

CYC: Your Cycling user manual

Written by Cameron Auld, Josh Bernasconi, Josh Burt, Ollie Chick,
and Ridge Nairn

Last updated 10 October 2017

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

Table of contents

[Table of contents](#)

[1 Getting Started](#)

[1.1 Prerequisites](#)

[1.2 Launching the app](#)

[2 Accounts](#)

[2.1 Logging in](#)

[2.2 Creating an account](#)

[2.3 Logging out](#)

[2.4 Changing your password](#)

[2.5 Deleting your Account](#)

[3 Map view](#)

[3.1 Retailers](#)

[3.1.1 Filtering and searching for retailers](#)

[3.1.2 Changing retailer lists](#)

[3.1.3 Adding a Retailer](#)

[3.2 WiFi hotspots](#)

[3.2.1 Filtering WiFi hotspots](#)

[3.2.2 Changing WiFi lists](#)

[3.2.3 Adding a WiFi hotspot](#)

[3.3 Trips](#)

[3.3.1 Plotting a route](#)

[3.3.2 Searching for bike trips](#)

[3.3.5 Adding a bike trip](#)

[4 Table view](#)

[4.1 Opening a Table](#)

[4.2 Viewing more about an Entry](#)

[4.3 Modifying and Deleting a Point](#)

[4.4 Viewing a point on the map](#)

[4.5 Adding Custom Points](#)

[4.6 Working with lists](#)

[5 Importing and exporting data](#)

[5.1 Importing a CSV](#)

[5.2 Exporting a CSV](#)

[5.3 CSV format](#)

[5.3.1 Bike trips](#)

[5.3.2 Retailers](#)

[5.3.3 WiFi hotspots](#)

[6 Keyboard Shortcuts](#)

[7 Troubleshooting](#)

1 Getting Started

1.1 Prerequisites

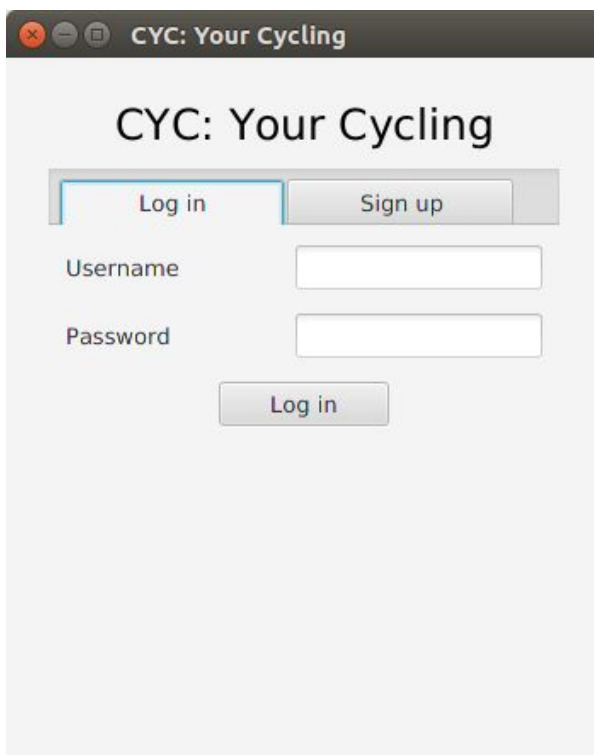
To run the app, you must have Java installed. To install Java, follow the prompts at <https://java.com/en/download>.

To use the map, you must have internet access.

1.2 Launching the app

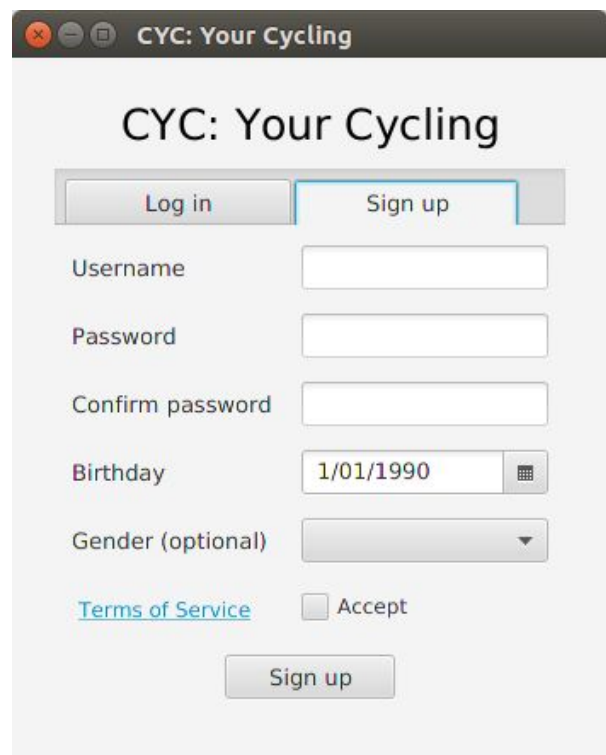
To run the app, you can either use the command `java -jar <file-name>` in a terminal, or double-click on the file (and if necessary, choose to run with Java Runtime Environment).

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.



The screenshot shows a window titled "CYC: Your Cycling". Inside, there are two tabs: "Log in" (which is selected and highlighted with a blue border) and "Sign up". Below the tabs, there are two text input fields labeled "Username" and "Password". Below these fields is a "Log in" button.

Figure 1: The log in screen



The screenshot shows a window titled "CYC: Your Cycling". Inside, there are two tabs: "Log in" and "Sign up" (which is selected and highlighted with a blue border). Below the tabs, there are four text input fields: "Username", "Password", "Confirm password", and "Birthday". The "Birthday" field has a date picker icon on the right. Below these fields is a "Gender (optional)" dropdown menu. At the bottom, there is a link for "Terms of Service" followed by an "Accept" checkbox and a "Sign up" button.

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).

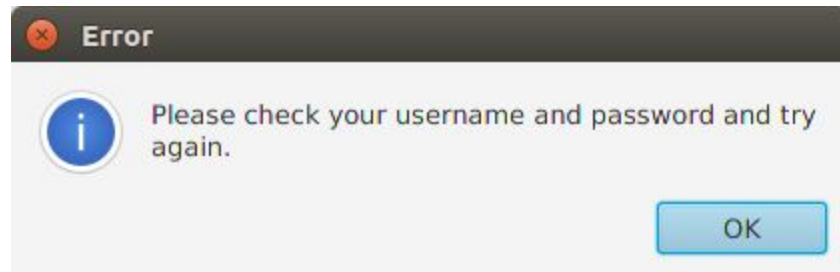


Figure 3: Getting your username and/or password wrong

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 use 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.

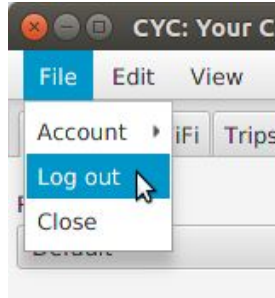


Figure 4: Selecting Log out

2.4 Changing your password

To change your password, select File → Account → Change password (see Figure 5). You will then be prompted to enter your current password, and a new password twice (see Figure 6).

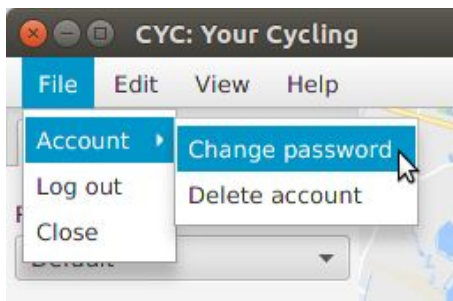


Figure 5: The map's File → Account menu

A screenshot of the 'Change password' dialog box. It has three input fields: 'Current password', 'New password', and 'Confirm password'. Below the fields are two buttons: 'Cancel' and 'Change password'.

Figure 6: Changing your password

2.5 Deleting your Account

To delete your account, select File → Account → Delete account (see Figure 5). You will then be prompted to enter your password (see Figure 7). 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](#)).

