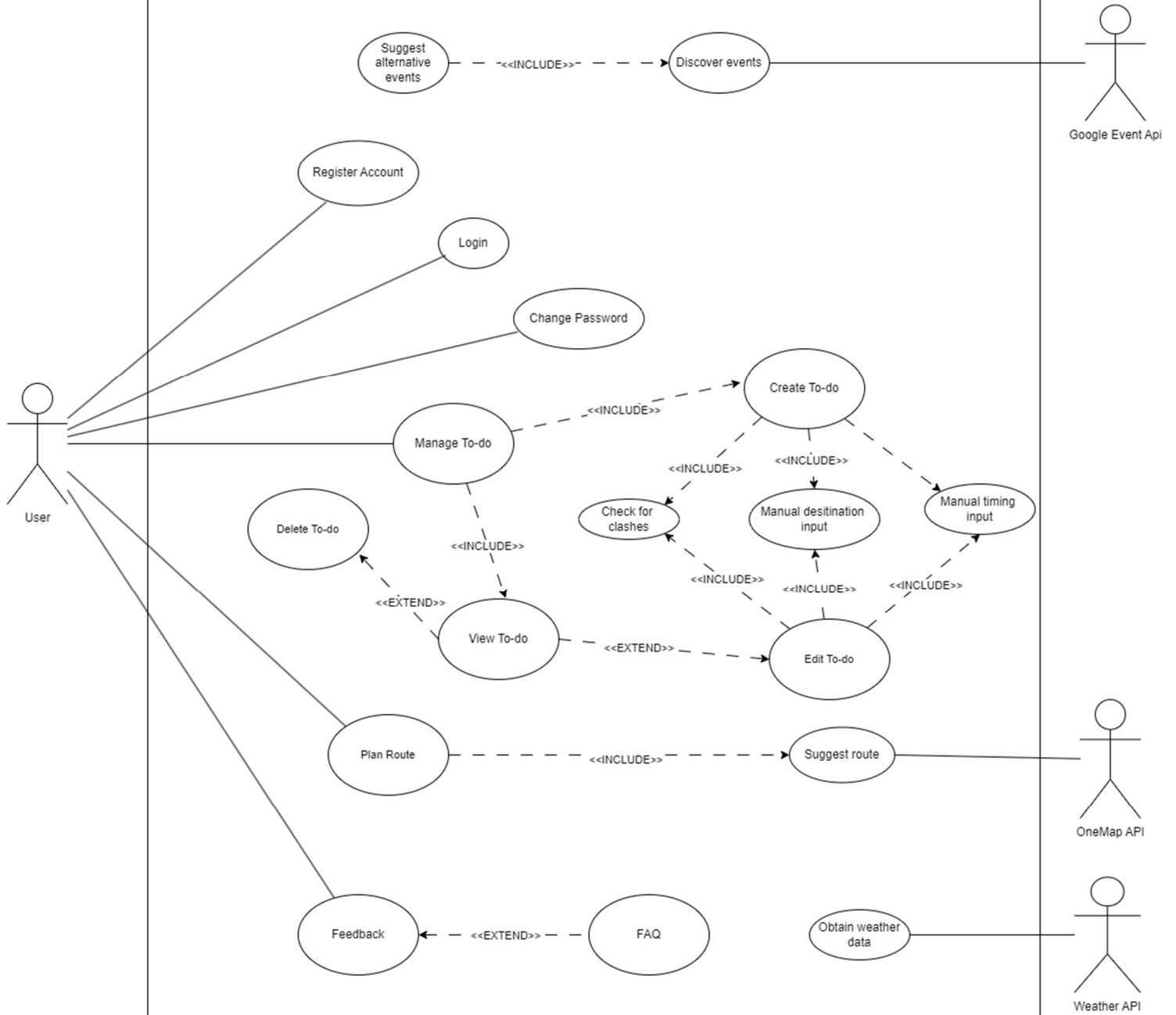


CheckIt



Use Case Description

Use Case ID:	01		
Use Case Name:	Manage Todo		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	25 Mar 2024

Actor:	User
Description:	This use case allows user to manage their To-do list
Preconditions:	User login and successfully authenticated
Postconditions:	User can modify the todo list
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none">1. The system presents the user with options to Create, Edit, Delete, or View Todos.2. If the user selects Create Todo, they are guided through the process outlined in the "Create Todo" use case.3. If the user selects Edit Todo, they first choose a Todo from their list to edit, then are guided through the editing process, where they can change any detail of the selected Todo.4. If the user selects Delete Todo, they choose a Todo to delete from their list and confirm deletion in the process described in the "Delete Todo" use case.5. If the user selects View Todo, they are presented with a list of their Todos and can select one to view its detailed information, as described in the "View Todo" use case.
Alternative Flows:	NIL
Exceptions:	If there are no Todos available when the user chooses to Edit or View, the system informs the user and offers to redirect them to the Create Todo option.
Includes:	Create To-do, Edit To-do, Delete To-do, View To-do
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	02		
Use Case Name:	Create Todo		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	18 Feb 2024

