CYC: Your Cycling user manual

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A live copy of this user manual is available at j.mp/CYCmanual.

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1 Getting Started

1.1 Prerequisites

To run the app, you must have Java installed. To install Java, follow the prompts at https://java.com/en/download.

To use the map, you must have internet access.

1.2 Launching the app

To run the app, you can either use the command `java -jar <file-name>` in a terminal, or double-click on the file (and if necessary, choose to run with Java Runtime Environment).

When the app launches, you will have to either log in or sign up (see Figures 1 and 2). Click the Log in and Sign up tabs to switch between them. When you log in, the map view will open.

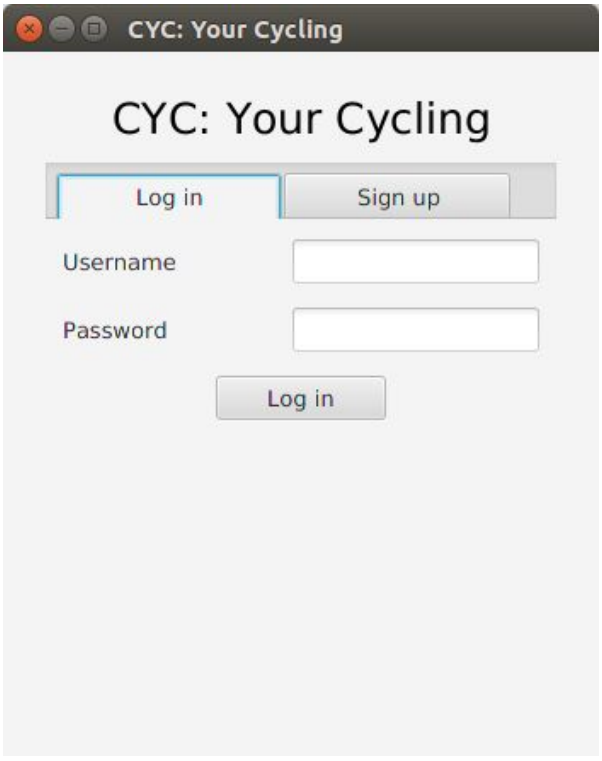

Figure 1: The log in screen

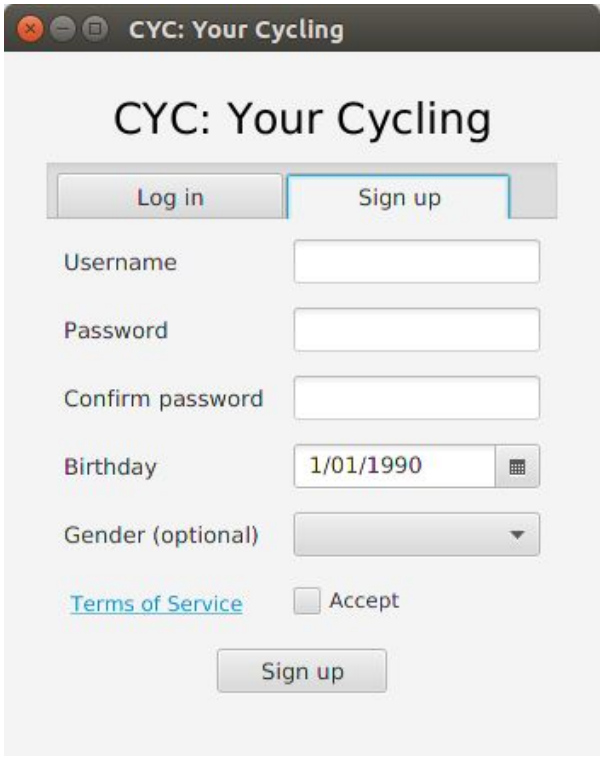

Figure 2: The sign up screen

2 Accounts

2.1 Logging in

To log in to your account, launch the app, enter your username and password, and click the Login button (see Figure 1). If you get your username and/or password wrong, you will be prompted to try again (see Figure 3).

Figure 3: Getting your username and/or password wrong

2.2 Creating an account

To create an account, click the Sign up tab and enter a username, password, birthday, and (optionally) your gender (see Figure 2). You will also have to accept the Terms of Service, which can be viewed by clicking Terms of Service. If the username is already taken by another user, you will be prompted to user another username. Your password must be at least 8 characters long. To complete signup, click the Sign Up button. You will then be taken into the app.

2.3 Logging out

To log out of your account, you can either close the app or select File → Log out (see Figure 4). If you have any extra windows open, it will prompt you to close these first. If you ignore this message and log out anyway, then some of your data may be lost.

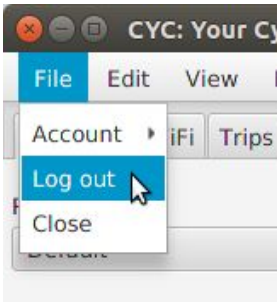

Figure 4: Selecting Log out

2.4 Changing your password

To change your password, select File → Account → Change password. You will then be prompted to enter your current password, and a new password twice.

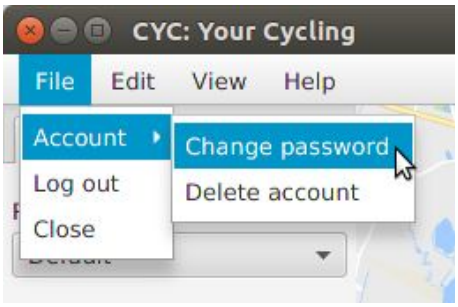

Figure 5: The map's File → Account menu

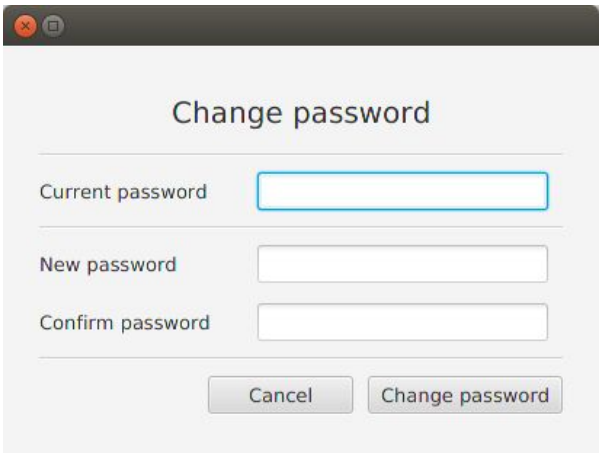

Figure 6: Changing your password

2.5 Deleting your Account

To delete your account, select File → Account → Delete account. You will then be prompted to enter your password. When you click confirm (and you have entered your password correctly), your account data will be permanently deleted; there is no way to retrieve it. It is recommended that you back up your data before deleting your account by exporting it (see 5.2 Exporting a CSV).