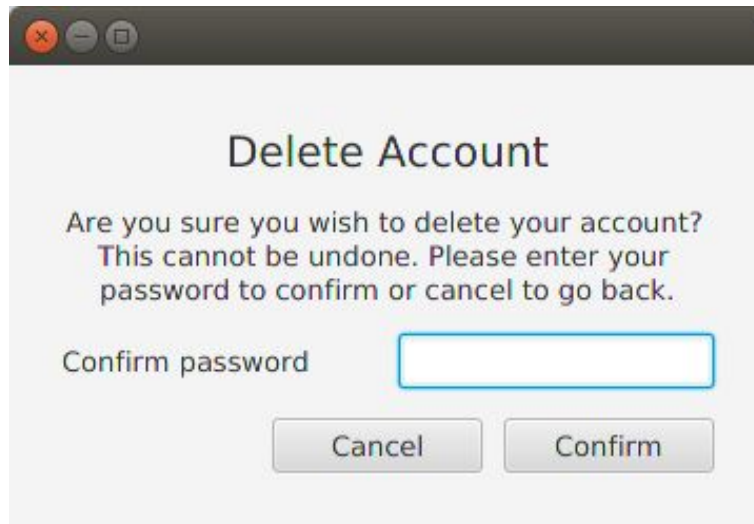


Figure 7: Deleting your account

3 Map view

The map view (see Figure 8) 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.

