

CSCI 2720 / ESTR 2106 – Building Web Applications

Course Project Demo

This document demonstrates some screen captures of a finished project provided by our TA Long Zeling. This demo only fulfills the basic requirement. In your project, you are encouraged to put more effort into designing extra features and decorating the layout.

Basic Application Requirements

User actions:

1. List all locations in a table as links to single locations and allow sorting the table with location names, distances, and the number of events at venue.

The screenshot shows a web-based application interface for managing locations. At the top, there is a navigation bar with links: Home, Location List, Event List, Map, Favourite list, and No idea?. To the right of the navigation is a user icon with the letter 'A'.

Below the navigation is a search bar labeled "Search by location..." and a dropdown menu labeled "Area". There is also a slider for "Distance (km)" with a current value of 0. Below these are "PREVIOUS" and "NEXT" buttons.

The main content area displays a table of locations. The columns are: ID, LOCATION, DISTANCE (KM), and NUMBER OF EVENTS. An "Add to Favourite" button is located at the end of each row. The table contains the following data:

ID	LOCATION	DISTANCE (KM)	NUMBER OF EVENTS	Add to Favourite
872	Tsuen Wan Town Hall	11.02 km	2	<input checked="" type="checkbox"/>
50110015	Hong Kong Cultural Centre (Grand Theatre)	14.49 km	2	<input checked="" type="checkbox"/>
87510305	Hong Kong City Hall (Exhibition Hall)	15.98 km	5	<input type="checkbox"/>
87410028	Ngau Chi Wan Civic Centre (Cultural Activities Hall)	9.50 km	8	<input checked="" type="checkbox"/>
87110023	Kwai Tsing Theatre (Auditorium)	10.81 km	9	<input type="checkbox"/>
76810049	Tuen Mun Town Hall (Cultural Activities Hall)	23.77 km	11	<input checked="" type="checkbox"/>
36310035	Sha Tin Town Hall (Auditorium)	4.60 km	12	<input checked="" type="checkbox"/>
36310593	Sha Tin Town Hall (Lecture Room 1)	4.60 km	21	<input type="checkbox"/>
76810312	Tuen Mun Town Hall (Conference Room)	23.77 km	22	<input checked="" type="checkbox"/>
87310196	Yuen Long Theatre (Lecture Room)	18.97 km	29	<input checked="" type="checkbox"/>

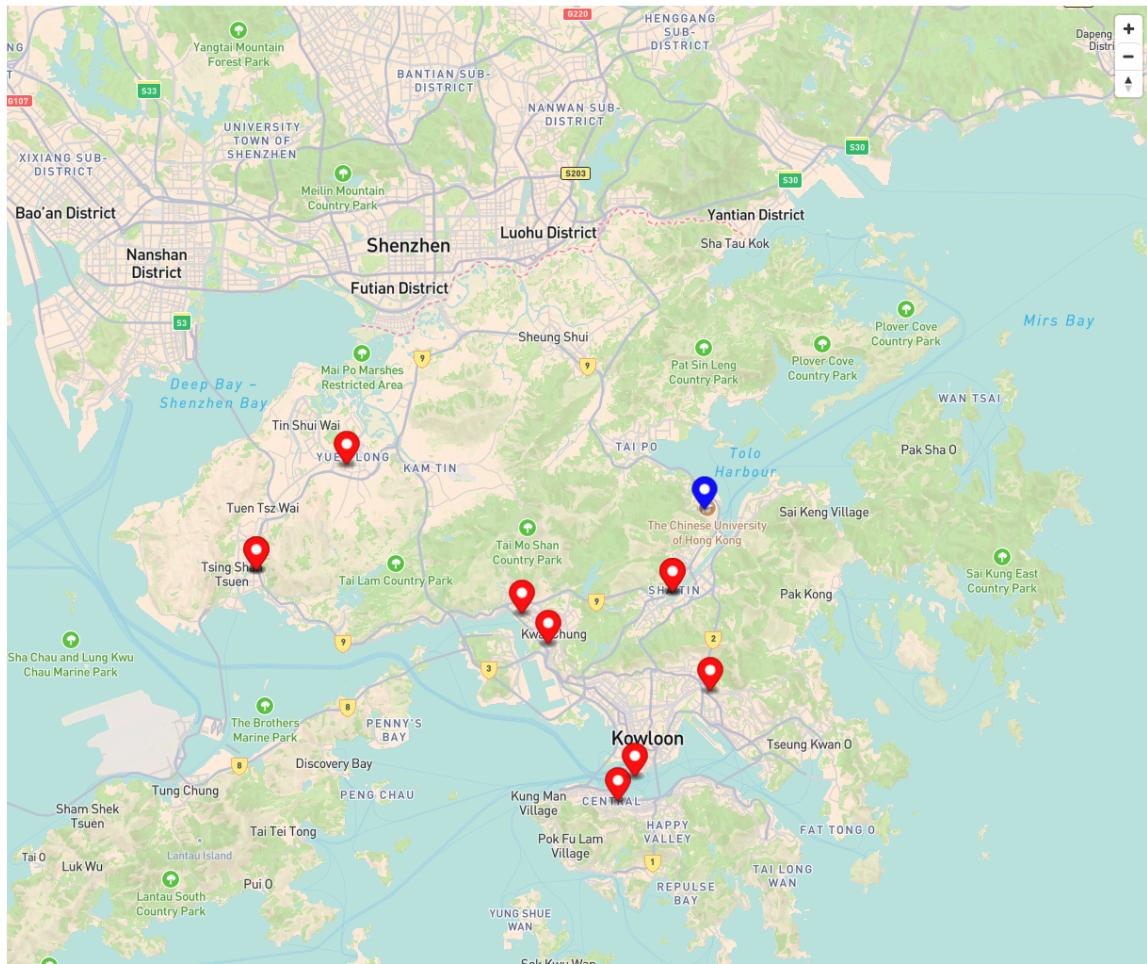
At the bottom of the page, there is a footer with the text "Page 1 of 1" and "Last updated time: 24/10/2025, 14:05:51".