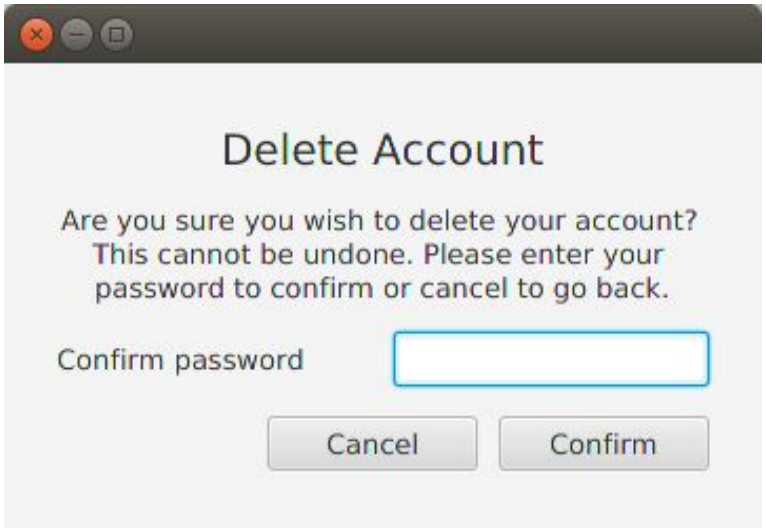

Figure 8: Deleting your account

3 Map view

The map view (see Figure 9) is the main interface of CYC. It is used to view and plan routes, and displaying retailers and WiFi hotspots, including highlighting those near a route. By default, it displays WiFi hotspots and retailers from the default lists. These are clustered into groups above a set density, above a set zoom level (i.e. they are clustered if there are enough close together, but not below a set zoom level).

There is a context menu at the top, a filter and search bar on the left, and an expandable table of WiFi hotspots and retailers near the selected route at the bottom. When a route is selected, directions will be displayed on the right.

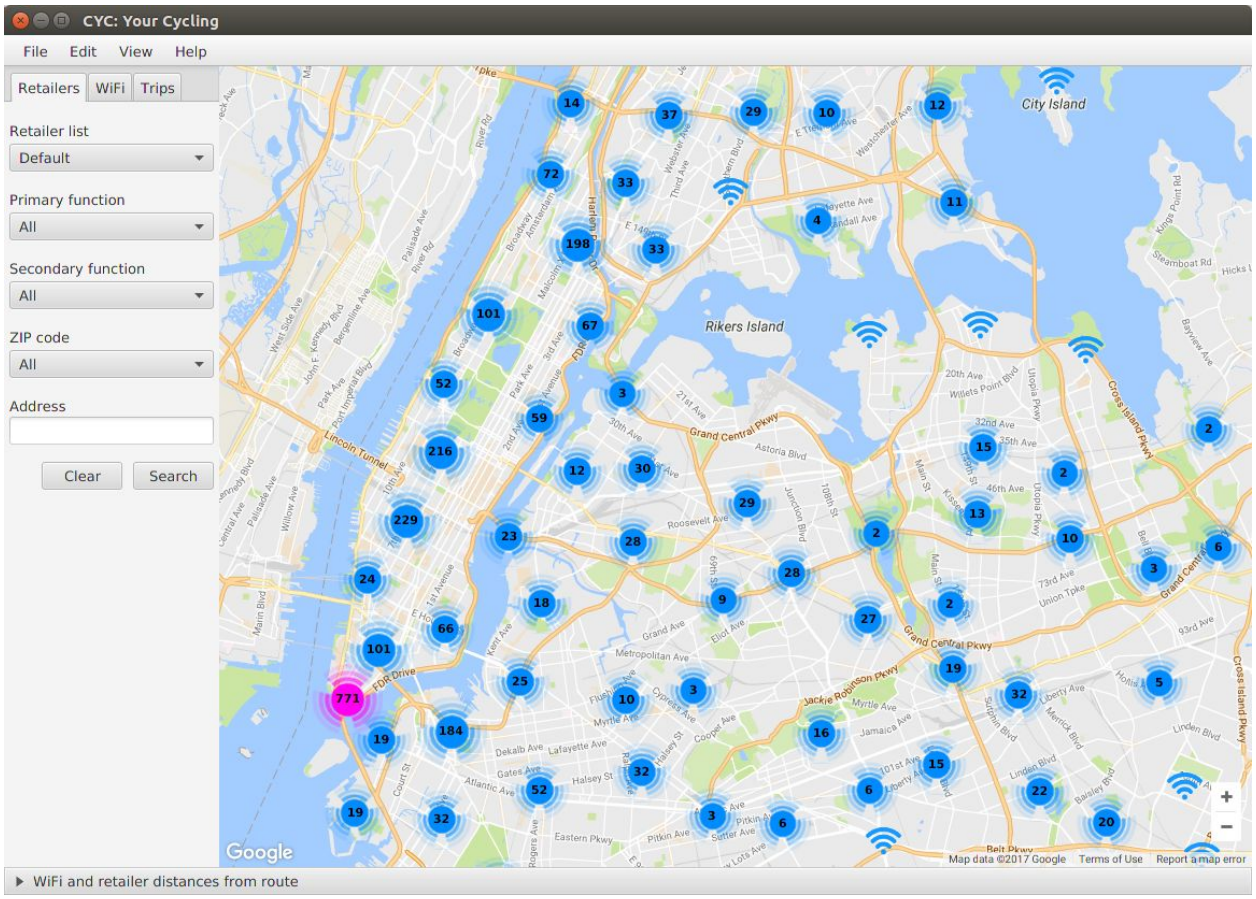

Figure 9: The map view

3.1 Retailers

Support is provided by CYC for searching and discovering retailers near bike routes. Filtering and searching options are in the Retailers tab on the left of the map.