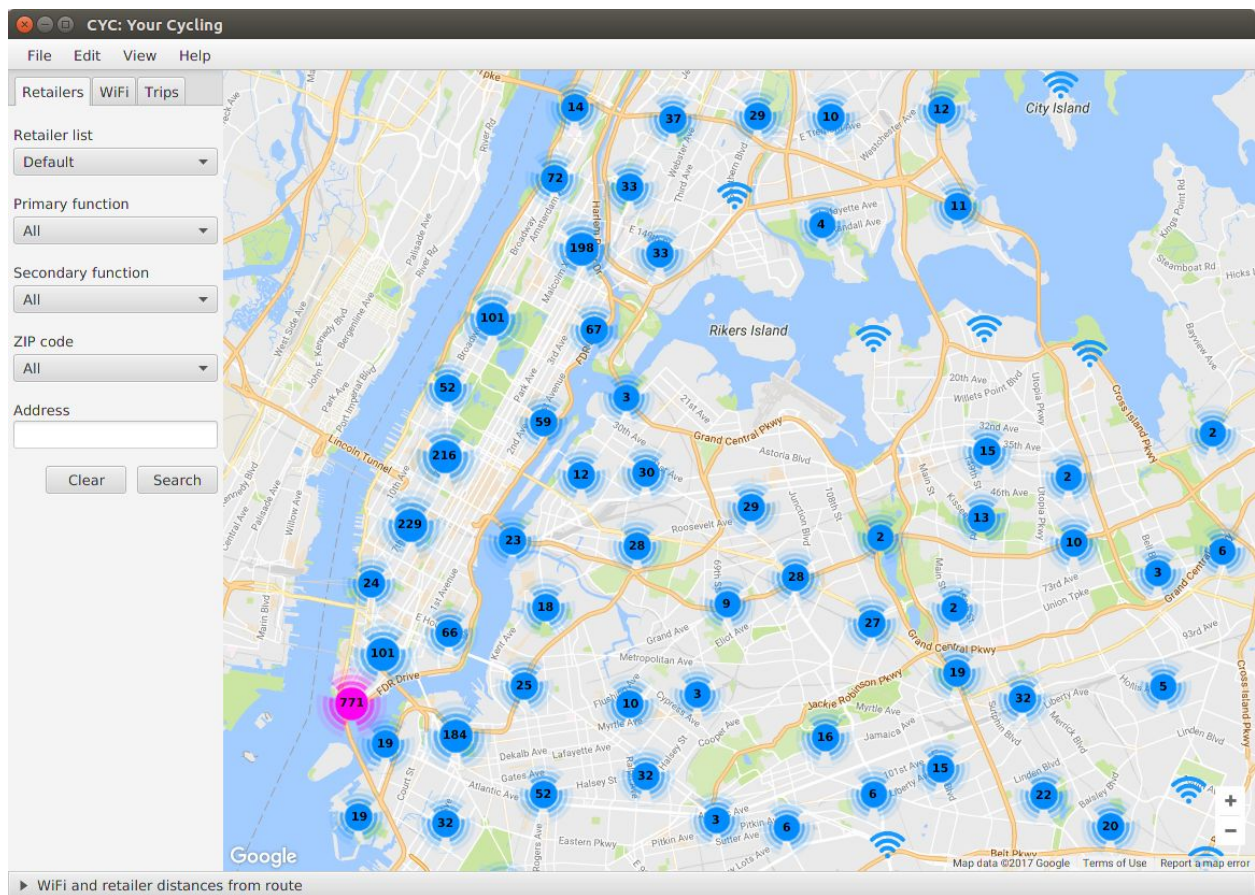


Figure 8: The map view

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 9.

The image shows a mobile application interface for filtering and searching retailers. At the top, there are three tabs: 'Retailers' (selected), 'WiFi', and 'Trips'. Below the tabs, there is a 'Retailer list' dropdown menu set to 'Default'. Underneath, there are two more dropdown menus: 'Primary function' set to 'Casual Eating & Ta...' and 'Secondary function' set to 'Pizza'. Below these is a 'ZIP code' dropdown menu set to 'All'. At the bottom of the filter section is an 'Address' text input field containing the word 'Broad'. At the very bottom of the interface are two buttons: 'Clear' and 'Search'.

Figure 9: 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 [4 Table view and lists](#) 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 10), or
2. Select Edit → Add retailer (see Figure 11).

You will then be presented with the Add a retailer screen (see Figure 12), 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 13).

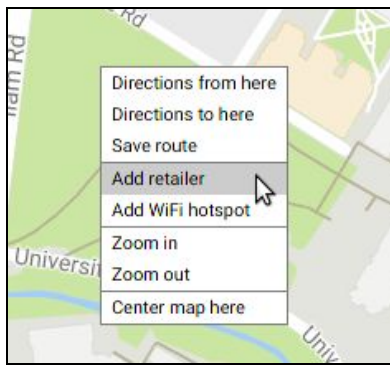


Figure 10: The map's right click menu

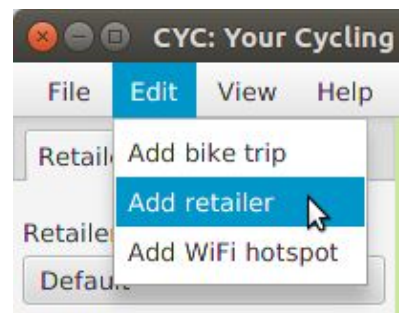


Figure 11: The map's Edit menu

The screenshot shows a web form titled "Add a retailer" with a close button in the top left. The form contains the following fields and values:

| | |
|--------------------|------------------|
| Name | Example retailer |
| Address (pre-line) | |
| Address | 123 Example St |
| ZIP code | 10002 |
| Latitude | 41.12345 |
| Longitude | -73.12345 |
| Primary function | Shopping |
| Secondary function | |

At the bottom right, there are two buttons: "Cancel" and "Add".

Figure 12: Adding a retailer

The screenshot shows the same "Add a retailer" form, but with some input highlighted in red to indicate it is invalid:

| | |
|--------------------|-----------------|
| Name | My new retailer |
| Address (pre-line) | |
| Address | 123 Main Street |
| ZIP code | NZ-8400 |
| Latitude | 40°38'20.7"N |
| Longitude | 73°57'25.3"W |
| Primary function | Shopping |
| Secondary function | |

The labels "ZIP code", "Latitude", and "Longitude" are also highlighted in red. At the bottom right, there are two buttons: "Cancel" and "Add".

Figure 13: 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 14.

