1. **Conduct one form of usability evaluation on your prototype (e.g. usability testing, heuristic evaluation, cognitive walkthrough). Describe which method you used, what you learnt from the evaluation, and any details you changed in the design as a result of the evaluation (500 words max)**

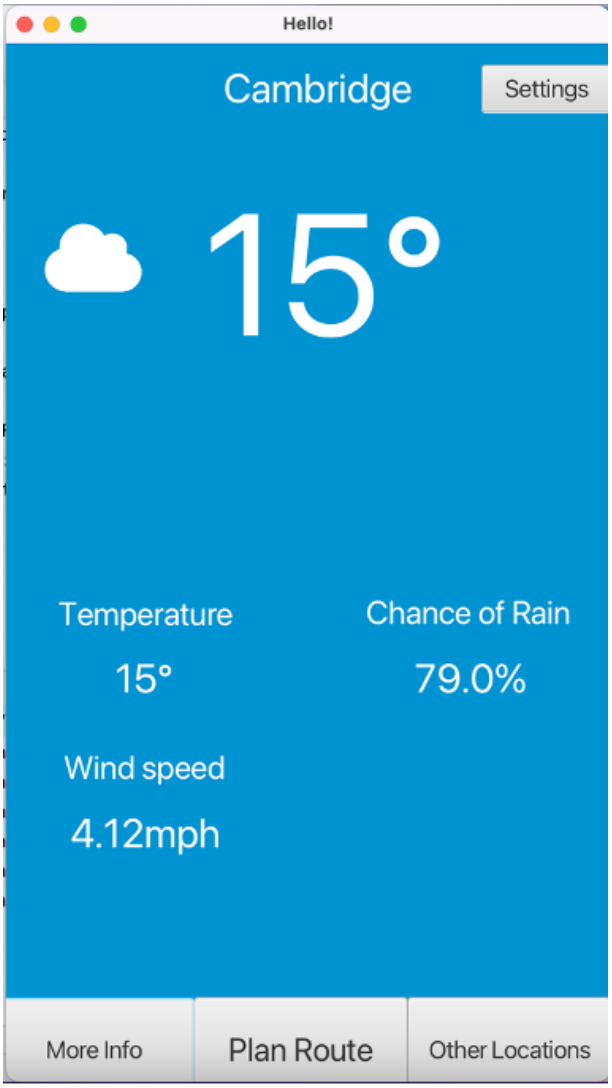
To evaluate the usability of our prototype, we chose to perform a cognitive walkthrough in order to discover any potential issues which might have prevented our target demographic from effectively navigating and utilising the final product. To avoid the costs of finding external usability experts to perform the walkthrough, we decided to select our own team members as analysts.

Who the users are: our target user group - cyclists who don't necessarily have any knowledge of any other similar apps.
Sample tasks for evaluation: planning a route, checking other info about the weather and looking at other locations.
Action sequences for completing the tasks:
Planning a route:The user clicks on the "Plan Route" button from the homepage and inputs their stops and then clicks on the "Add Stop" button to add it to the list one by one.After adding all the stops, the user clicks on the "View Route" button and then clicks on the "See Results" button to get the final route.
Checking other information:The user clicks on the "More Info" button on the homepage to view the More Info page and then clicks on the "Back" button to get back to the homepage
Looking at other locations:The user clicks on the "Other Locations" button on the homepage" and then inputs the desired location and clicks on the "+" button.

Description or implementation of interface:

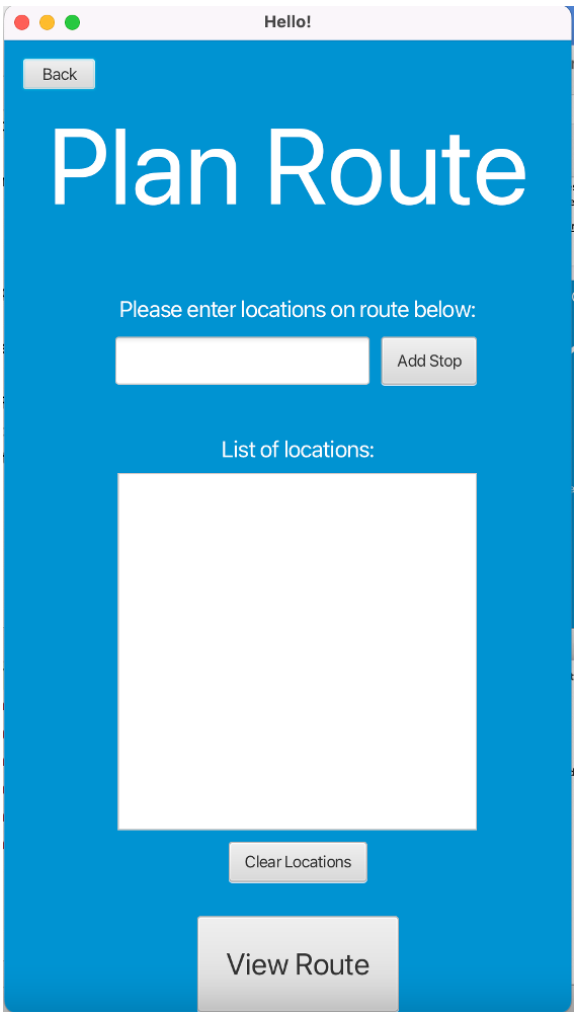
1. Walk through the action sequences for each task. Record important information.

a. Open the app

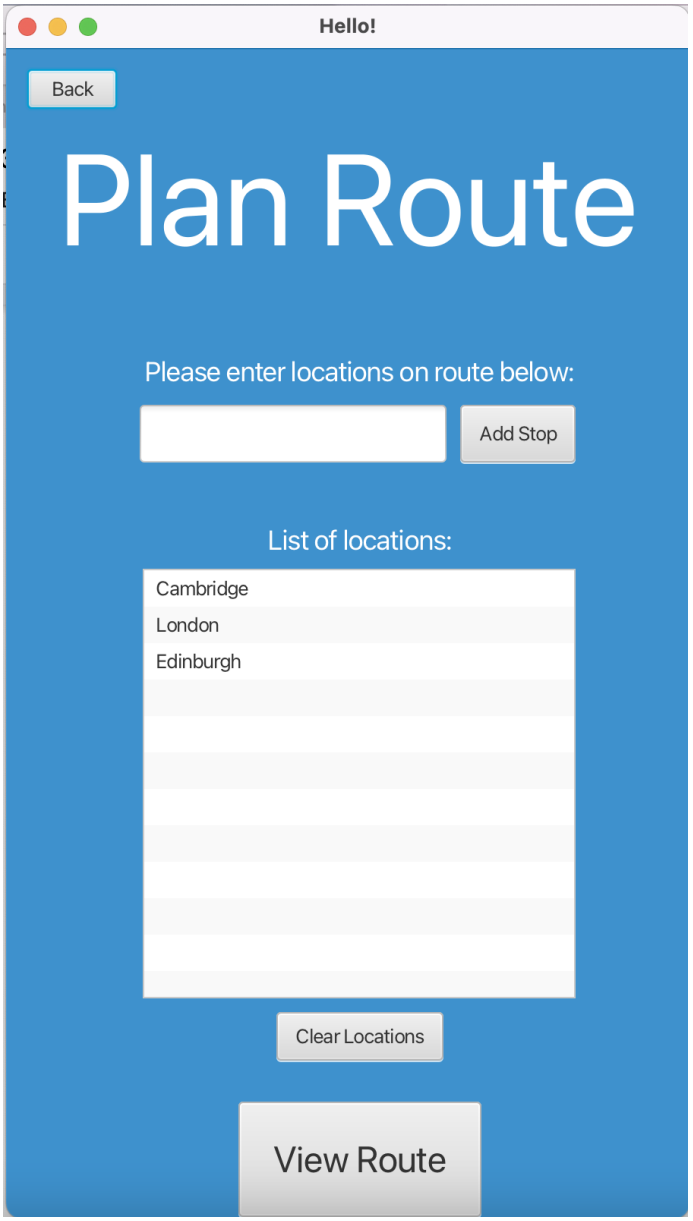


b. Click “Plan Route” button

Button is easy to find as in the centre and has a descriptive label.

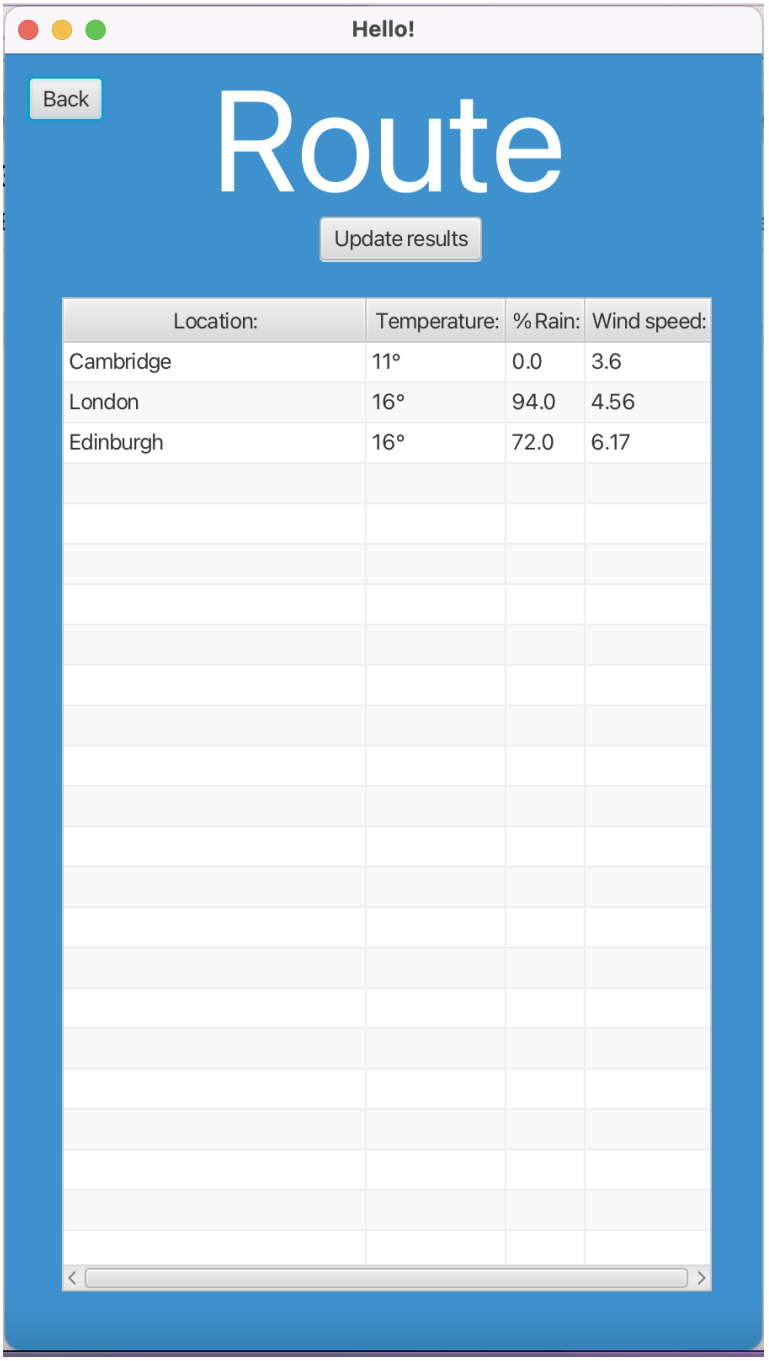


c. User inputs their stops and clicks on the “Add Stop” button to add it to the list, one by one.



There is no way to tell if you have selected the correct location, e.g. Cambridge could be in England or America.

d.User clicks on “View Route” button and “See Result” button.



Users may not think to press view results and think that it has not worked.

As a result of the cognitive walkthrough, we found several areas of improvement that would make the experience of using the prototype more fluid. For example, since no feedback was initially given when a user attempted to insert a location that didn’t exist in the ‘Other Locations’ page, we added a warning message that would show up in that case and disappear after the user eventually enters a valid location. In addition, we found that having multiple input boxes for changing units could be confusing, so we decided to only use a single box for switching between metric and imperial units.

2. **Did you need to deviate from your lo-fi design in any other way? If so, why? (150 words max)**

Yes. The main deviation from the original specification came from not implementing the embedded google maps interface. This was due to the fact that both libraries we downloaded and explored did not work on the architecture of the laptops we were using. We instead implemented a table which dictates the temperature and wind speed at the locations along the route.

We also deviated in terms of the display of weather at different locations. Instead of showing the weather (in terms of various metrics) at 15-minute intervals in the future, it solely displays the weather at the current time. This decision was due to the fact that we did not have the time and we also felt that it was a simpler display for the user instead of a complex table. Also rather than limiting our system to just the UK we extended it to work globally, albeit only in English.