3.1.1 Filtering and searching for retailers

Retailers can be filtered by primary function, secondary function and ZIP code. They can also be searched by address (this does allow incomplete addresses — “Broad” will match any retailer on Broadway or Broad Street — but it only searches the street number and name). Filtering and searching also allows retailers found along a route to be filtered.

For example, to display pizza places on Broadway or Broad Street, you would fill out the filters and search as shown in Figure 10.

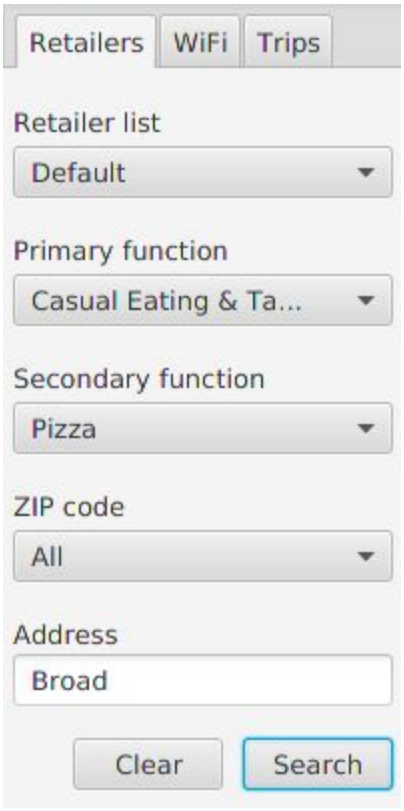

Figure 10: Filtering and searching retailers

3.1.2 Changing retailer lists

At the top of the Retailers tab, the dropdown menu titled Retailer list can be used to select the active list of retailers. See Section {add section link} for more on creating Lists.

3.1.3 Adding a Retailer

To add a retailer, you can either:

1. Right-click on the retailer’s location on the map, and click Add retailer (see Figure 11), or
2. Select Edit → Add retailer (see Figure 12).

You will then be presented with the Add a retailer screen (see Figure 13), where you can fill in information about the retailer. Every field except the address pre-line and the secondary function is required, and the ZIP code, latitude and longitude fields must be integers. Fields with invalid input are highlighted in red (see Figure 14).