Retailers WiFi Trips

WiFi list
Default

Borough
The Bronx

Cost
Free

Provider
NYPL

Clear

Figure 14: Filtering WiFi hotspots

3.2.2 Changing WiFi lists

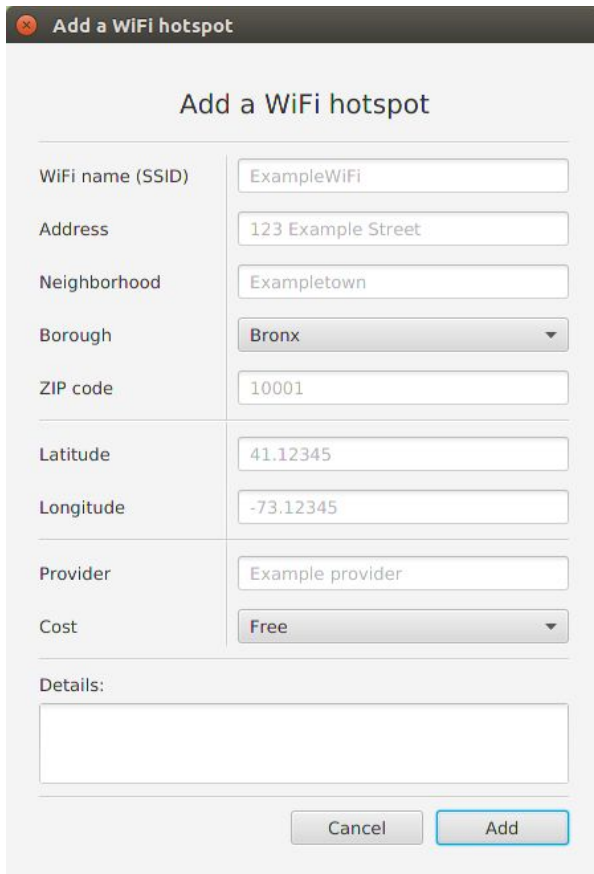
At the top of the WiFi tab, the dropdown menu titled WiFi list can be used to select the active list of WiFi hotspots. See [4 Table view and lists](#) for more on creating lists.

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 10), or
2. Select Edit → Add WiFi hotspot (see Figure 11).

You will then be presented with the Add a WiFi hotspot screen (see Figure 15), 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 16).



Add a WiFi hotspot

WiFi name (SSID): ExampleWiFi

Address: 123 Example Street

Neighborhood: Exometown

Borough: Bronx

ZIP code: 10001

Latitude: 41.12345

Longitude: -73.12345

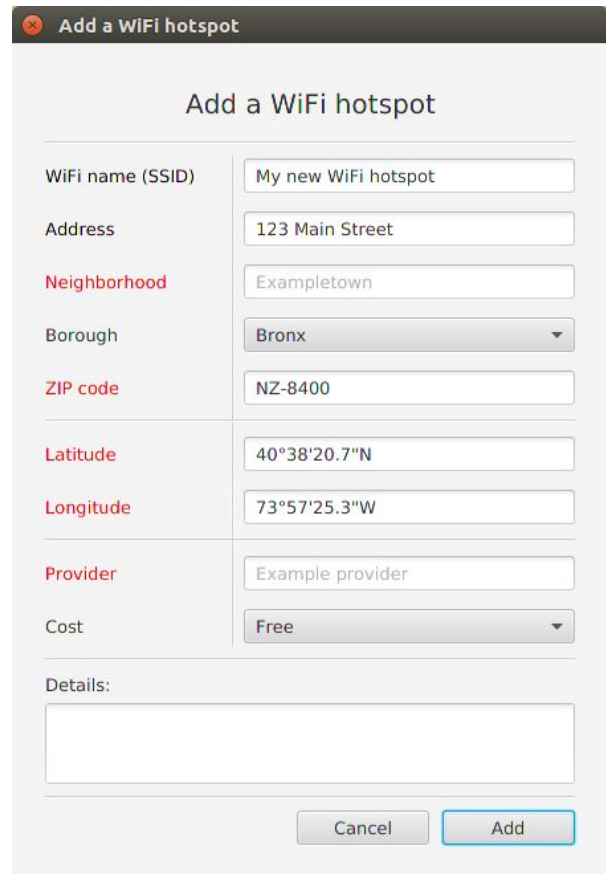
Provider: Example provider

Cost: Free

Details:

Cancel Add

Figure 15: Adding a WiFi hotspot



Add a WiFi hotspot

WiFi name (SSID): My new WiFi hotspot

Address: 123 Main Street

Neighborhood: Exometown

Borough: Bronx

ZIP code: NZ-8400

Latitude: 40°38'20.7"N

Longitude: 73°57'25.3"W

Provider: Example provider

Cost: Free

Details:

Cancel Add

Figure 16: 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 17 and 18). The bottom menu can be expanded, and more details about the distances and particular retailers and hotspots are shown.



Figure 17: A green WiFi hotspot marker



Figure 18: 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 19). 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.

The screenshot shows the 'CYC: Your Cycling' application window. The interface includes a menu bar (File, Edit, View, Help), tabs for 'Retailers', 'WiFi', and 'Trips', and a 'Bike trip list' dropdown set to 'Default'. Input fields for 'Start latitude' (41.12345), 'Start longitude' (-73.12345), 'End latitude' (41.12346), and 'End longitude' (-73.12346) are present, along with a 'Search' button. A 'Gender or bike ID' field contains '202' with 'Clear' and 'Search' buttons. A status message states: 'This trip took 1 hour and ends 436 m away at (40.70693, -74.0038)'. Navigation buttons 'Previous' and 'Next' are at the bottom left. The main map area displays a red route through Manhattan, with green circular markers indicating WiFi hotspots and retailers. A right-hand pane provides cycling directions, starting from '99 Lafayette St, New York, NY 10013, USA' and ending at '195 Front St, New York, NY 10038, USA'. The directions list six steps with distances and turn instructions. A yellow warning box at the top right states: 'Bicycling directions are in beta. Use caution - This route may contain streets that aren't suited for bicycling.' The bottom status bar shows 'Map data ©2017 Google' and links for 'Terms of Use' and 'Report a map error'. A footer note reads '► WiFi and retailer distances from route'.

CYC: Your Cycling

File Edit View Help

Retailers WiFi Trips

Bike trip list
Default

Start latitude
41.12345

Start longitude
-73.12345

End latitude
41.12346

End longitude
-73.12346

Search

Gender or bike ID
202

Clear Search

This trip took 1 hour and ends 436 m away at (40.70693, -74.0038).

Previous Next

Map data ©2017 Google Terms of Use Report a map error

► WiFi and retailer distances from route

Bicycling directions are in beta. Use caution - This route may contain streets that aren't suited for bicycling.

A 99 Lafayette St, New York, NY 10013, USA

1.5 km. About 6 mins

1. Head **southwest** on 0.5 km
Lafayette St toward
White St
2. Continue onto 0.3 km
Centre St
3. Turn **left** onto 0.3 km
Spruce St
4. Turn **right** onto 0.2 km
Gold St
5. Turn **left** onto 0.3 km
Fulton St
6. Turn **right** onto 5 m
Front St
Destination will be on the right

B 195 Front St, New York, NY 10038, USA

Map data ©2017 Google

Figure 19: 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 10), or
2. Select Edit → Add bike trip (see Figure 11).

You will then be presented with the Add a bike trip screen (see Figure 20), 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 21).

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.

Add a bike trip

Add a bike trip

| | | |
|-----------|---|---|
| Bike ID | 12345 | |
| | Start point | End point |
| Time | hh:mm:ss <input checked="" type="radio"/> am <input type="radio"/> pm | hh:mm:ss <input checked="" type="radio"/> am <input type="radio"/> pm |
| Date | d/mm/yyyy | d/mm/yyyy |
| Latitude | 41.12345 | 41.12346 |
| Longitude | -73.12345 | -73.12346 |

Cancel Add

Figure 20: Adding a bike trip

Add a bike trip

Trips must start before they can finish.

| | | |
|-----------|---|---|
| Bike ID | BIKE-202 | |
| | Start point | End point |
| Time | 1:30 <input type="radio"/> am <input checked="" type="radio"/> pm | 1:20 <input type="radio"/> am <input checked="" type="radio"/> pm |
| Date | 1/10/2017 | 1/10/2017 |
| Latitude | my house | 41.12346 |
| Longitude | -73 | -73 |

Cancel Add

Figure 21: 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 22). This will open the list selector (see Figure 23). New lists can be created by clicking one of the buttons along the bottom.

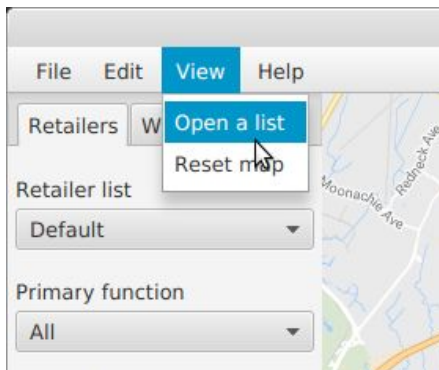


Figure 22: The map's view menu

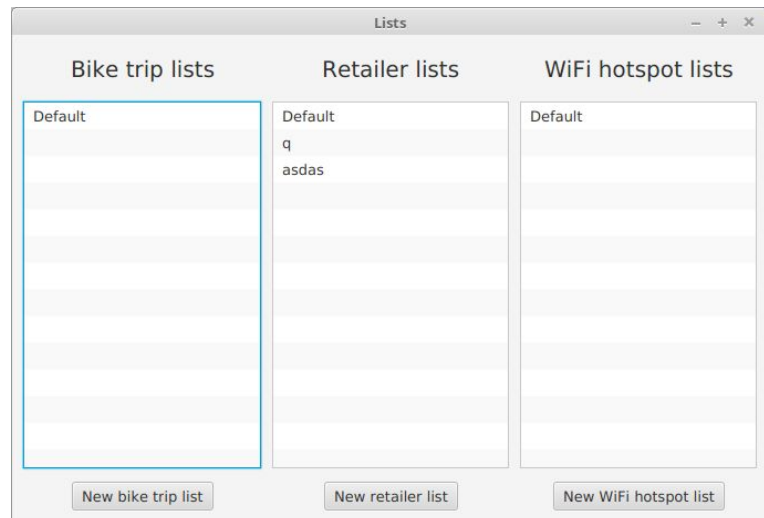


Figure 23: The list selector

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 22), 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 24).

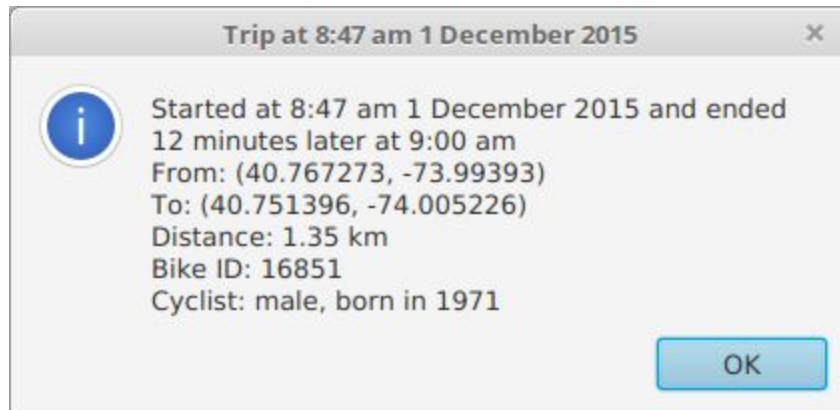


Figure 24: More information about an entry

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; see Figure 25). This will bring up a dialog where you can add the datapoint, as shown in the map view.

