
Auto Planner

Requirement

Travelling is fun, but planning is always painful.

I traveled to Japan this summer. When planning, I always need to search for routes between various locations and determine the shortest path.

As for the algorithm, finding the shortest path that go through all vertex is an NP problem, which means there is no efficient algorithm for it and will take long time.

For human's mind, it's also very hard to find the best route. In addition, we need to choose restaurant, hotel, etc.

Here I came up with an idea, I can build a website that help people plan their trip, after people enter the spots they want to go, system will generate a best route for them, and recommend restaurants and hotels as well.

This is the theme of my project.

Conceptual model

Nav bar

Provide links for important pages, sign in and sign up function.

Home Page:

Choose the city you want to go.

Arrange Page:

Select or input some attractions, the system will automatically arrange a route with a shortest path and show how much time it will take to travel between the attractions by different modes of transportation.

System generate a time table for users to review.

The route will be shown on a map.

Recommend Page

Recommend some popular travel routes to users.
Users can view and leave comments.

Saved Trips Page

Users can save some travel routes to review.

Functions

Explore More

Click the down arrow in the home page, some pictures will appear and the scroll bar will automatically scroll down to the image part.

Sign in & Sign up

Click the icon on the right of the nav bar, the buttons will show.
The stored username is "*User*" and password is "*123456*".
You can also create a user to sign in, it will be stored until you close the browser.

Sign out

If you have signed in, the button will change to "Sign out".
It will ask for confirmation when you want to sign out.

Arrange

You can select some attractions, after being selected, the text will show in the input form too.
Click "Add more" can add more input bars.
Click "Get my route" will go to the result page, there is a share link but it's not working.
The result will change along with your choose in the previous pags.

Recommend

Recommend page has some routes to view.
Click the categories on the top can categorize those tours.

Click "Leave Comments" will go to the comment page, if you didn't sign in it will show some information to tell you that you need to sign in first. The leave comment form is just a layout. Click "View Tour" will go to the result page, only Singapore has a real tour page.

Saved Trips

Click the "saved trips" link on the nav bar, if you didn't sign in, there will be an alert. It's now just a list of tours that been saves.

Conclusion

JavaScript and html are time-consuming, it's difficult to build a website by thousands of lines' code. Data gathering is troublesome.

The algorithm part is more difficult, so I give up about the recommending restaurants and hotel part. The website is still a prototype and maybe I can keep working on it to make it complete.

The good part is I've learned much about JavaScript, such as how to pass values through two static html pages without server.