Graphics Review cd-026

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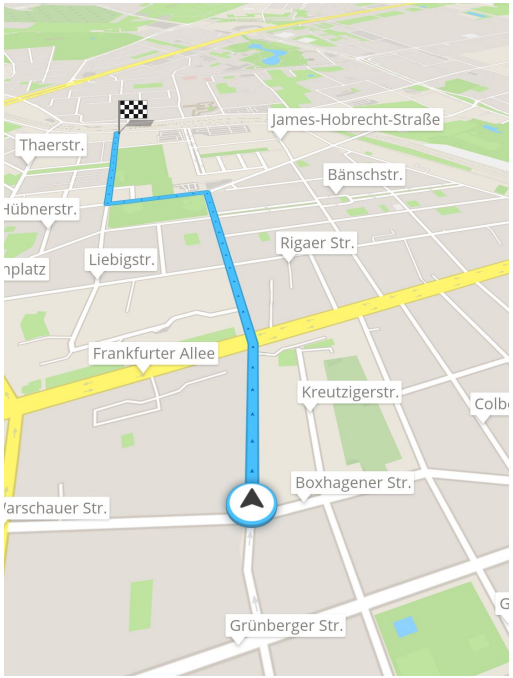
Yuwen (Echo) Zheng
Anna Shi

Presentation Overview

1. Target users
2. Guiding principles
3. Mapper Features
4. Conclusion

Mapper is for delivery people



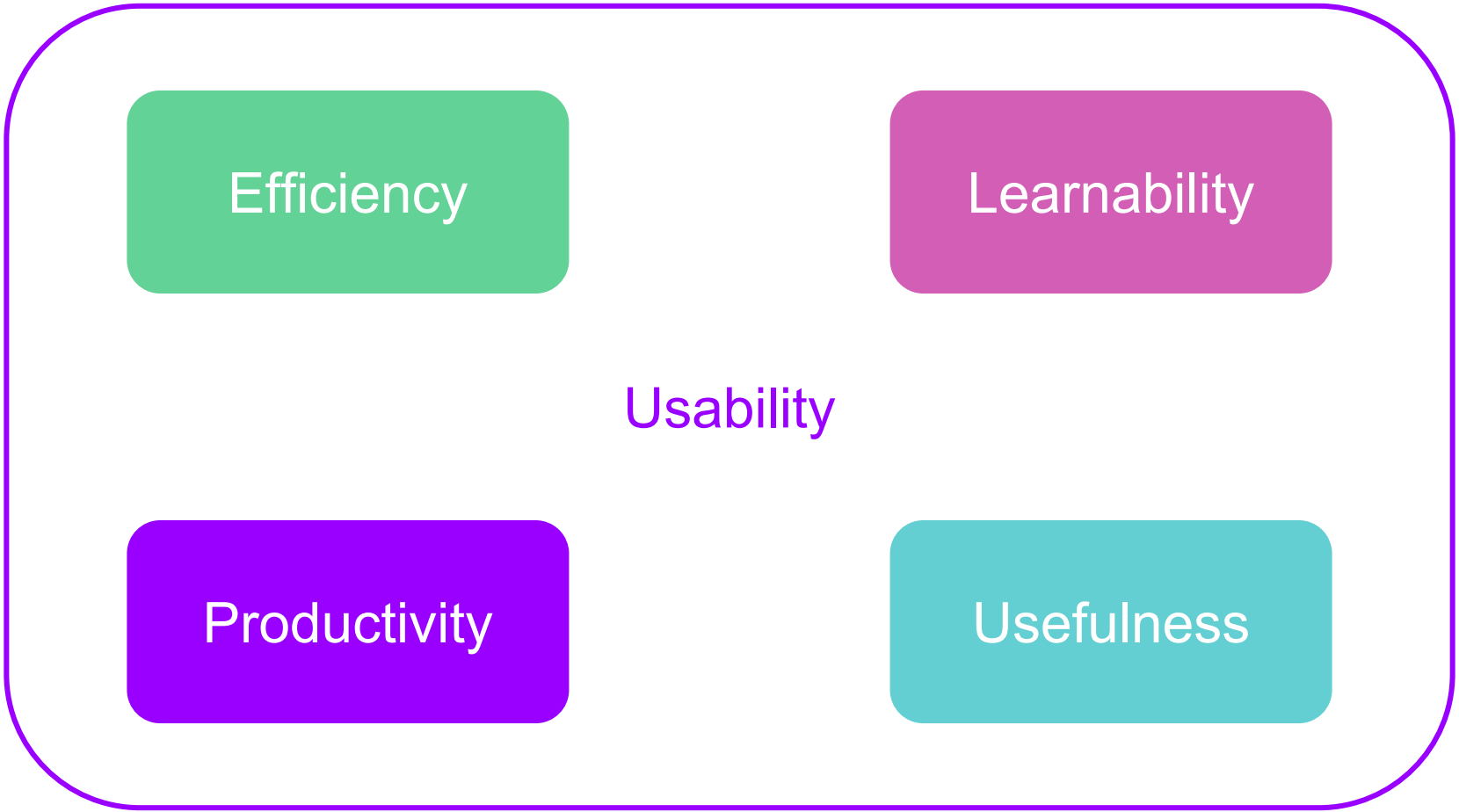
https://developer.skobbler.com/

http://www.lavorofacile.info/news/item/1574-autisti-di-furgoni-e-camion-per-consegne-e-trasporto-a-roma-e-nel-lazio.html

Guiding principles

Usability

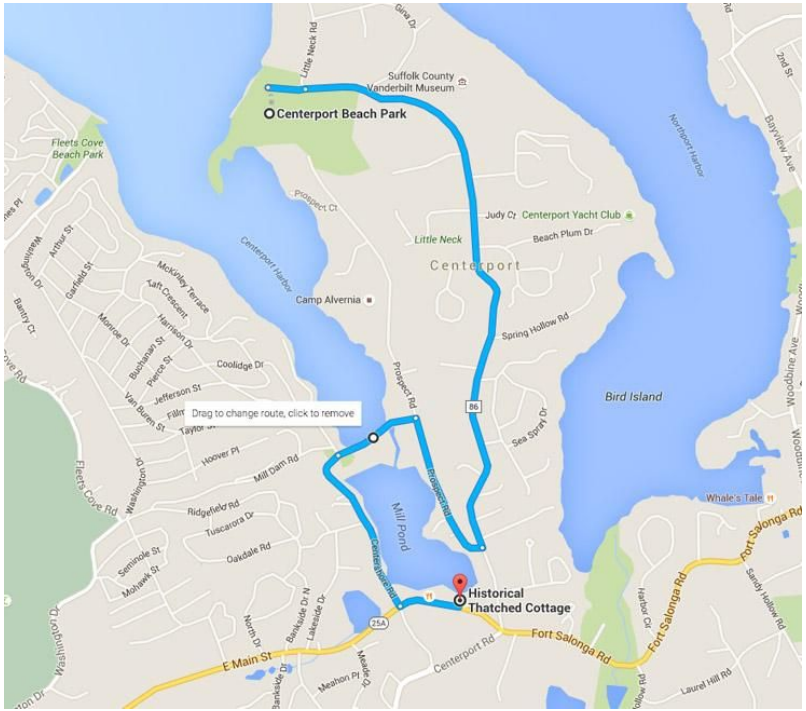
Responsiveness



A. Seffah *et al*, "Usability measurement and metrics: A consolidated model," *Software Qual J,* vol. 14, *(2),* pp. 159-178, 2006.

Efficiency of information

- Is it easy to look for the information you need?

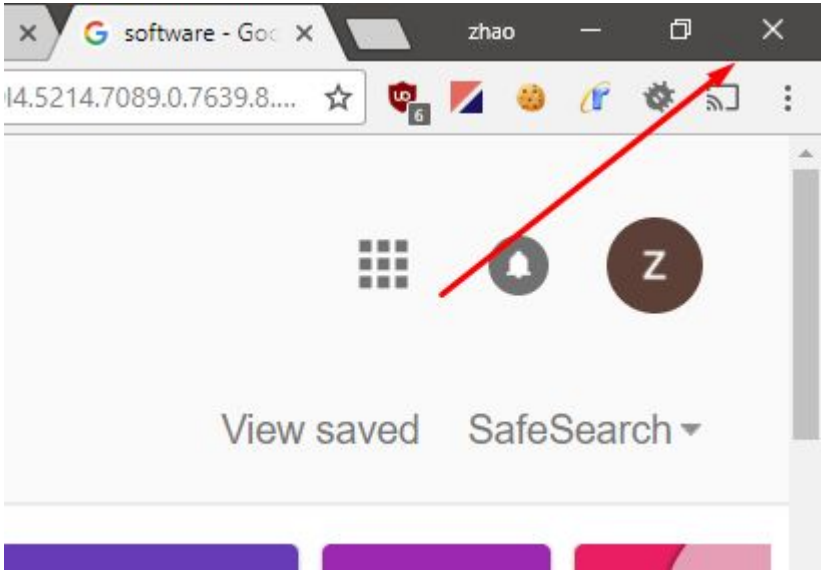


https://www.pcmag.com/article/343939/how-to-make-custom-routes-in-offline-maps

https://docs.optaplanner.org/7.4.1.Final/optaplanner-docs/html_single/index.html

Learnability

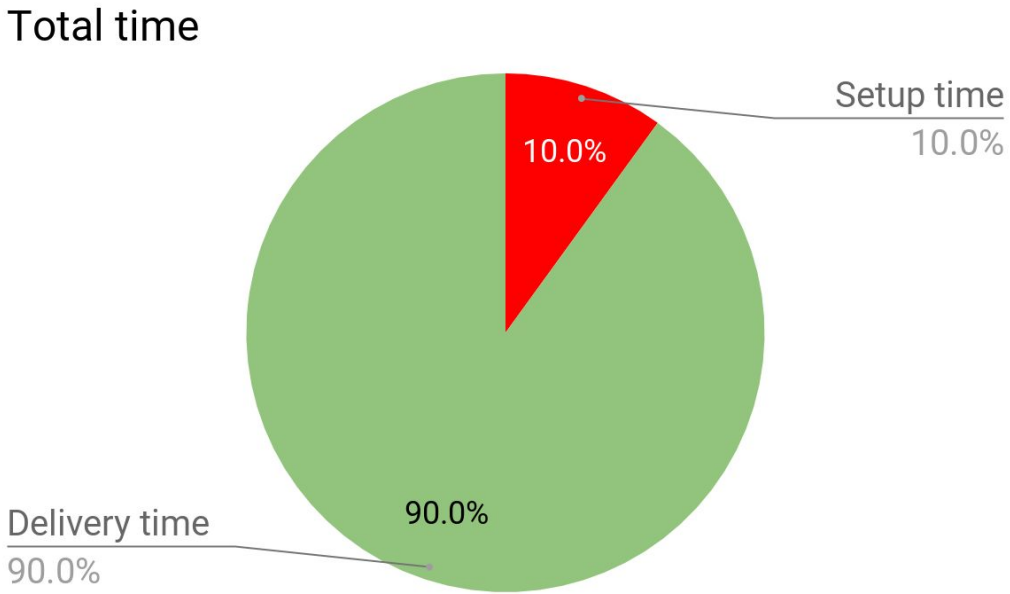
- Is it intuitive?