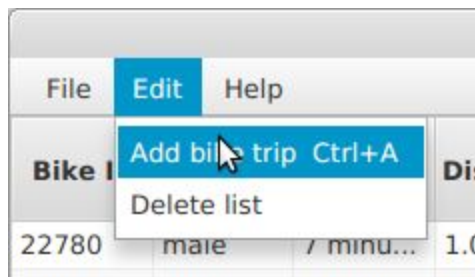


Figure 25: The table's Edit menu

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 26). This will bring up a dialog where you can edit the entry's data.

| | |
|-------|-----------|
| 95 km | 40.767273 |
| 45 km | 40.767273 |
| 35 km | |
| 32 m | |
| 48 km | |
| 97 km | |
| 12 m | 40.767273 |
| 58 m | 40.767273 |

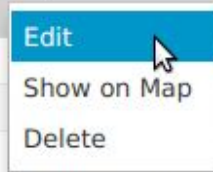


Figure 26: The right-click menu for entries in a table

To delete an entry, open the relevant list, then right-click on the entry you want to delete and select Delete (see Figure 26). To delete the whole list, select Edit → Delete list (Figure 25).

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 (see Figure 26). 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 27). 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 28). 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 29).

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

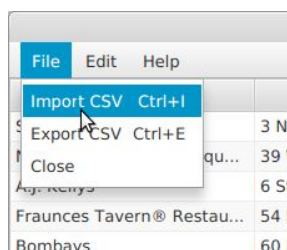


Figure 27: The table's File menu

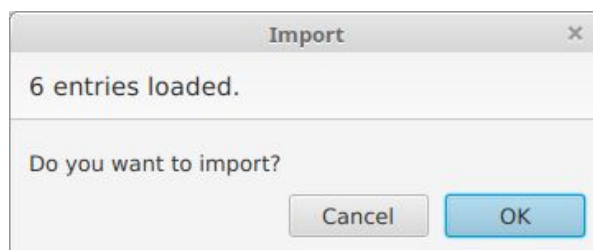


Figure 28: Importing a CSV

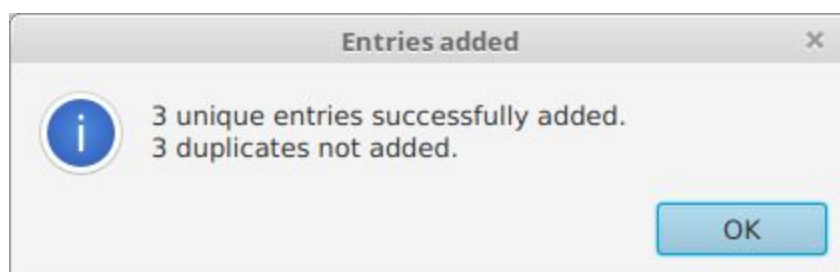


Figure 29: Window showing how many entries were added to the list

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 27), 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 | <i>Empty</i> | | |
| 5 | <i>Empty</i> | | |
| 6 | Start point (latitude) | A number between -90 and 90 | No |
| 7 | Start point (longitude) | A number between -180 and 180 | No |
| 8 | <i>Empty</i> | | |
| 9 | <i>Empty</i> | | |
| 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 | <i>Empty</i> | | |
| 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 | <i>Empty</i> | | |
| 3 | <i>Empty</i> | | |
| 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 | <i>Empty</i> | | |
| 11 | <i>Empty</i> | | |
| 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 | <i>Empty</i> | | |
| 19 | Borough | Anything | No |
| 20 | <i>Empty</i> | | |
| 21 | Neighbourhood | Anything | No |
| 22 | <i>Empty</i> | | |
| 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 | <ul style="list-style-type: none">● Restart CYC● Restart your computer● Check that Java is the correct version (build 1.8.0-111-b14 — in a terminal, input <code>java -version</code> to check)● Redownload CYC● Delete <code>~/ .cyc</code> — 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 | <ul style="list-style-type: none">● 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 | <ul style="list-style-type: none">● Adjust your zoom level● Reset the map by selecting View → Reset map (see Figure 25) |