Actor:	User
Description:	This use case allows user to create a To-do and add it into the To-do list
Preconditions:	User selected Create To-do in the View To-do page
Postconditions:	A To-do is created and added into the To-do list
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to create a new Todo. 2. The system prompts the user for the Todo details: title, task, starting datetime, ending datetime, destination, indoor/outdoor status. 3. The user inputs the required details and may use the included use case "manual destination input" to input the address of the activity, "manual timing input" to input the activity time.. 4. The system include use case "check for clashes" to identify if there's any overlap between activities. If there is, system will warn the user and ask user to change starting or ending datetime.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	Manual timing input, Manual destination input, Check for clashes
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	03
Use Case Name:	Edit Todo

Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	18 Feb 2024

Actor:	User
Description:	This use case allows user to edit a To-do and update the To-do list
Preconditions:	User selected Edit To-do in the View To-do page
Postconditions:	The specified To-do is edited and the To-do list is updated accordingly
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to edit a specified Todo. 2. The system prompts the user for the Todo details: title, task, starting datetime, ending datetime, destination, indoor/outdoor status. 3. The user update the details and may use the included use case "manual destination input" to input the address of the activity, "manual timing input" to input the activity time. 4. The system include use case "check for clashes" to identify if there's any overlap between activities. If there is, system will warn the user and ask user to change starting or ending datetime.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	Manual timing input, Manual destination input, Check for clashes
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	04		
Use Case Name:	View Todo		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie

Date Created:	8 Feb 2024	Date Last Updated:	18 Feb 2024
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Actor:	User
Description:	This use case allows user to view the To-do list
Preconditions:	User selected View To-do in the Manage To-do page
Postconditions:	User view a todo list and can choose to delete/edit the individual todo
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to view Todos list. 2. The system retrieves Todos list from the database and displays them to the user. 3. The user can select a Todo activity from the list to view its detailed information and edit/delete the specific Todo.
Alternative Flows:	NIL
Exceptions:	If there are no Todos to display, the system informs the user that no Todos are available.
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	05		
Use Case Name:	Delete Todo		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie

Date Created:	8 Feb 2024	Date Last Updated:	18 Feb 2024
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Actor:	User
Description:	This use case allows user to delete the To-do list
Preconditions:	User selected Delete To-do in the View To-do page
Postconditions:	Selected To-do will be deleted
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to delete a Todo. 2. The system confirms the deletion request. 3. Upon confirmation, the system deletes the selected Todo from the database and confirms the deletion to the user.
Alternative Flows:	NIL
Exceptions:	If there are no Todos to delete, the system informs the user that no Todos are available.
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	06		
Use Case Name:	Manual Destination Input		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	User
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Description:	This use case allows user to input the location of destination
Preconditions:	User selected to manually input the destination location when creating/editing the To-do
Postconditions:	Location destination information of the creating/editing To-do has been updated
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. When prompted for Todo details, the user selects the option to manually input the destination. 2. The user enters the address of the activity. 3. The system validates the address and saves it as part of the Todo's destination.
Alternative Flows:	NIL
Exceptions:	If the address is invalid, the system alerts the user and requests a valid address.
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	07		
Use Case Name:	Register Account		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	11 Mar 2024	Date Last Updated:	11 Mar 2024

Actor:	User
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Description:	This use case allows new user to create his/her account
Preconditions:	User open the website
Postconditions:	User information created and stored in database
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User selects the option to register. 2. User provides a username, email and password. 3. System validates the provided information. 4. System creates a new user account in the database. 5. User receives confirmation of account creation.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	08		
Use Case Name:	Manual Timing Input		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	User
Description:	This use case allows user to input the timing of To-do
Preconditions:	User selected to manually input the timing when creating/editing a To-do
Postconditions:	starting datetime and ending datetime information of the creating/editing To-do has beening updated
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. When prompted for Todo details, the user selects the option to manually input the activity time. 2. The user inputs the date and time of the activity. 3. The system validates and saves the input as part of the Todo's starting datetime and ending datetime.

Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	09		
Use Case Name:	Check for clashes		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	User
Description:	This use case will check if there is any time overlaps within the Todo list and raise warning information if there is
Preconditions:	User finished inputting all details of a Todo
Postconditions:	Creating/editing a specific Todo finished
Priority:	Low
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. During Todo creation or editing, the system checks for time overlaps with existing Todos. 2. If an overlap is found, the system alerts the user and provides details of the clash.
Alternative Flows:	The user can choose to adjust the Todo details to resolve the clash or proceed despite the overlap.
Exceptions:	NIL

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

Use Case ID:	10		
Use Case Name:	Obtain Weather Data		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	Weather API
Description:	This use case allows user to input the timing of To-do
Preconditions:	User login to the CheckIt website
Postconditions:	Weather data retrieved for current user location and all Todo destination
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. The system uses the Weather API to obtain real-time weather data for the user's current location and all Todo destination. 2. The system displays the weather information to the user or uses the information to suggest alternative events or provide alerts.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL

Notes and Issues:	NIL
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Use Case ID:	11		
Use Case Name:	Discover Events		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	Google Event API
Description:	This use case uses Google Event API to present events happened nearby
Preconditions:	User choose to discover events when creating To-do
Postconditions:	A list of events retrieved and present to user
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to discover events. 2. The system uses the Google Event API to present the user with events happening nearby, based on preferences and current location. 3. The user can view more information about an event or add it as a Todo.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	12		
Use Case Name:	Suggest Alternative Events		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	Google Event API
Description:	This use case offers user some alternative events to replace existing outdoor To-dos which might be affected due the bad weather
Preconditions:	User login and authenticated successfully, one or more outdoor Todo is impacted by weather condition
Postconditions:	Possible To-do update if user accept system suggestion
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. If weather conditions impact an outdoor Todo, the system suggests alternative indoor events or sheltered transportation modes, utilizing Weather and Event Discovery APIs. 2. The user can review the suggested alternatives.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	Discover Events
Special Requirements:	NIL
Assumptions:	NIL

Notes and Issues:	NIL
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Use Case ID:	13		
Use Case Name:	Plan Route		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	13 Mar 2024

Actor:	User
Description:	This use case allows user to plan route between the location of the To-dos based on the To-do list he/she has
Preconditions:	User login and authenticated successfully
Postconditions:	Routes between destinations selected by user will be stored in database
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. The user selects the option to plan a route. 2. The system displays dates on which users have created Todos. 3. Upon selection, the system uses the included "Suggest Route" use case to plan the routes between every continuous two events. 4. The system retrieves the destination of the selected Todo and the specified start location. 5. The system uses "Suggest route" to suggest an optimal path from the start location to the Todo's destination 6. The system displays the suggested routes to the user, including details such as estimated travel time and possible modes of transportation as well as a mini map. 7. The user can view details of each route by selecting "next route" and "previous route" buttons.
Alternative Flows:	NIL

Exceptions:	NIL
Includes:	Suggest routes
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	14		
Use Case Name:	Suggest Route		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	OneMap API
Description:	This use case retrieve a few best routes suggestion from OneMap API
Preconditions:	User request for route suggestion in Plan Route page
Postconditions:	Several routes are suggested and shown on the website
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. Based on a selected Todo's destination or during the creation of a Todo, the user requests route suggestions. 2. The system uses the OneMap API to suggest an optimal path from the user's current location to the destination, considering traffic and public transportation options. 3. The system displays the suggested routes and show the estimated time taken of each route to the user.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	15		
Use Case Name:	FAQ		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	15 Feb 2024

Actor:	User
Description:	This use case displays user some FAQs to clear possible doubts
Preconditions:	User login and authenticated successfully
Postconditions:	User checked the FAQ and clear doubts hopefully
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User select the FAQ option. 2. System displays FAQs in another webpage. 3. If the FAQs are not helpful to address user's problem, user can choose to send feedback.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	16		
Use Case Name:	Feedback		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	18 Feb 2024

Actor:	User
Description:	This use case allows user to send feedback to the system manager
Preconditions:	User login and authenticated successfully
Postconditions:	User send feedback successfully
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User select to send feedback to system manager 2. A small window will pop up and ask user to fill in the information to send feedback 3. User input his description of the issue in detail 4. User can choose to upload a screenshot about the issue (pdf, img, jpg format etc, <30MB) 5. User input his email address for manager to email about the update in future
Alternative Flows:	User is allowed to give up sending feedback by closing the small pop-up window
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	17		
Use Case Name:	Login		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	11 Mar 2024	Date Last Updated:	11 Mar 2024

Actor:	User
Description:	This use case allows an existing user to access their account by entering credentials.
Preconditions:	User open the webpage
Postconditions:	User is allowed to use CheckIt system
Priority:	High
Frequency of Use:	Medium

Flow of Events:	<ol style="list-style-type: none"> 1. User enters their email and password. 2. System verifies the email and password against the database. 3. If credentials are correct, the user is logged in. 4. If no such user exists, the user is prompted to register. 5. If the password is incorrect, the user is informed.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	18		
Use Case Name:	Change Password		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	11 Mar 2024	Date Last Updated:	11 Mar 2024

Actor:	User
Description:	This use case allows users to change their password.
Preconditions:	User at the login page and forget the password
Postconditions:	User password updated in the database
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User requests to change the password, entering their email. 2. System validates the email and sends a password change link. 3. User clicks the link and enters a new password. 4. System updates the user's password in the database.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL