Assignment 8 Final Project Writeup
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Website link:
https://jenny-xin.github.io/PUI2020/assignment_8/

Part 1
The website's target user group is people who like to go on budget-friendly trips. Planning a trip can be daunting without a central place to organize and keep all related trip information such as flight ticket, hotel address, and expenses of food. In order to address that pain point, the purpose of the website is to provide a tool to help travelers stay organized and keep track of their budget and important trip information in an easy way. The website contains sections for budget, location, trip duration and also more detailed information such as types of transportation, housing, and food/activities. Since the website provides a centralized area to store trip information, it can serve a secondary group of users who may not be concerned with budgeting, but are concerned with organizing details and information related to their trip. The interactivity and flexibility of the website makes it interesting because users can add many types of information at varying levels of detail. The goal is to provide users a tool that organizes information in whatever way is most helpful to them. Therefore, none of the fields are required to fill out and the field inputs are vague enough that the user can enter information in whatever way makes the most sense to them.

Part 2
- Pop-up for entering trip overview details
  - On the left-hand sidebar, click on the Edit Trip Details button, the dark purple box labeled "Budget", or the light purple box labeled "Duration" and "Location" to open the pop-up.
  - After seeing the popup, fill in text input fields. A dropdown will appear for the location field, from which you can select a location to display on Google Maps.
- Close the pop-up by pressing "Save" and the information will be displayed on the sidebar
- Add information under Transportation, Housing, or Food/Activities
  - Click the "add" button
  - Fill in text input fields
- Delete Transportation, Housing, or Food/Activities
  - Click on the "X" button on the right side of the white container
- Add expenses to budget
  - Fill in input field labeled "Expense" with a numerical value
  - Click "Update Budget" to see it get subtracted from the budget amount
- Save trip
  - Click "save trip" on the bottom of the sidebar to store in LocalStorage.
  - A pop-up appears after saving the trip in order to confirm to the user that their information is indeed stored.
- Reset trip

- ○ Click "reset trip" to clear the trip (and localStorage) and start over to make a new one
- ● Responsive
  - ○ Shrink the size of the browser to see the responsive layout of the website
  - ○ Sidebar will be hidden within a hamburger menu, which you can toggle to open and close (via "X" button on sidebar).

Part 3
1. BootStrap: I used BootStrap to make the website responsive. I incorporated its row and column classes, as well as code for the modal used to edit trip details.
2. Google Maps API: I chose to use this API in order to allow users to see their location on a map. In addition, they can search around the area to better plan where to go on their trip. Specifically, I used the Google Maps Places Autocomplete feature (source: https://developers.google.com/maps/documentation/javascript/examples/places-autocomplete#maps_places_autocomplete-javascript).
3. Animation: I used CSS Transition to animate the sidebar when it gets toggled and collapsed when the screen size changes. It makes the layout transition more smoothly and more pleasant to see.
4. jQuery: I used jQuery to create a function that toggles the hamburger menu to collapse/display the sidebar when the screen size shrinks. By toggling the display of the sidebar, it creates a better responsive experience (compared to simply decreasing the size of the elements on the screen).

Part 4
Due to time constraints, I wasn't able to make another webpage that consisted of all the trips saved. So instead, I added a reset button on the final website where the user can clear the trip and make a new one once the old trip is completed. I also moved the Google Maps into the modal rather than showing it on the sidebar because it looked too cluttered otherwise. In addition, this allows the map to be bigger and display more map elements.

Part 5
One challenge I had was using LocalStorage to store trip information. I used plain javascript to create and store nested objects within a larger trip object, which was complicated because these objects were created dynamically. I also encountered issues with creating a fixed, collapsible sidebar that appeared when the screen size became smaller. I learned later on that both these challenges could have been mitigated if I had used React or fully explored Bootstrap.