2. Show all locations in a map, with links to each single location (suggested APIs: Google Maps, OpenStreetMap or MapBox).

④ Example

[Home](#) [Location List](#) [Event List](#) [Map](#) [Favourite list](#) [No idea?](#)

A



3. Filter locations by keywords, areas, and distance (e.g., within x km), with dynamic updates to the location list and map without page refresh.

⌚ Example

[Home](#) [Location List](#) [Event List](#) [Map](#) [Favourite list](#) [No idea?](#)

A

The screenshot shows a search interface for locations. A red oval highlights the search input field containing the text "hong". Below the search bar is a dropdown menu set to "Area". To the right is a slider for "Distance (km)" with a blue dot at the end of the scale. Navigation buttons "PREVIOUS" and "NEXT" are on the far right. The main area displays a table of search results:

ID	LOCATION	DISTANCE (KM)	NUMBER OF EVENTS	Action
50110015	Hong Kong Cultural Centre (Grand Theatre)	14.49 km	2	<input checked="" type="checkbox"/>
87510305	Hong Kong City Hall (Exhibition Hall)	15.98 km	5	<input type="checkbox"/>

Page 1 of 1 Last updated time: 24/10/2025, 14:08:37

⌚ Example

[Home](#) [Location List](#) [Event List](#) [Map](#) [Favourite list](#) [No idea?](#)

A

The screenshot shows a search interface for locations. A red oval highlights the search input field containing the text "tsuen wan". Below the search bar is a dropdown menu set to "Area". To the right is a slider for "Distance (km)" with a blue dot at the end of the scale. Navigation buttons "PREVIOUS" and "NEXT" are on the far right. The main area displays a table of search results:

ID	LOCATION	DISTANCE (KM)	NUMBER OF EVENTS	Action
872	Tsuen Wan Town Hall	11.02 km	2	<input checked="" type="checkbox"/>
87410028	Ngau Chi Wan Civic Centre (Cultural Activities Hall)	9.50 km	8	<input checked="" type="checkbox"/>
87110023	Kwai Tsing Theatre (Auditorium)	10.81 km	9	<input type="checkbox"/>
36310035	Sha Tin Town Hall (Auditorium)	4.60 km	12	<input checked="" type="checkbox"/>
36310593	Sha Tin Town Hall (Lecture Room 1)	4.60 km	21	<input type="checkbox"/>

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⌚ Example

[Home](#) [Location List](#) [Event List](#) [Map](#) [Favourite list](#) [No idea?](#)

A

The screenshot shows a search interface for locations. A red oval highlights the search input field containing the text "kwai tsing". Below the search bar is a dropdown menu set to "Area". To the right is a slider for "Distance (km)" with a blue dot at the end of the scale. Navigation buttons "PREVIOUS" and "NEXT" are on the far right. The main area displays a table of search results:

ID	LOCATION	DISTANCE (KM)	NUMBER OF EVENTS	Action
87110023	Kwai Tsing Theatre (Auditorium)	10.81 km	9	<input type="checkbox"/>

Page 1 of 0 Last updated time: 24/10/2025, 14:08:37

4. A separate view for one single location, containing: a) A map showing the location. b) The location details. c) User comments, where users can add new comments seen by all other users.

⌚ Example

Home Location List Event List Map Favourite list No idea? A

Sha Tin Town Hall (Lecture Room 1)

Comment

hello world!

really nice place, will go again!

wonderful performance!

What is your comment?