Screenshot of Google Chrome

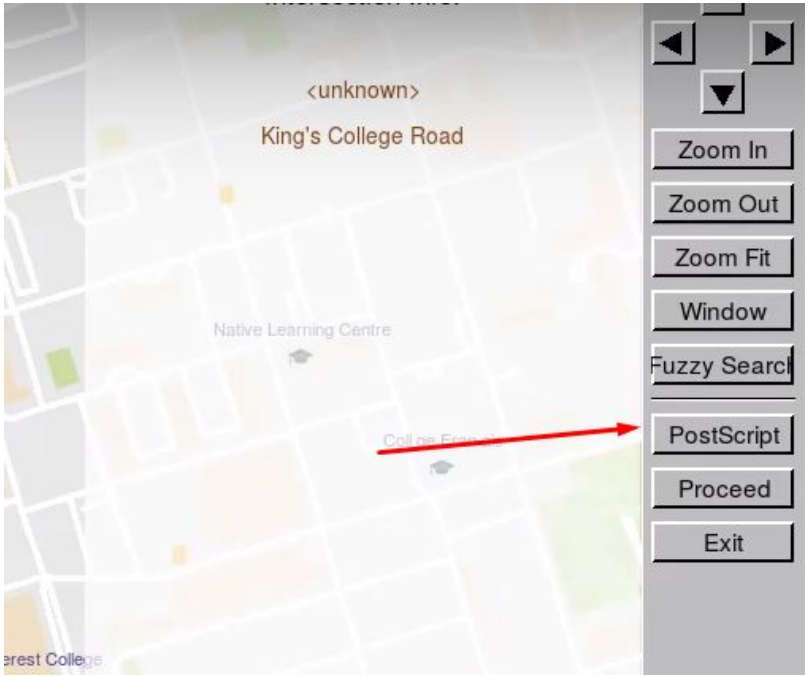
Productivity

- How quickly can you get going?
    - More time in GIS = Less time doing work



Usefulness

- Do we need it?
  - PostScript?
    - User unlikely to print

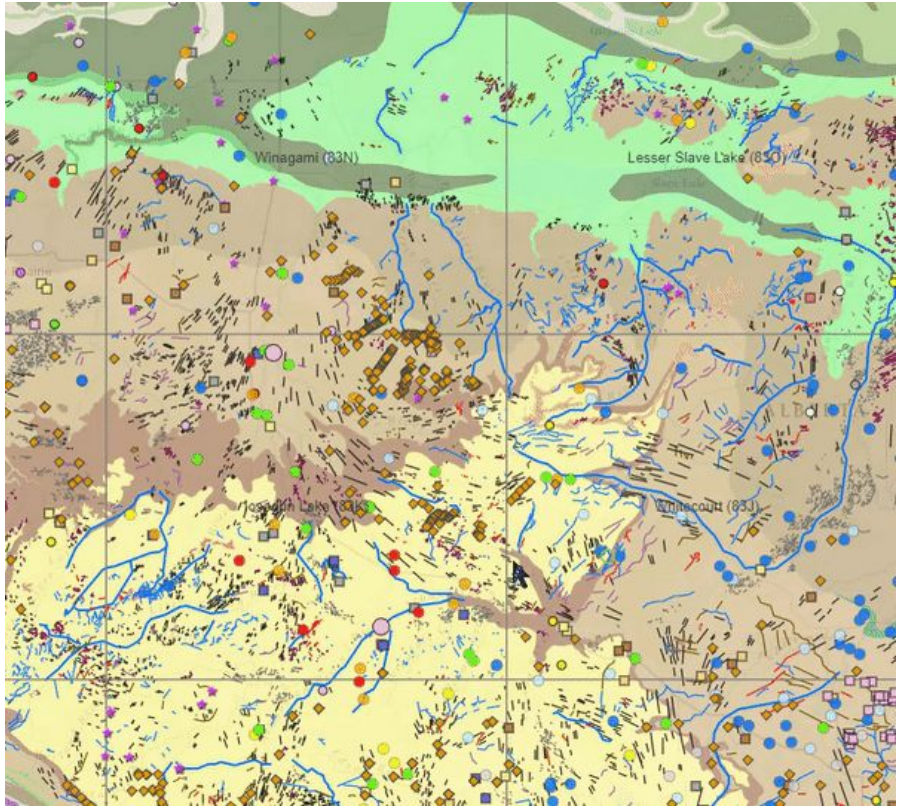


https://www.youtube.com/watch?v=FHFnFpCrp0U

Responsiveness

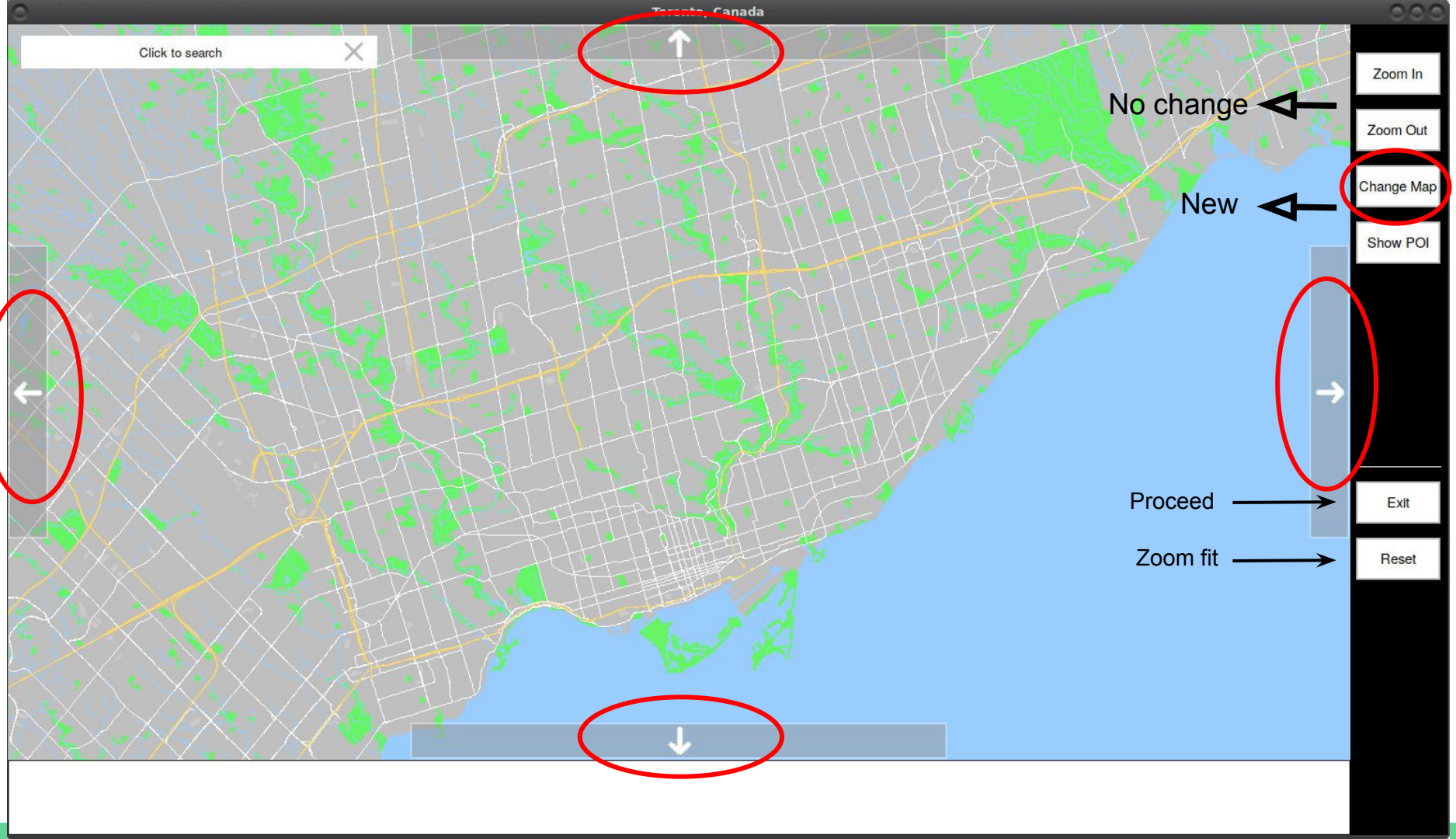
- Constant feedback to the user
  - **0.1 seconds**
    - **User feels directly in control**
  - 1 second
    - Does not break flow of application
  - 10 seconds
    - Still retains user attention

J. Nielsen, *Usability Engineering.* 1993.



http://ags-aer.maps.arcgis.com/apps/webappviewer/index.html?id=cfb4ed4a8d7d43a9a5ff766fb8d0aee5