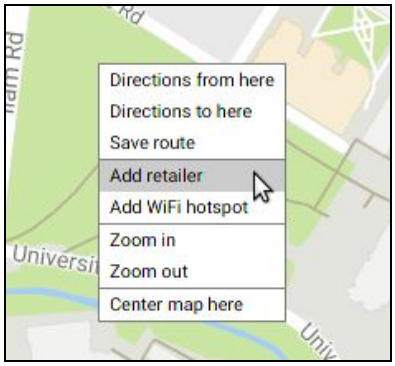

Figure 11: The map's right click menu

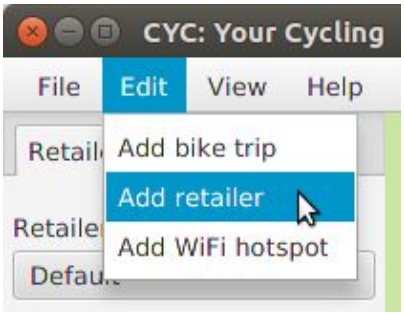

Figure 12: The map's Edit menu

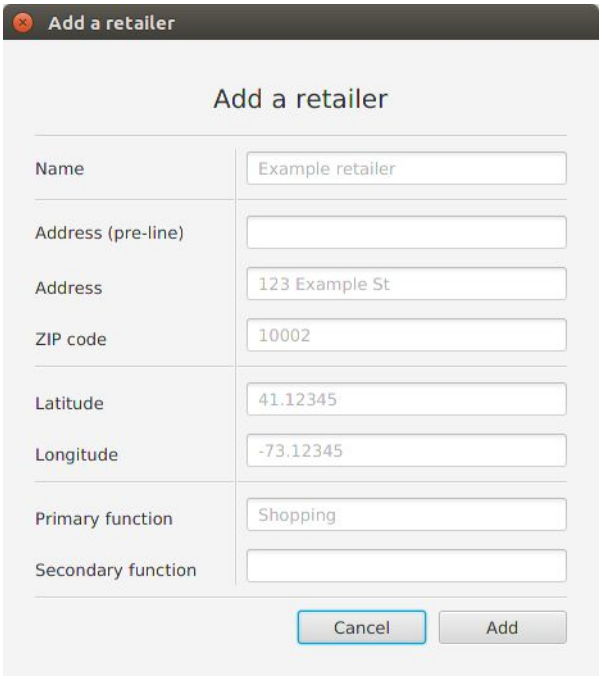

Figure 13: Adding a retailer

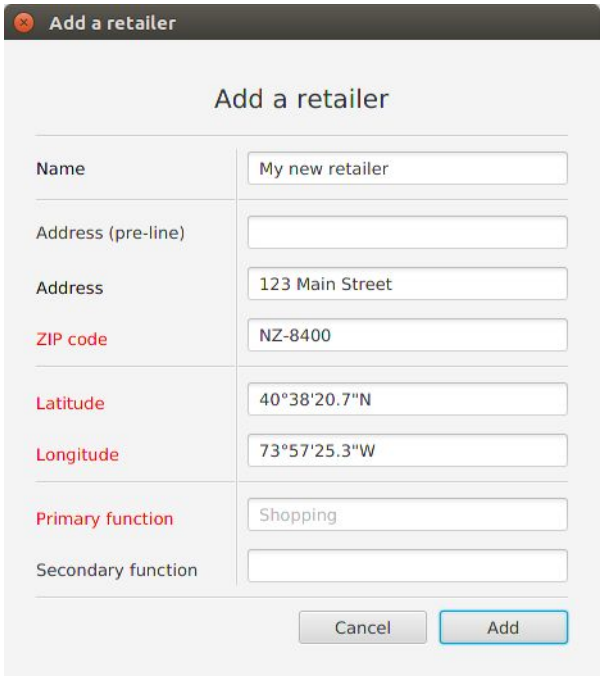

Figure 14: Adding a retailer with some invalid input

3.2 WiFi hotspots

Support is provided by CYC for filtering and discovering WiFi hotspots near bike routes. Filtering options can be found for this in the WiFi tab on the left of the map.

3.2.1 Filtering WiFi hotspots

WiFi hotspots can be filtered by borough, cost and provider. Filtering also allows WiFi hotspots found along a route to be filtered. They can also be filtered in the general view.

For example, to display free WiFi hotspots from the New York Public Library in The Bronx, you would fill out the filters as shown in Figure 15.

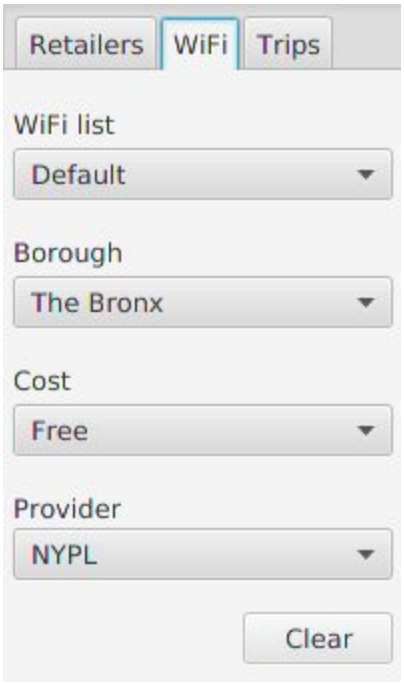

Figure 15: Filtering WiFi hotspots

3.2.2 Changing WiFi lists

At the top of the WiFi tab, the dropdown menu titled WiFi list can be used to select the active list of WiFi hotspots. See Section {add section link} for more on creating Lists.

3.2.3 Adding a WiFi hotspot

To add a WiFi, you can either:

1. Right-click on the WiFi hotspot's location on the map, and click Add WiFi hotspot (see Figure 16), or
2. Select Edit → Add WiFi hotspot (see Figure 17).

You will then be presented with the Add a WiFi hotspot screen (see Figure 18), where you can fill in information about the retailer. Every field except the details section is required, and the ZIP code, latitude and longitude fields must be integers. Fields with invalid input are highlighted in red (see Figure 19).

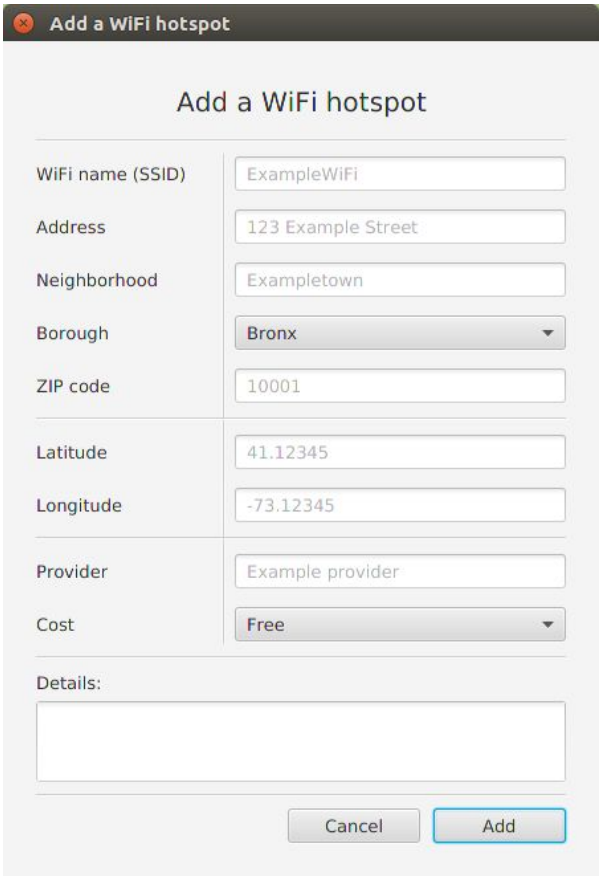

Figure 18: Adding a WiFi hotspot

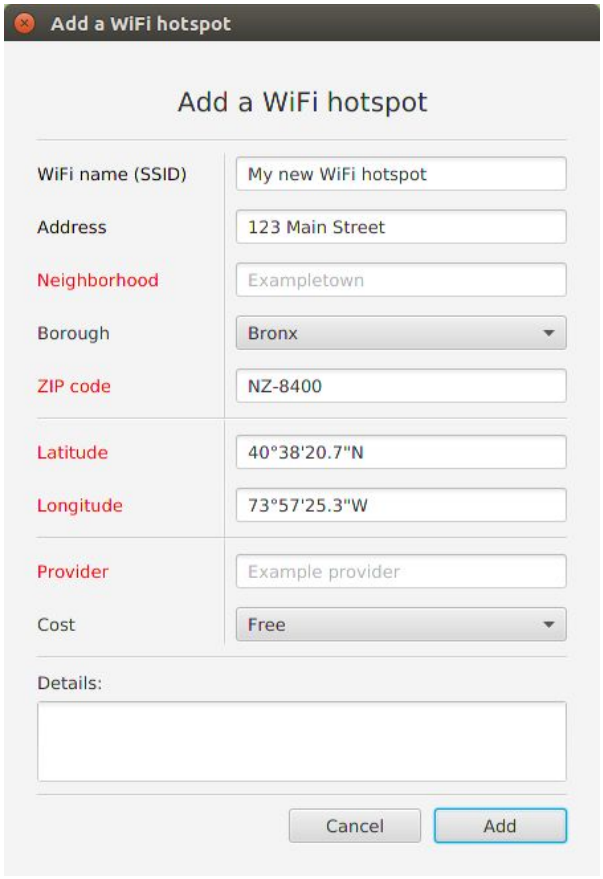

Figure 19: Adding a WiFi hotspot with some invalid input

3.3 Trips

Trips can be planned using CYC. The nearest retailers and WiFi hotspots to them are shown on the map in green (see Figures 20 and 21). The bottom menu can be expanded, and more details about the distances and particular retailers and hotspots are shown.

