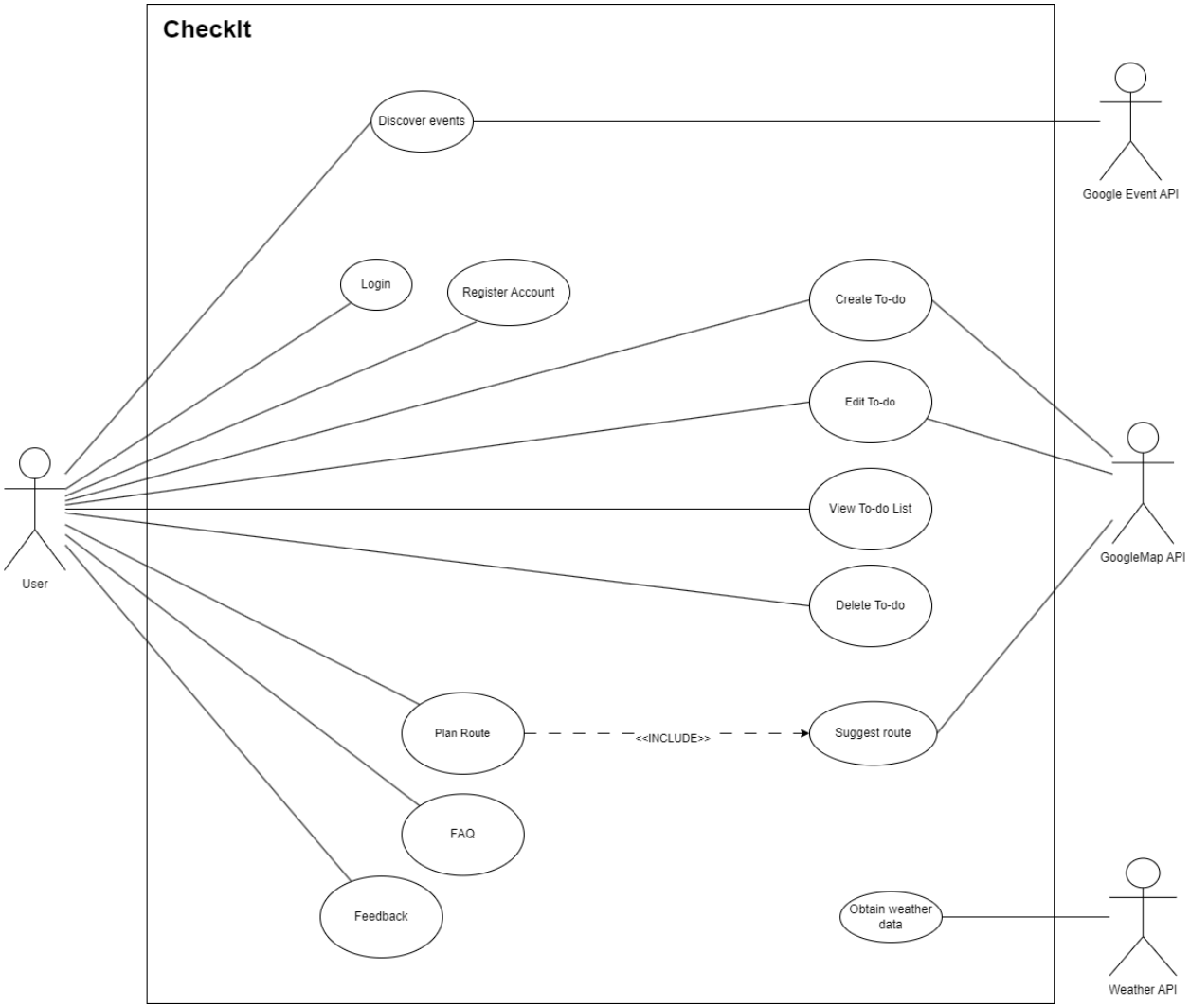

Use Case Description

Use Case ID:	01		
Use Case Name:	Create Todo		
Created By:	Zhong Xing Jie	**Last Updated By:**	Zhong Xing Jie
Date Created:	8 Feb 2024	**Date Last Updated:**	12 Apr 2024

Actor:	User, GoogleMap API

Description:	This use case allows user to create a To-do and add it into the To-do list
Preconditions:	User chooses to Create To-do
Postconditions:	A To-do is created and added into the To-do list
Priority:	High
Frequency of Use:	Medium
Flow of Events:	1. The user selects the option to create a new Todo. 2. The system prompts the user for the Todo details: title, description, starting datetime, ending datetime, destination, indoor/outdoor status. 3. For destination, user can key in the keywords of it and system will use GoogleMap API to fetch a list of searched addresses for user to select. 4. If all necessary details are input and the starting/ending datetime is reasonable, system will add the Todo into Todo list.
Alternative Flows:	If user does not key in every necessary detail, system will prompt alert to remind user to fill in all the necessary part. If the starting/ending datetime is unreasonable (i.e. starting datetime is later than ending datetime), system will prompt alert to remind user to change the timing.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	02		
Use Case Name:	Edit Todo		
Created By:	Zhong Xing Jie	**Last Updated By:**	Zhong Xing Jie
Date Created:	8 Feb 2024	**Date Last Updated:**	12 Apr 2024