Mapper Features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Click to search
Zoom In
No change
Zoom Out
Change Map
New
Show POI
Proceed
Exit
Zoom fit
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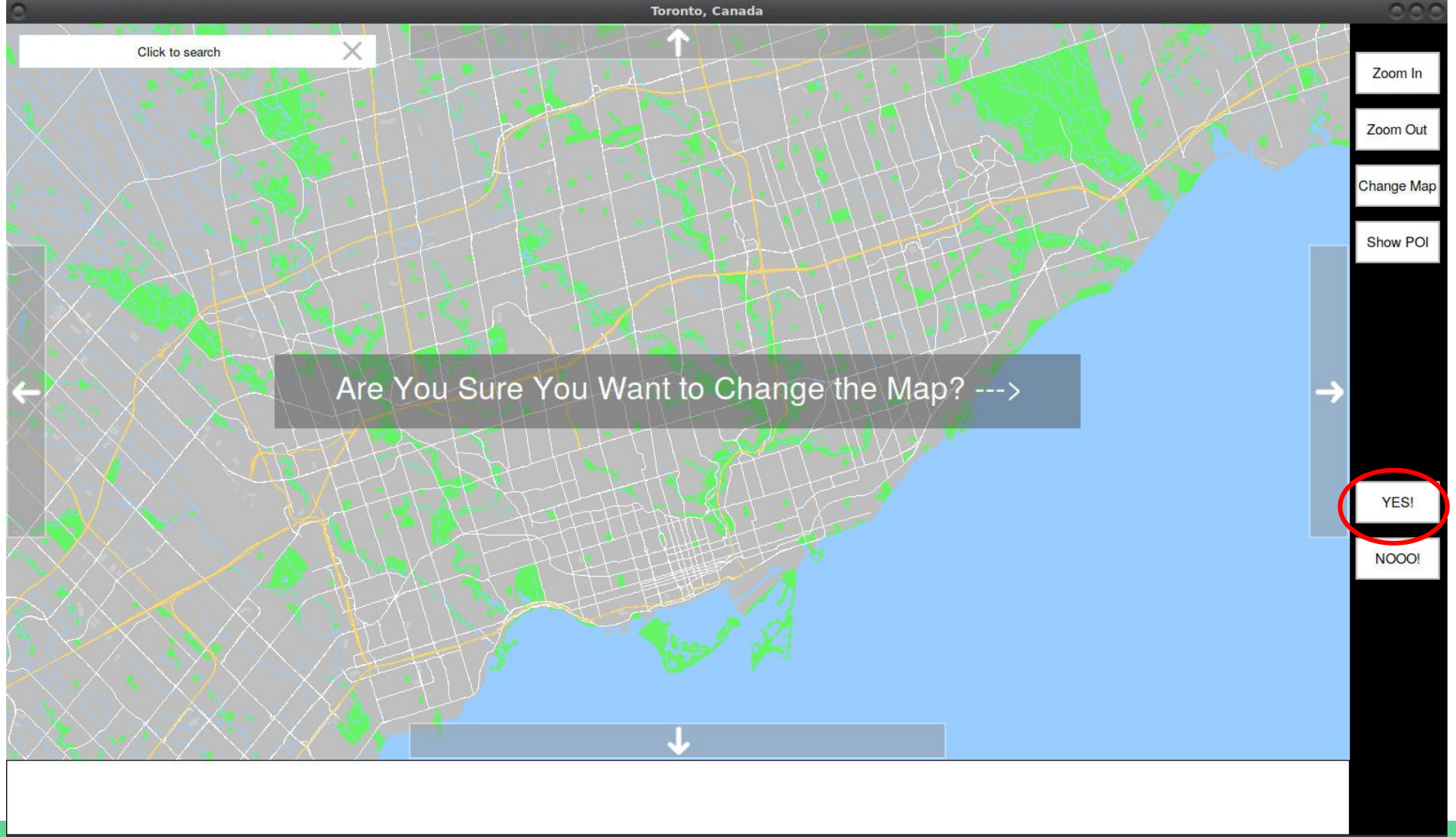
https://sa3er.deviantart.com/art/World-Cities-2-0-386839729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Click to search
Zoom In
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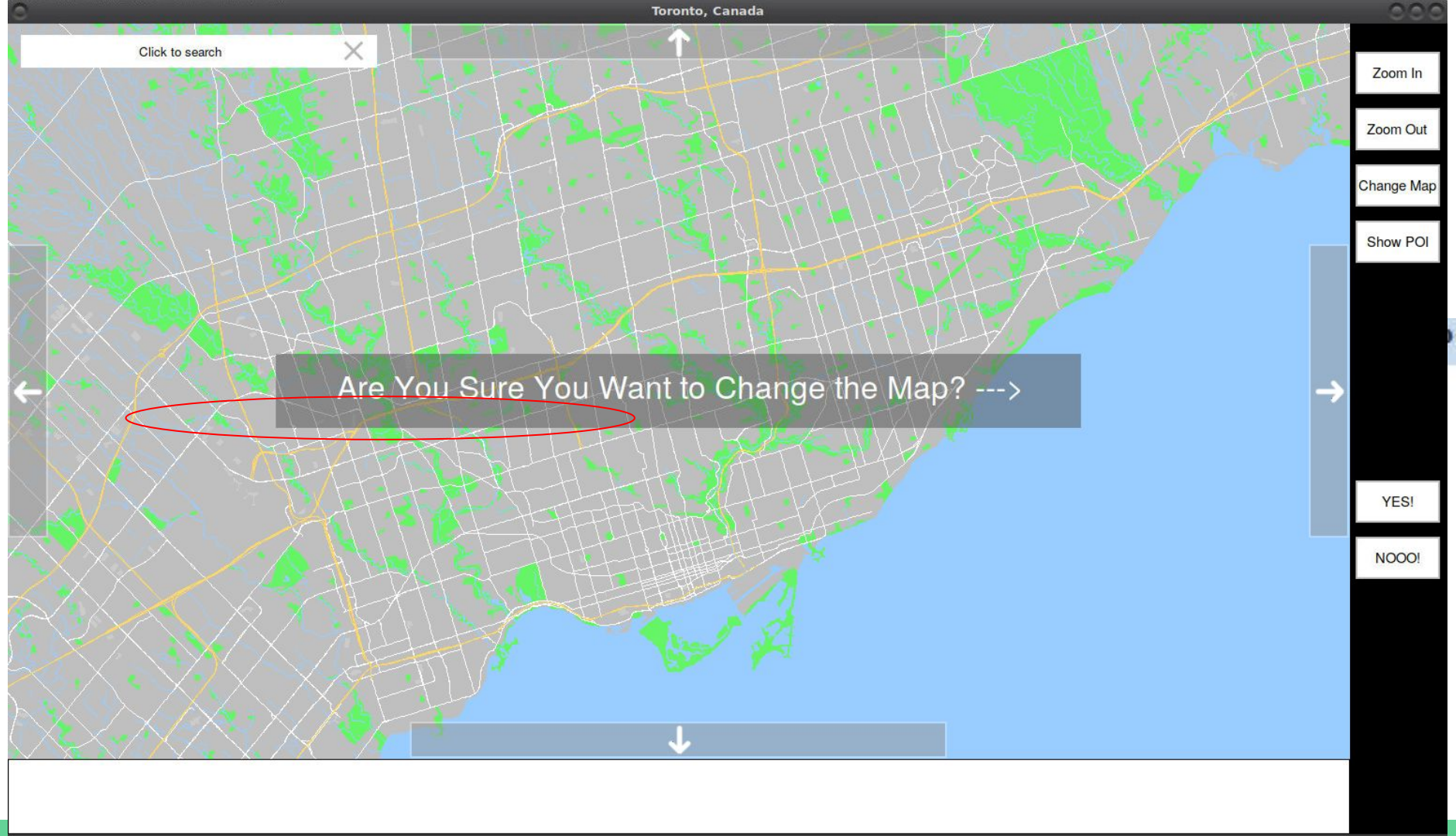
Are You Sure You Want to Change the Map? --->
YES!
NOOO!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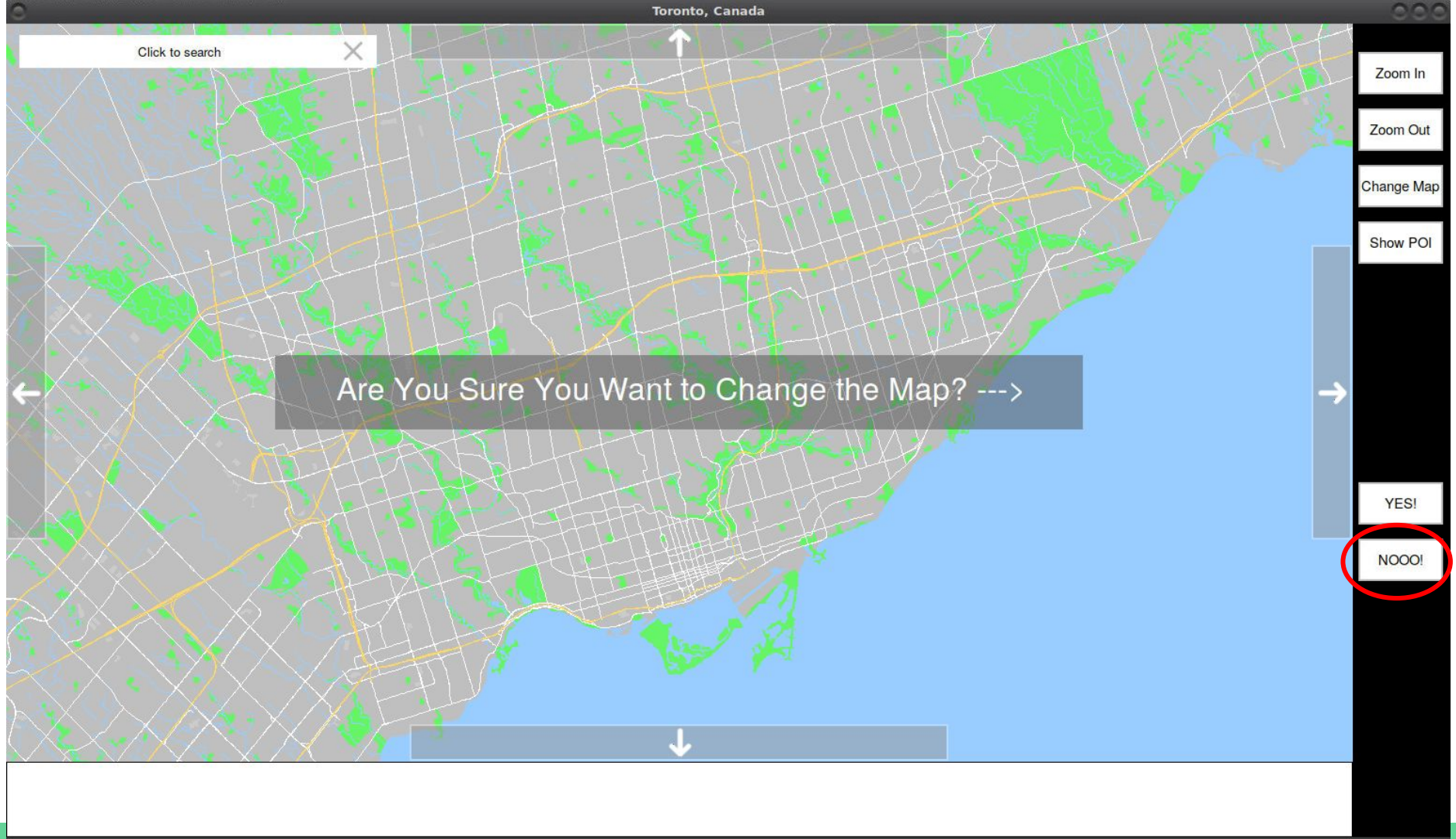
YES!
NOOO!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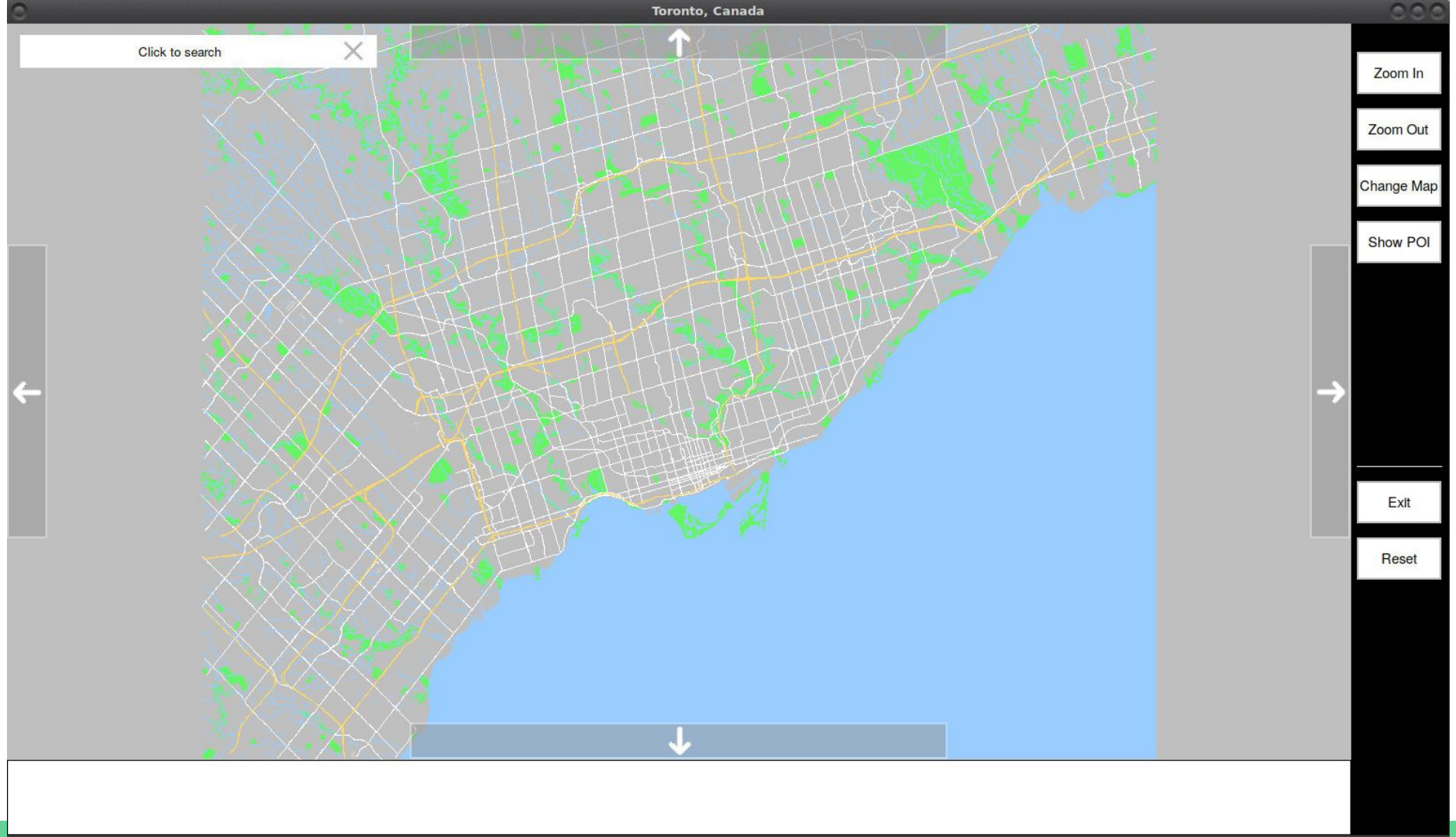