Figure 20: A green WiFi hotspot marker	Figure 21: A green retailer marker

3.3.1 Plotting a route

To plot a route, right-click the point on the map that you would like the route to start and select directions from here, then right-click where you would like to stop at and select directions to here (see Figure 11). A route will automatically be generated and displayed on the map, and directions will be displayed in a pane on the right (see Figure 22). The closest WiFi hotspots and retailers will be shown along the route, in green. To save the route, right-click anywhere on the map and select Save route. To clear the route, right-click on the map and select Clear directions.

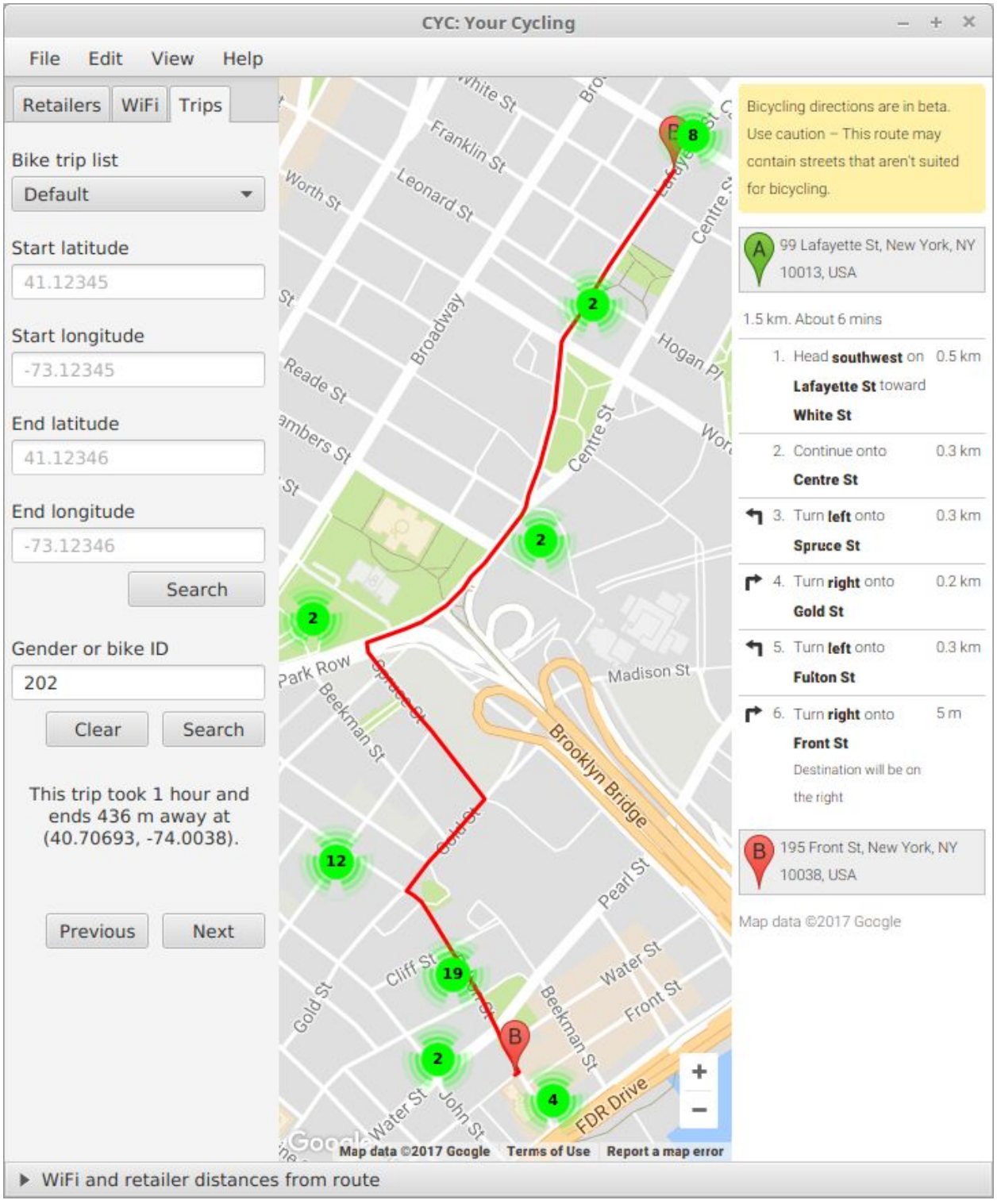

Figure 22: Displaying a route on the map

3.3.2 Searching for bike trips

Bike trips can be searched for by their start and/or end point, or their gender or bike ID. A search will generate a list of bike trips; this can be traversed using the Next and Previous buttons.

A route to and from a known latitude and longitude can be searched using the Route tab. Entering only a start point will find all trips that start near to the given point. Entering a start and end point will find all routes that start at that point and finish at the end point, as well as any that start between them.

All routes for a gender or a bike ID can be searched using the Gender or bike ID textbox. The gender will match anything that starts with “m”, “f”, or “u”; the bike IDs must be complete (i.e. partial bike IDs will not match).

