2. User is redirected to a form that prompts him to select the date and start time he will be there. 3. Once user selects the required information, he clicks on the “Confirm” button to create the booking.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	B2		
Use Case Name:	Delete Booking		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	Users can delete an existing booking for a study area.
Preconditions:	<ol style="list-style-type: none"> 1. User is already logged in to the system. 2. User has already created a booking previously.
Postconditions:	User successfully deletes a booking.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Delete” for the selected booking. 2. Once the user clicks on the “Delete” button, the system will delete the booking.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	B3		
Use Case Name:	Edit Booking		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	Users can edit an existing booking for a study area.
Preconditions:	<ol style="list-style-type: none"> 1. User is already logged in to the system. 2. User has already created a booking previously.
Postconditions:	User successfully edits a booking.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Edit” for the selected booking. 2. User is redirected to a form that prompts the user for a new date and start time of booking. 3. User selects all the required details, and click on the “Confirm” button. 4. System updates the booking details.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	C0		
Use Case Name:	Manage Cart		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	Users can manage the cart for the store by adding or remove products to and from his cart.
Preconditions:	User is already logged in to the system.
Postconditions:	User can view his cart, and add or remove products from it.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Store” icon on the navigation bar. 2. User is redirected to the store page, where he can add products to the cart. 3. User clicks on the “Cart” icon on the navigation bar. 4. User is redirected to the cart page, where he can view all the items in his cart and click “Delete” to delete the respective product from the cart. 5. Once the user is ready to purchase his items, he can click “Check Out” to purchase the products.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	<ol style="list-style-type: none"> 1. Add Product to Cart 2. Remove Product from Cart 3. Check Out 4. Login
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	C1		
Use Case Name:	Add Product to Cart		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can add a product from the store to his cart.
Preconditions:	User is already logged in to the system.
Postconditions:	User successfully adds the product to the cart.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Store” icon on the navigation bar. 2. User is redirected to the store page, where he can view all the available products. 3. User clicks on the “Add to Cart” button. 4. The system will make a POST request to the E-Commerce API, which adds the selected product to the user’s cart.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	C2		
Use Case Name:	Remove Product from Cart		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can remove a product from his cart.
Preconditions:	<ol style="list-style-type: none"> 1. User is already logged in to the system. 2. User already has a product in the cart.
Postconditions:	User successfully removes the product from his cart.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Cart” icon on the navigation bar. 2. User is redirected to the cart page, where he can view all the products that he has added to the cart. 3. User clicks on the “Delete” button to remove the product from his cart. 4. System makes a “DELETE” request to the E-Commerce API and deletes the product from the cart..
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	C3		
Use Case Name:	Edit Product in the Cart		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can edit the quantity of a product in his cart.
Preconditions:	<ol style="list-style-type: none"> 1. User is already logged in to the system. 2. User already has a product in the cart.
Postconditions:	User successfully edits the quantity of the product from his cart.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Cart” icon on the navigation bar. 2. User is redirected to the cart page, where he can view all the products that he has added to the cart. 3. User clicks on the “-” or “+” buttons to modify the quantity of the cart. 4. System makes a “PUT” request to the E-Commerce API with the new quantity of the product and updates the cart..
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	C4		
Use Case Name:	Check Out		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can check out his cart and confirm an order.
Preconditions:	<ol style="list-style-type: none"> 1. User is already logged in to the system. 2. User already has at least 1 product in the cart.
Postconditions:	User successfully checks out his products and creates an order.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Cart” icon on the navigation bar. 2. User is redirected to the cart page, where he can view all the products that he has added to the cart. 3. User enters his address and postal code, then clicks on the “Check Out” button. 4. A new order for the products will be created. 5. All the products in his current cart will then be removed.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	VO1		
Use Case Name:	View Order		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can view all orders that he has placed.
Preconditions:	1. User is already logged in to the system.
Postconditions:	User successfully checks out his products and creates an order.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on the “Orders” icon on the navigation bar. 2. User is redirected to the orders page, where he can view all the orders that he has previously made but checking out his cart.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	Login
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	AB1		
Use Case Name:	Ask AI Buddy		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, Gemini API
Description:	Users can ask a question to our AI bot to seek help on his work.
Preconditions:	NIL
Postconditions:	User receives a response to his question.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. User navigates to the buddyai page by clicking on “BuddyAI” on the navigation bar. 2. User enters the question he wants to ask, then clicks on “Ask Buddy” button. 3. The system will make a POST request to the Gemini API, which then receives a response and displays the answer on the user’s screen.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	Login
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	P1		
Use Case Name:	View Products		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User, E-Commerce API
Description:	Users can view all the available products in the store.
Preconditions:	NIL
Postconditions:	User views a list of all the available products on 1 page.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on “Store” on the navigation bar. 2. User will be redirected to the store page, where he can view all the products available for purchase.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL

Use Case ID:	S1		
Use Case Name:	View Study Areas		
Created By:	Jared Pek	Last Updated By:	Jared Pek
Date Created:	30/1/2024	Date Last Updated:	30/1/2024

Actor:	User
Description:	Users can view all the available study areas around him.
Preconditions:	NIL
Postconditions:	User views a list of all the available study areas on 1 page.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. User navigates to the home page. 2. System will obtain the user's live location. 3. System will aggregate the list of study areas and sort it in order of straight line distance to the user. 4. User can view the list of all the available study areas in the order that is closest to his location.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	User has internet connection
Notes and Issues:	NIL