Toronto, Canada
Click to search
Zoom In
Zoom Out
Change Map
Show POI
Exit
Reset

POI classification prioritizes useful information

Basics

Restaurant

Fast Food

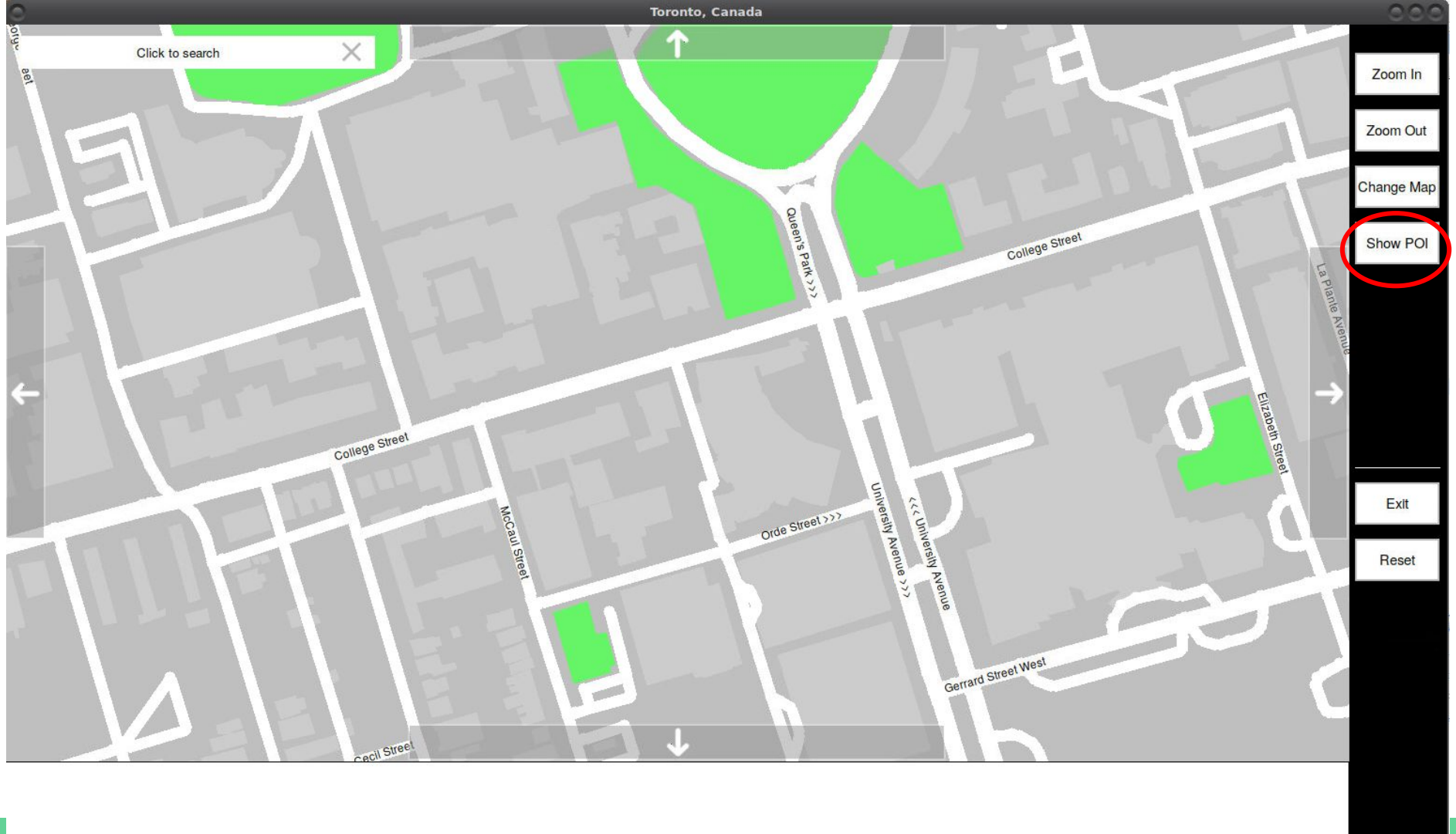
Cafe

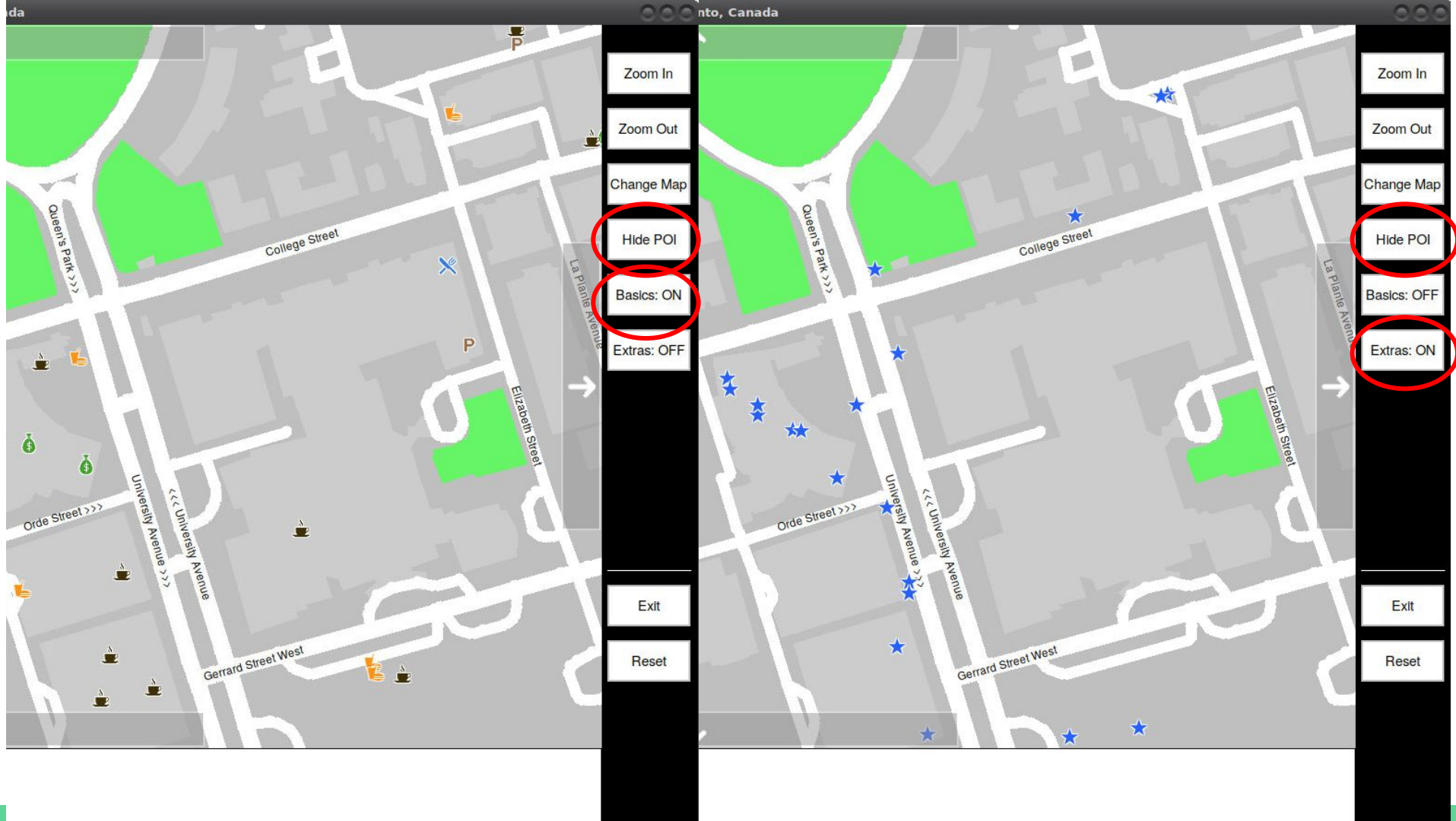
Parking

Bank

Extras

https://mapicons.mapsmarker.com/category/markers/transportation/road-transportation/
http://www.lavorofacile.info/news/item/1574-autisti-di-furgoni-e-camion-per-consegne-e-trasporto-a-roma-e-nel-lazio.html