3.3.5 Adding a bike trip

To add a bike trip, you can either:

1. Right-click on the map after generating a route, then select Save route (see Figure 11), or
2. Select Edit → Add bike trip (see Figure 12).

You will then be presented with the Add a bike trip screen (see Figure 23), where you can fill in information about the bike trip. Every field is required, and the start date and time must be before the end date and time. Fields with invalid input are highlighted in red (see Figure 24).

custom bike trip, select the edit option from the menu then add a bike trip will appear. Following the prompts will allow you to successfully add a new bike trip.

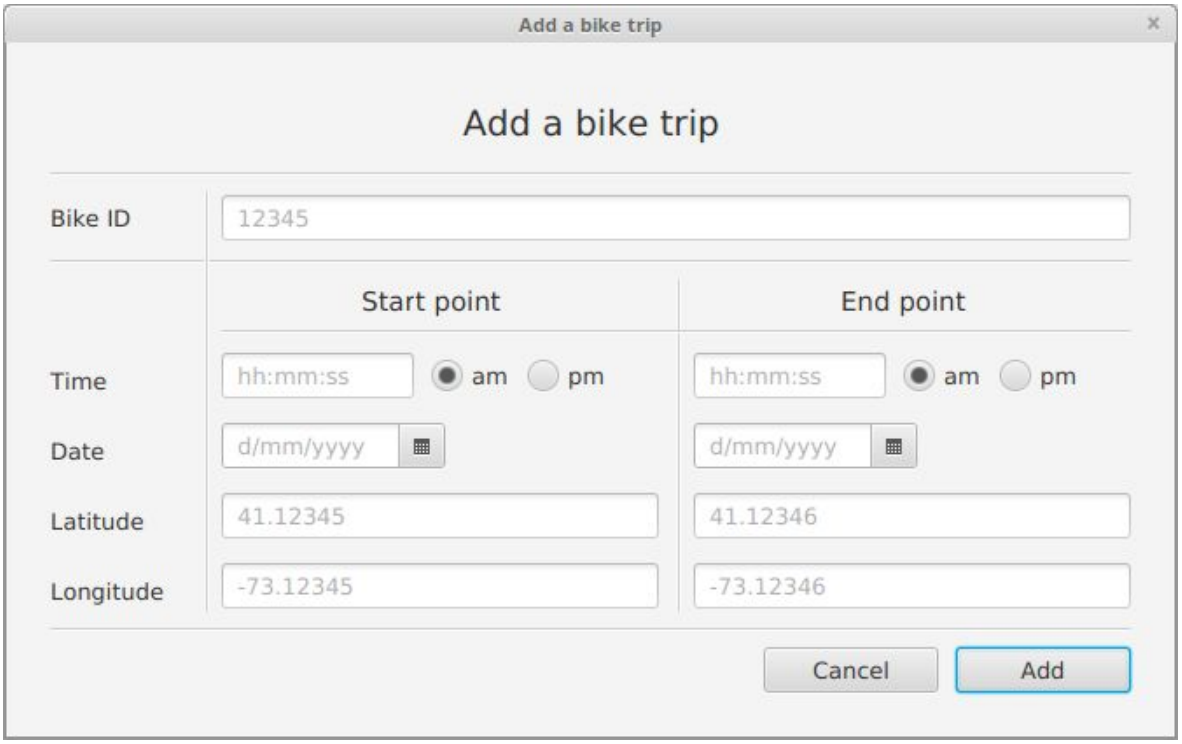

Figure 23: Adding a bike trip

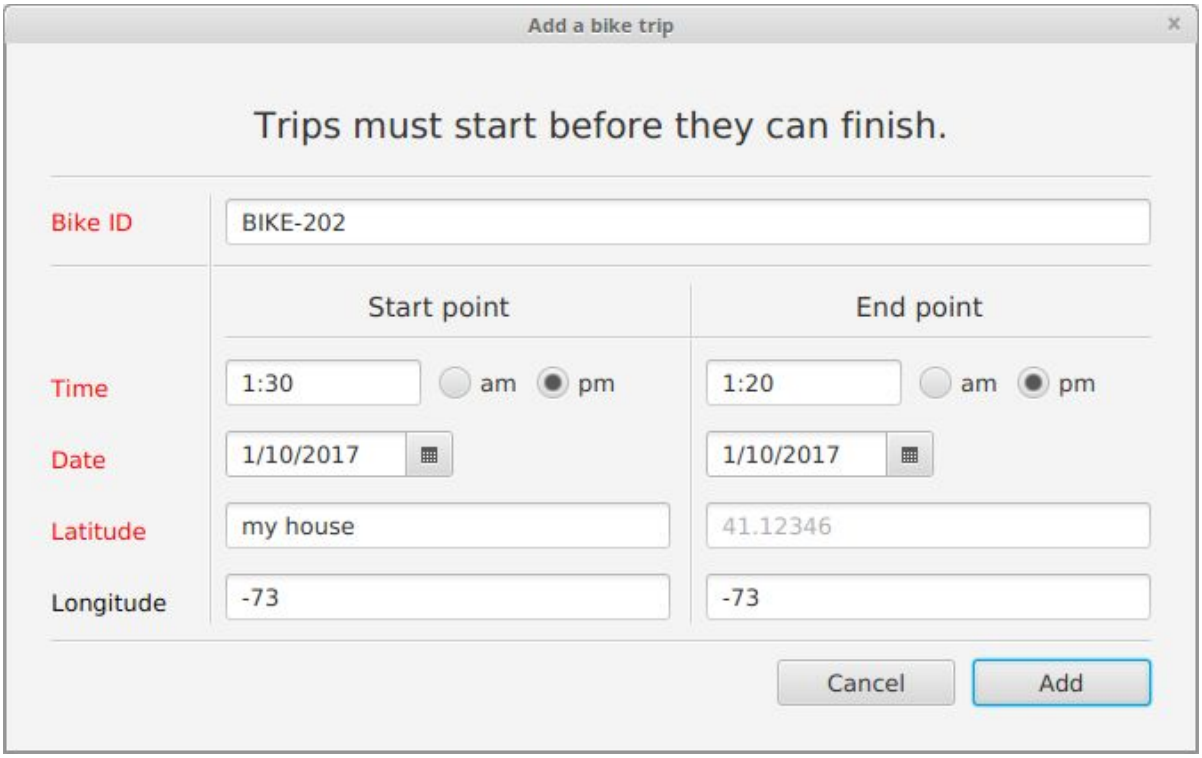

Figure 24: Adding a bike trip with some invalid input

4 Table view and lists

The table view provides clear and detailed information about all data loaded into the application.