Add Comment

Remove from favourite

5. Add location into a list of user's favourite locations and see the list in another view.

⌚ Example

Home Location List Event List Map Favourite list No idea? A

Search by location			
Location	Number of Events		
Sha Tin Town Hall (Lecture Room 1)	21	×	
Kwai Tsing Theatre (Auditorium)	9	×	
Hong Kong City Hall (Exhibition Hall)	5	×	

PREVIOUS NEXT Page 1 of 1

6. See the username in the top-right of screen and be able to log out.

⌚ Example

Home Location List Event List Map Favourite list No idea? A

Search by location...		Area	Distance (km)	PREVIOUS	NEXT
ID	LOCATION	DISTANCE (KM)	NUMBER OF EVENTS		
872	Tsuen Wan Town Hall	11.02 km	2		

admin
 admin@email.com
[User Manager](#)
[Event Manager](#)
[Add to Favourite](#)
[Profile](#)
[Sign out](#)

Admin actions:

1. CRUD stored event details in the local database.
 - a. We will not test other features (e.g., map, comments) if deleting an existing location.

⌚ Example

Event List						
New Event		Search events by title...		Last Updated on 24/10/2025, 14:07:12		
Event Title	Description	Venue	Price	Presenter(s)	Date & Time	Actions
2024 Hong Kong Youth Chinese Orchestra Annual Concert "Voyage. Rainbow. Dream of Red Chamber"	N/A	Sha Tin Town Hall (Auditorium)	\$115, 90, 70	Presented by Leisure and Cultural Services Department	1 Dec 2024 (Sun) 7:30pm	<button>Update</button> <button>Delete</button>
Cantonese Opera Excerpts	N/A	Sha Tin Town Hall (Auditorium)	\$50	Presented by Sha Tin Arts Association	28 Dec 2024 (Sat) 7:15pm	<button>Update</button> <button>Delete</button>
Cantonese Operatic Songs Concert	N/A	Sha Tin Town Hall (Auditorium)	Free admission by tickets	Presented by The Phoenix Sound Chinese Opera Troupe	24 Dec 2024 (Tue) 2:15pm	<button>Update</button> <button>Delete</button>
Cantonese Operatic Songs Concert	N/A	Sha Tin Town Hall (Auditorium)	\$280, 120, 60	Presented by Jade Flower Cantonese Operatic Society	23 Dec 2024 (Mon) 7:00pm	<button>Update</button> <button>Delete</button>
Joe Mok's Concert	N/A	Sha Tin Town Hall (Auditorium)	\$680, 480, 280	Presented by Cultural Stage Creation Centre	16 Dec 2024 (Mon) 7:30pm	<button>Update</button> <button>Delete</button>
Mei Lam Cantonese	N/A	Sha Tin Town	Free admission	Presented by Mei Lam Cantonese	27 Dec 2024 (Fri)	<button>Update</button> <button>Delete</button>

2. CRUD user data (username and password only) in the local database.
 - a. We will not test other features (e.g., comments) if deleting an existing user.

⌚ Example

User List						
New User		Search users by username...		Last Updated on 24/10/2025, 14:07:42		
Name	Role	Actions				
admin admin@email.com	Admin	<button>Edit</button>	<button>Delete</button>			
zeling zllong25@cse.cuhk.edu.hk	User	<button>Edit</button>	<button>Delete</button>			

3. Log out as admin. (Same as User Action 6)

Non-user actions:

1. Log in as user with username and password.
2. Log in as admin using username and password.

Sign in to your account

Your username

User123

Password

Remember me

Sign in

Don't have an account yet? [Sign up](#)

Extra Features

We provide two possible extra features here:

1. Including a like button, similar to Facebook, for users to interact with events.

⑨ Example

Home Location List Event List Map Favourite list No idea? A

Venue	Date	Title	Description	Presenter	Price	LIKE
Sha Tin Town Hall (Auditorium)	1 Dec 2024 (Sun) 7:30pm	2024 Hong Kong Youth Chinese Orchestra Annual Concert "Voyage. Rainbow. Dream of Red Chamber"	N/A	Presented by Leisure and Cultural Services Department	\$115, 90, 70	
Sha Tin Town Hall (Auditorium)	28 Dec 2024 (Sat) 7:15pm	Cantonese Opera Excerpts	N/A	Presented by Sha Tin Arts Association	\$50	
Sha Tin Town Hall (Auditorium)	24 Dec 2024 (Tue) 2:15pm	Cantonese Operatic Songs Concert	N/A	Presented by The Phoenix Sound Chinese Opera Troupe	Free admission by tickets	
Sha Tin Town Hall (Auditorium)	23 Dec 2024 (Mon) 7:00pm	Cantonese Operatic Songs Concert	N/A	Presented by Jade Flower Cantonese Operatic Society	\$280, 120, 60	

2. A random event picker, similar to Google's "I'm Feeling Lucky" button.

[Get Random Event](#)

DANCE DRAMA "LI BAI"

Date: 03/01/2025 19:30; 04/01/2025 19:30; 05/01/2025 14:30
Duration: 90mins
Age Limit: N/A
Price: \$880;\$780;\$580;\$380;\$180
Description: N/A

[Venue: Hong Kong Cultural Centre \(Grand Theatre\)](#)

It's not necessary to follow my suggestions above. Feel free to design any appropriate feature for your website.