Toronto, Canada
Click to search
Zoom In
Zoom Out
Change Map
Show POI
Exit
Reset
College Street
Queen's Park
College Street
McCaul Street
Orde Street
University Avenue
University Avenue
Elizabeth Street
Gerrard Street West
Cecil Street


Zoom In
Zoom Out
Change Map
Hide POI
Basics: ON
Extras: OFF
Exit
Reset
College Street
Queen's Park
Elizabeth Street
University Avenue
Orde Street
Gerrard Street West
La Plante Avenue
Zoom In
Zoom Out
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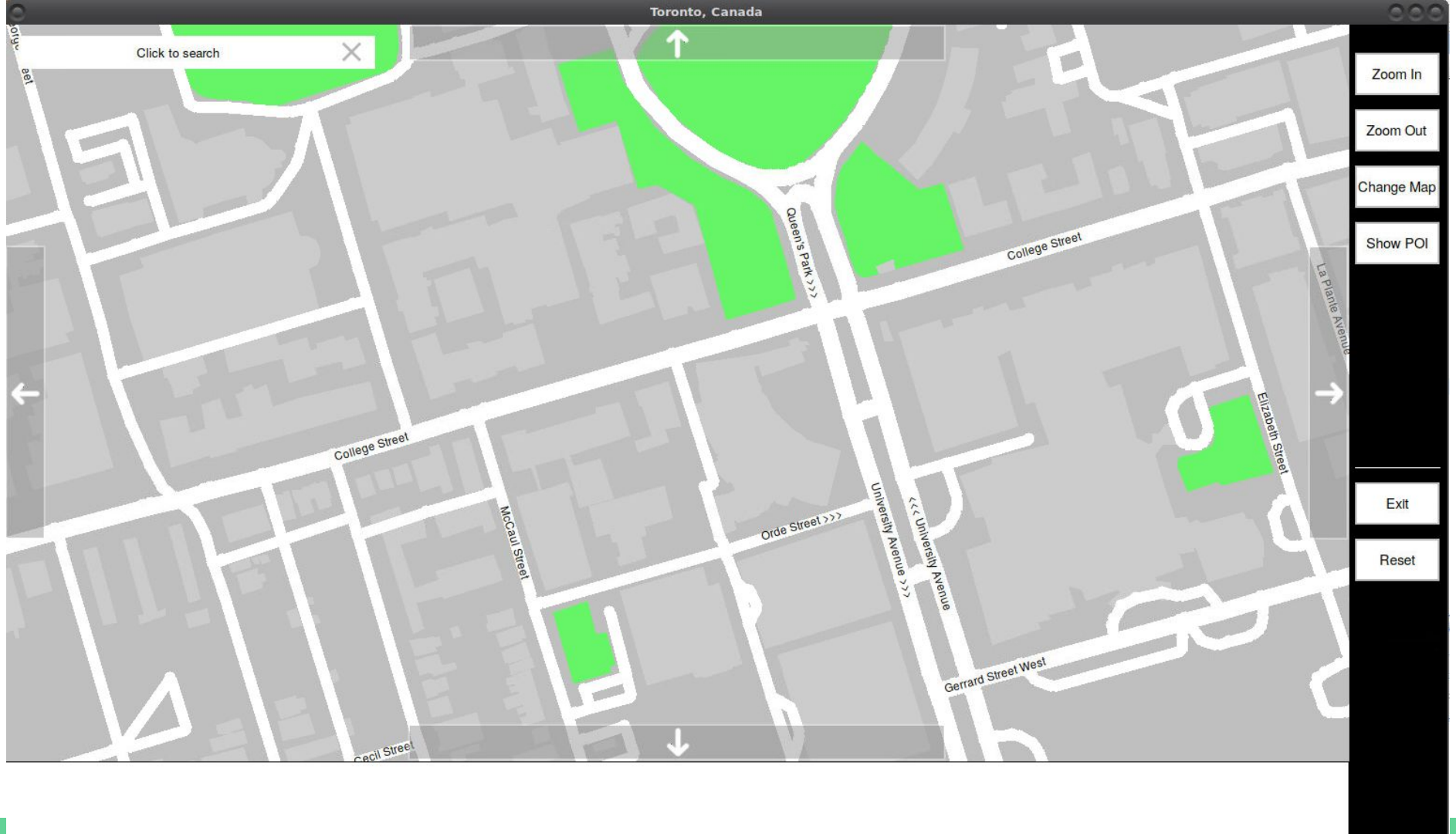
Orde Street
Gerrard Street West


Toronto, Canada
Click to search
Zoom In
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Reset
College Street
Queen's Park >>>
College Street
La Plante Avenue
Elizabeth Street
McCaul Street
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University Avenue >>>
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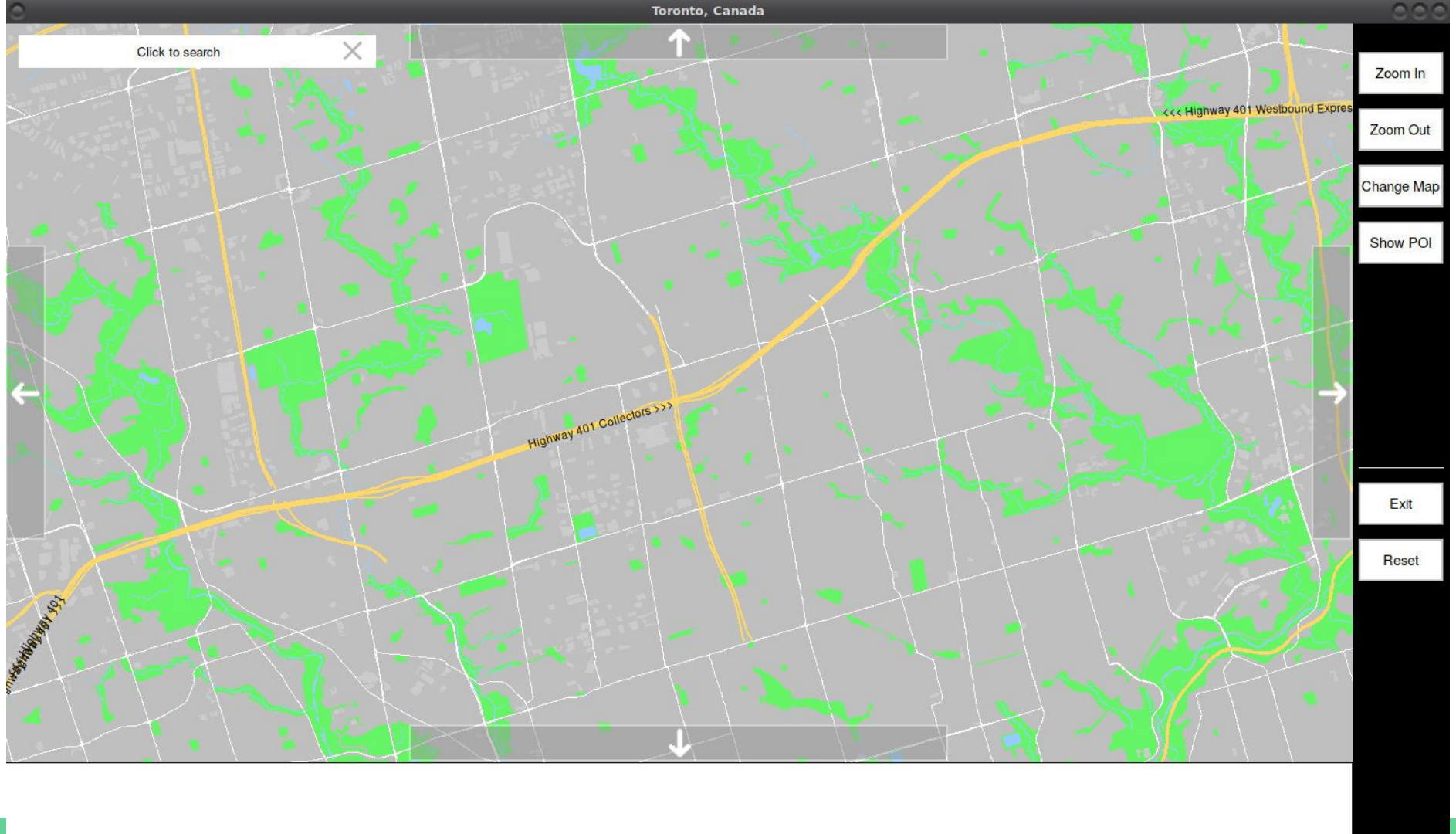
Gerrard Street West
Cecil Street