Lists with different sets of data points can be created, appended to and selected. Each list can only hold data of one type, however any combination of the three lists can be selected, one per type.

4.1 Working with lists

To Add a new List, select View → Open a list (see Figure 25). This will open the list selector (see Figure 26). New lists can be created by clicking one of the buttons along the bottom.

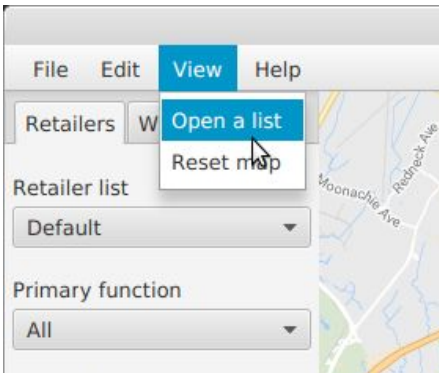

Figure 25: The map's view menu

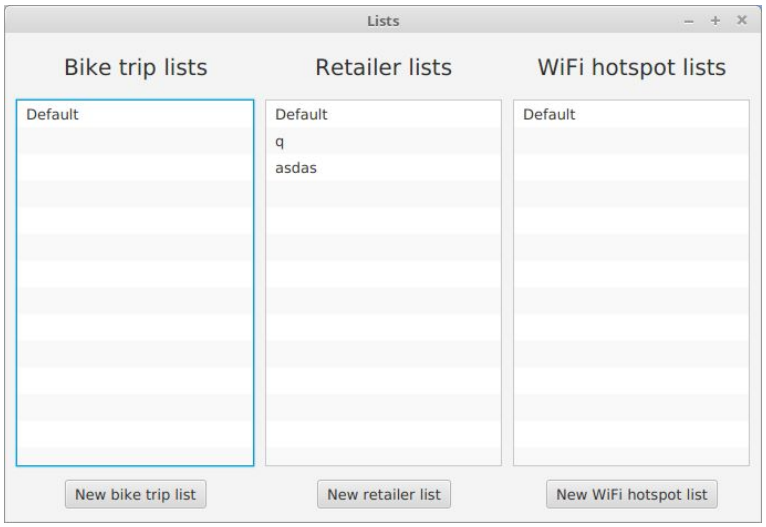

Figure 26: The list selector

Once a list has been created, it will be available in the map; by selecting a list in the map view, only data from that list will be displayed.

4.2 Opening a list

To open a list, select View → Open a list (see Figure 25), then double-click the list you would like to open.

4.3 Viewing more information about an entry

To view more information about an entry, double-click on the entry in the table. This will open a pop-up with all the information available (see Figure 27).

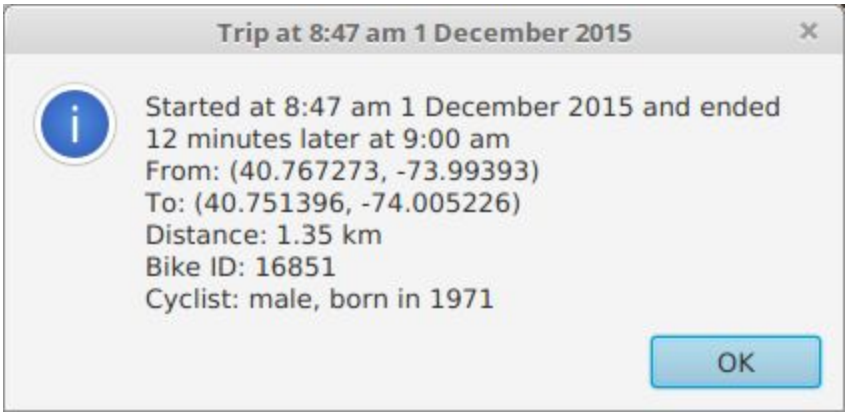

Figure 27: More information about an entry

4.4 Adding entries

To add an entry, select Edit → Add data point (where data point is bike trip, retailer, or WiFi hotspot, depending on what table you have open). This will bring up a dialog where you can add the datapoint, as shown in the map view.

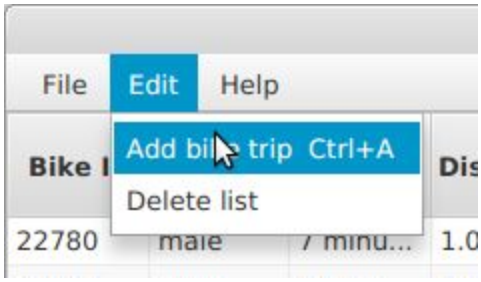

Figure 28: The table's Edit menu

4.5 Editing and deleting entries

To edit an entry, open the relevant list, then right-click on the entry you want to edit and select Edit (see Figure 29). This will bring up a dialog where you can edit the entry's data.

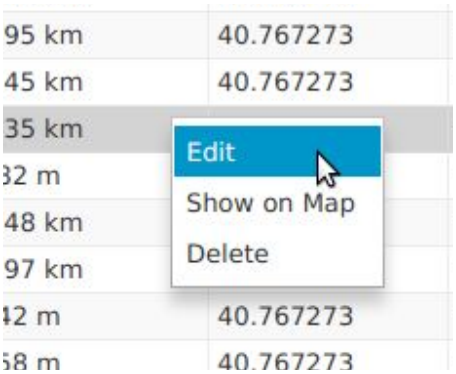

Figure 29: The right-click menu for entries in a table

To delete an entry, open the relevant list, then right-click on the entry you want to delete and select Delete (see Figure 29). To delete the whole list, select Edit → Delete list (Figure 28).