Actor:	User, GoogleMap API

Description:	This use case allows user to edit a To-do and update in the To-do list accordingly
Preconditions:	User selects a To-do and choose to edit it
Postconditions:	The specified To-do is edited and the To-do list is updated accordingly
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	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. For destination, user can key in the keywords of it and system will use GoogleMap API to fetch a list of searched addresses for user to select. 4. If all necessary details are input and the starting/ending datetime is reasonable, system will update the Todo into Todo list.
Alternative Flows:	If user does not key in every necessary detail, system will prompt alert to remind user to fill in all the necessary part. If the starting/ending datetime is unreasonable (i.e. starting datetime is later than ending datetime), system will prompt alert to remind user to change the timing.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	03		
Use Case Name:	View Todo List		
Created By:	Zhong Xing Jie	**Last Updated By:**	Zhong Xing Jie

Date Created:	8 Feb 2024	Date Last Updated:	12 Apr 2024

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:	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:	04		
Use Case Name:	Delete Todo		
Created By:	Zhong Xing Jie	**Last Updated By:**	Zhong Xing Jie
Date Created:	8 Feb 2024	**Date Last Updated:**	15 Mar 2024

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 list page
Postconditions:	Selected To-do will be deleted
Priority:	Low
Frequency of Use:	Low
Flow of Events:	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:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	05		
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
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:	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:	6

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:	12 Apr 2024

Actor:	Weather API
Description:	This use case uses weather API to obtain weather condition
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:	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 determine if it is needed to raise alert for user.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	7

Use Case Name:	Discover Events		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	12 Apr 2024

Actor:	Google Event API, User
Description:	This use case uses Google Event API to present events happened
Preconditions:	User choose to discover events
Postconditions:	3 events retrieved and present to user based on user's location and event type input
Priority:	Low
Frequency of Use:	Low
Flow of Events:	1. The user selects the option to discover events. 2. The user inputs the event type and event location. 3. The system uses the Google Event API to present the user with events happening, based on preferences and current location. 4. The user can view more information about an event.
Alternative Flows:	If there is no events found based on user input, system will return a notice of no related events.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	8		
Use Case Name:	Plan Route		
Created By:	Zhong Xing Jie	Last Updated By:	Zhong Xing Jie
Date Created:	8 Feb 2024	Date Last Updated:	1 Apr 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 will be displayed
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. The user selects the option to plan a route. 2. The system displays Todos whose duration cover the day when user is planning route. 3. User selects Todos he plans to work on that day and key in the timing of each Todo when he plans to start/end the task. 4. Upon selection, the system orders the selected todos by sequence and uses the included "Suggest Route" use case to plan the routes between every continuous two events. 5. The system retrieves the destination of the selected Todo and the specified start location. 6. The system uses “Suggest route” to suggest an optimal path from each task location to the following Todo's location. 7. The system displays the suggested routes to the user, including estimated travel time. 8. The user can view details of each route, such as a text description of the route as well as an according mini-map by selecting “next route” and “previous route” buttons.
Alternative Flows:	If user only selected 1 tasks to plan route, there will be no route displayed. If user only selected 2 tasks to plan route, there will be no “next route” and “previous route” button displayed. If user never key in the timing information, system will raise window alert to remind user to input those information. If user key in the starting/ending datetime unreasonably (i.e. the starting time is later thant the ending time), system will raise window alert to remind user to correct those timing.
Exceptions:	NIL
Includes:	Suggest routes
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	9		
Use Case Name:	Suggest Route		
Created By:	Zhong Xing Jie	**Last Updated By:**	Zhong Xing Jie
Date Created:	8 Feb 2024	**Date Last Updated:**	12 Apr 2024

Actor:	GoogleMap API
Description:	This use case retrieve best route suggestion from GoogleMap 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:	1. Based on a selected Todo's destination, the user requests route suggestions. 2. The system uses the GoogleMap API to suggest an optimal path from one task location to another, considering traffic and public transportation options. 3. The system displays the suggested routes by a mini-map and text description as well as showing the estimated time taken of each route to the user.
Alternative Flows:	If no route by public transport is founded based on the location of tasks, system will inform the user that the according route is unavailable.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	10		
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:	1. User select the FAQ option. 2. System displays FAQs. 3. User can click on each FAQ to check the answer of it.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	11		
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:	1. User select to send feedback to system manager 2. User will be directed to a feedback page and be asked to fill in the information to send feedback 3. User input his description of the issue in detail
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:	12		
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:	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