Controlled Information Density reduces clutter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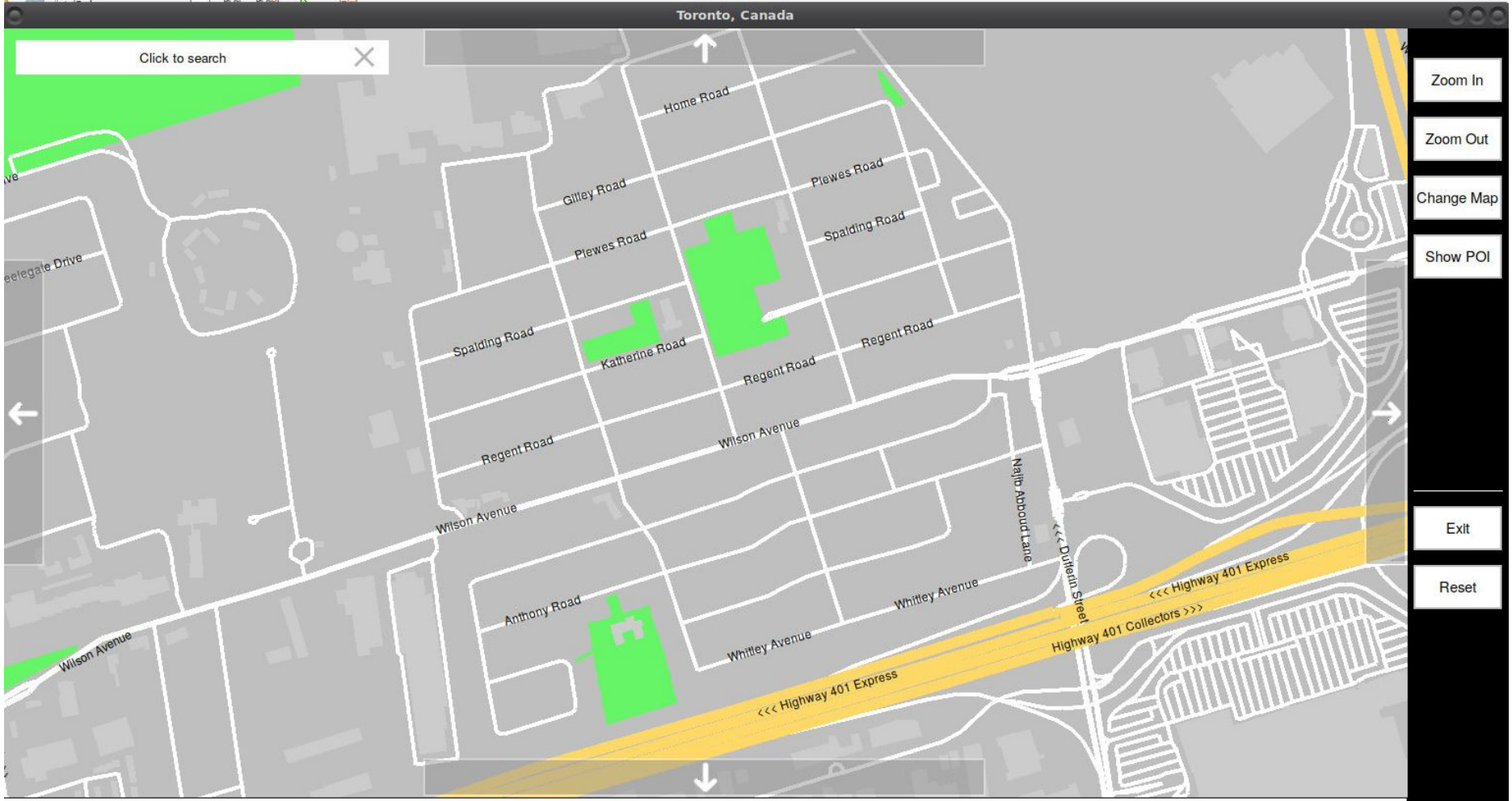
Highway 401 Collectors >>>


Toronto, Canada
Click to search
Zoom In
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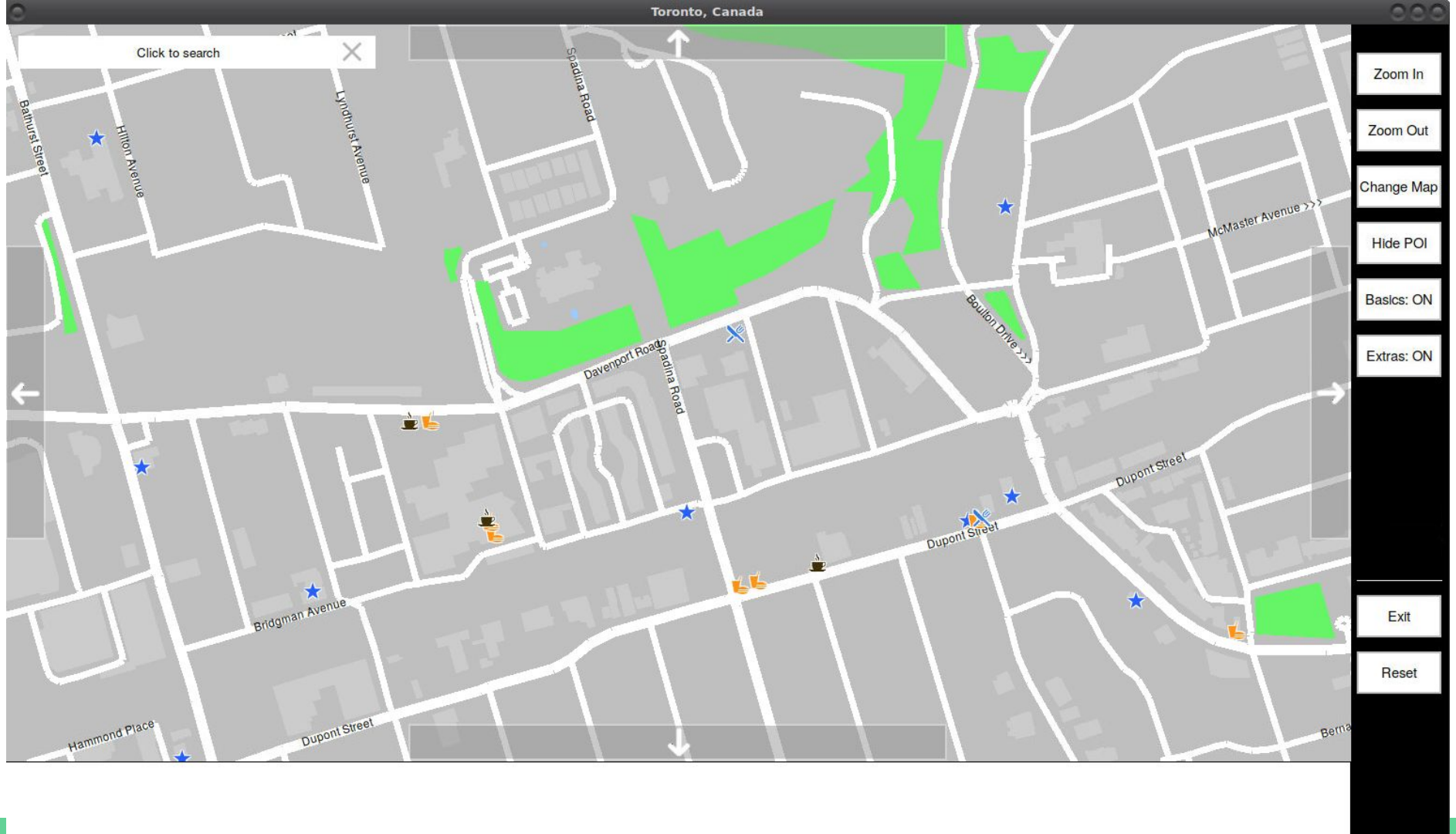
Home Road
Gilley Road
Plewes Road
Spalding Road
Katherine Road
Regent Road
Wilson Avenue
Anthony Road
Whitley Avenue
Naqib Abboud Lane
Dufferin Street
<<< Highway 401 Express
Highway 401 Collectors >>>
eelegate Drive