4.6 Viewing an entry on the map

To view an entry on the map, right-click on the entry you want to view and select Show on Map (Figure 29). This will bring focus back to the map and show the entry. For WiFi hotspots and retailers, it will highlight them in green.

5 Importing and exporting data

You can import data into CYC from a CSV file, and also export your data into a CSV file.

5.1 Importing a CSV

To import a CSV file, open the list that you want to import the CSV into. Select File → Import CSV (see Figure 33). Select the CSV file you want to import, and click Open. A window will then pop up showing how many entries were loaded and ask if you want to import them (see Figure 34). If you choose to import them, another window will pop up showing how many entries were added and how many were not added due to them being duplicates (see Figure 35).

To be able to load data, the CSV file must be in the right format (see 5.3 CSV format).

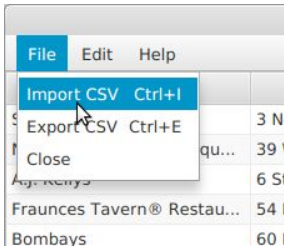

Figure 33: The table's File menu

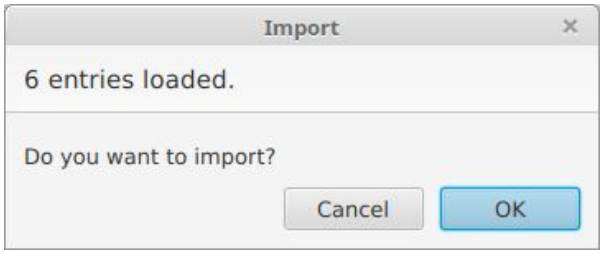

Figure 34: Importing a CSV

Figure 35: Window showing how many entries were added to the list

5.2 Exporting a CSV

To export a CSV file, open the list you would like to export (see 4.1 Working with lists for more on lists). Select File → Export CSV (see Figure 33), then select the output folder. It will be exported in the format shown in 5.3 CSV format.

5.3 CSV format

To import a CSV, it must be in the correct format. CSV files will be exported in this format.

5.3.1 Bike trips

The CSV format for bike trips is shown in the table below.

Column	Data	Valid values	Allowed to be empty?
1	**Trip duration (in seconds)**	An integer	Yes — it will be calculated based on the start and end dates and times
2	**Start time**	A date and time in the format `d/m/yyyy hh:mm:ss` or `yyyy-mm-dd hh:mm:ss`	No
3	**End time**	A date and time in the format `d/m/yyyy hh:mm:ss` or `yyyy-mm-dd hh:mm:ss`	No
4	*Empty*		
5	*Empty*		
6	**Start point (latitude)**	A number between -90 and 90	No
7	**Start point (longitude)**	A number between -180 and 180	No
8	*Empty*		
9	*Empty*		
10	**End point (latitude)**	A number between -90 and 90	No
11	**End point (longitude)**	A number between -180 and 180	No
12	**Bike ID**	An integer	Yes
13	*Empty*		
14	**Birth year**	An integer	Yes
15	**Gender**	1 for male, 2 for female, or 0 for unknown	Yes — it will be set to

			unknown

5.3.2 Retailers

The CSV format for retailers is shown in the table below. If there is not a valid latitude provided in column 10, then it will try and get a latitude from column 11 and a longitude from column 12.

Column	Data	Valid values	Allowed to be empty?
1	**Name**	Anything	No
2	**Address**	Anything	Yes
3	**Address (pre-line)**	Anything	Yes
4	**City**	Anything	No
5	**State**	Anything	No
6	**ZIP code**	An integer	Yes
7	**Block-Lot**	Anything	Yes
8	**Primary function**	Anything	Yes — it will be set to Other
9	**Secondary function**	Anything	Yes — it will be set to Other
10/11	**Latitude**	A number between -90 and 90	No
11/12	**Longitude**	A number between -180 and 180	No

5.3.3 WiFi hotspots

The CSV format for WiFi hotspots is shown in the table below.

Column	Data	Valid values	Allowed to be empty?
1	**Object ID**	An integer	Yes
2	*Empty*		
3	*Empty*		
4	**Cost**	Anything	No

5	**Provider**	Anything	No
6	**Place name**	Anything	Yes
7	**Location**	Anything	Yes
8	**Latitude**	A number between -90 and 90	No
9	**Longitude**	A number between -180 and 180	No
10	*Empty*		
11	*Empty*		
12	**Location type**	Anything	Yes
13	**Remarks**	Anything	Yes
14	**City**	Anything	No
15	**SSID**	Anything	No
16	**Source ID**	Anything	Yes
17	**Activated**	A date and time in the format `m/d/yyyy hh:mm:ss a Z` (e.g. `10/30/2017 11:45:54 AM +0000`)	Yes
18	*Empty*		
19	**Borough**	Anything	No
20	*Empty*		
21	**Neighbour-hood**	Anything	No
22	*Empty*		
23	**ZIP code**	An integer	No

6 Keyboard Shortcuts

Table view

Ctrl + A	Add point
Ctrl + I	Import CSV
Ctrl + E	Export CSV

7 Troubleshooting

Issue	Suggested solutions
CYC will not open	• Restart CYC • Restart your computer • Check that Java is the correct version (build 1.8.0-111-b14 — in a terminal, input `java -version` to check) • Redownload CYC • Delete `~/.cyc` — note that this will remove all user data, so only do this as a last resort or if you have no data saved yet
No data points appear on the map	• Ensure that your computer has access to the internet • Check that the current list has data points in it • Reset the map by selecting View → Reset map (see Figure 25) • Make a new user account • Import a CSV file (see 5.1 Importing a CSV)
Map has artifacts	• Adjust your zoom level • Reset the map by selecting View → Reset map (see Figure 25)