Toronto, Canada
Click to search
Zoom In
Zoom Out
Change Map
Hide POI
Basics: ON
Extras: ON
Exit
Reset
Spadina Road
Bathurst Street
Hilton Avenue
Lyndhurst Avenue
McMaster Avenue >>>
Bouillon Drive >>>
Davenport Road
Spadina Road
Dupont Street
Dupont Street
Bridgman Avenue
Hammond Place
Dupont Street

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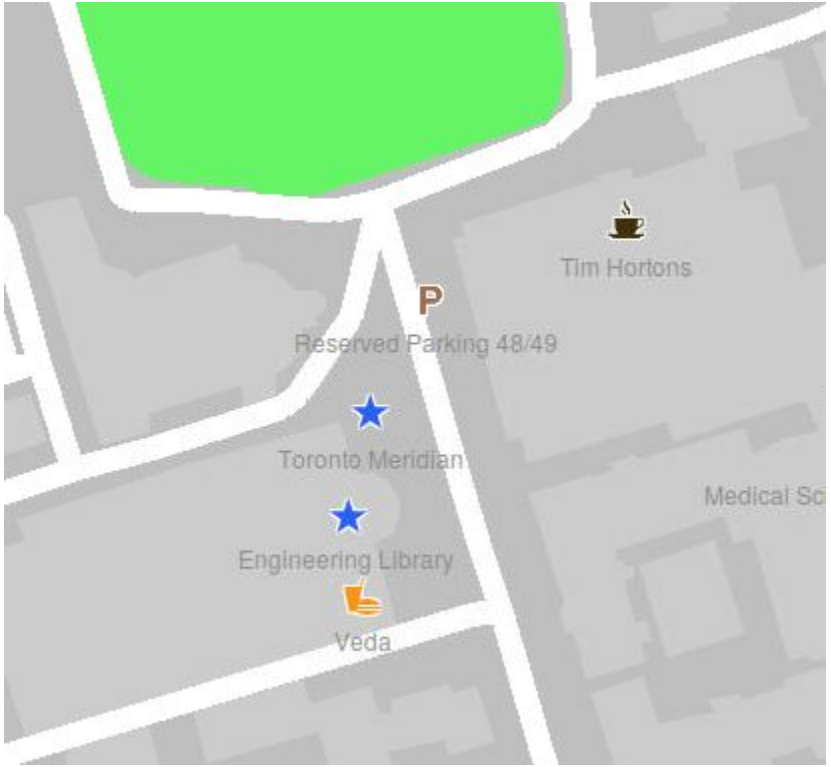
Tim Hortons
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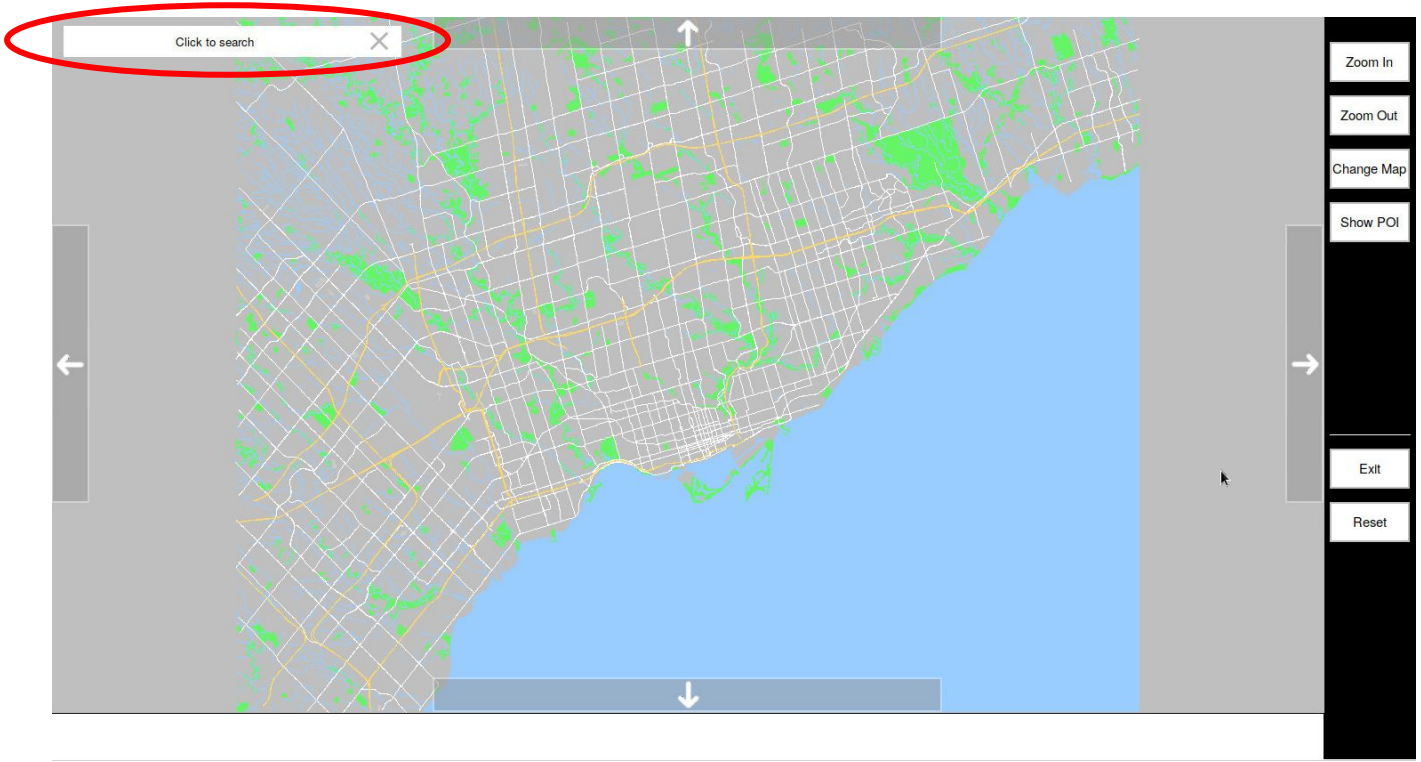
Reserved Parking 48/49
Toronto Meridian
Engineering Library
Veda

Intelligent Search Bar reduces manual searching



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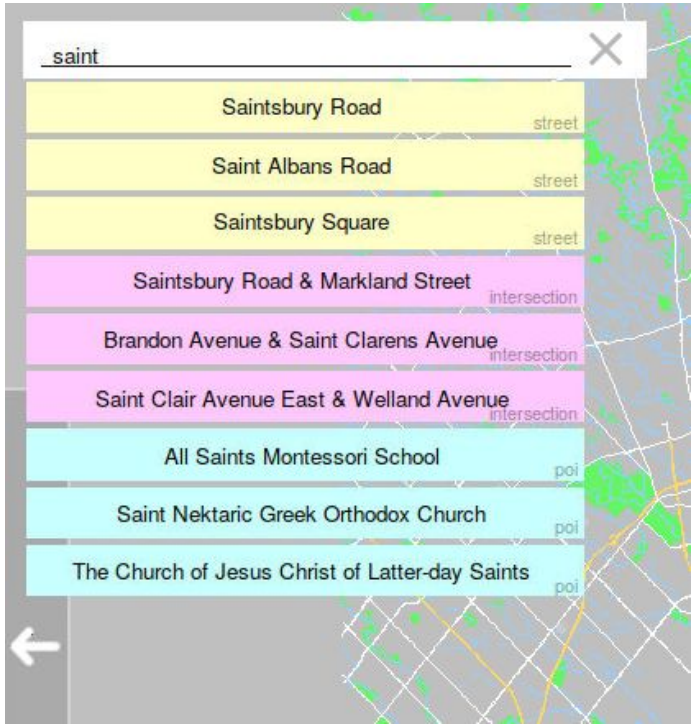

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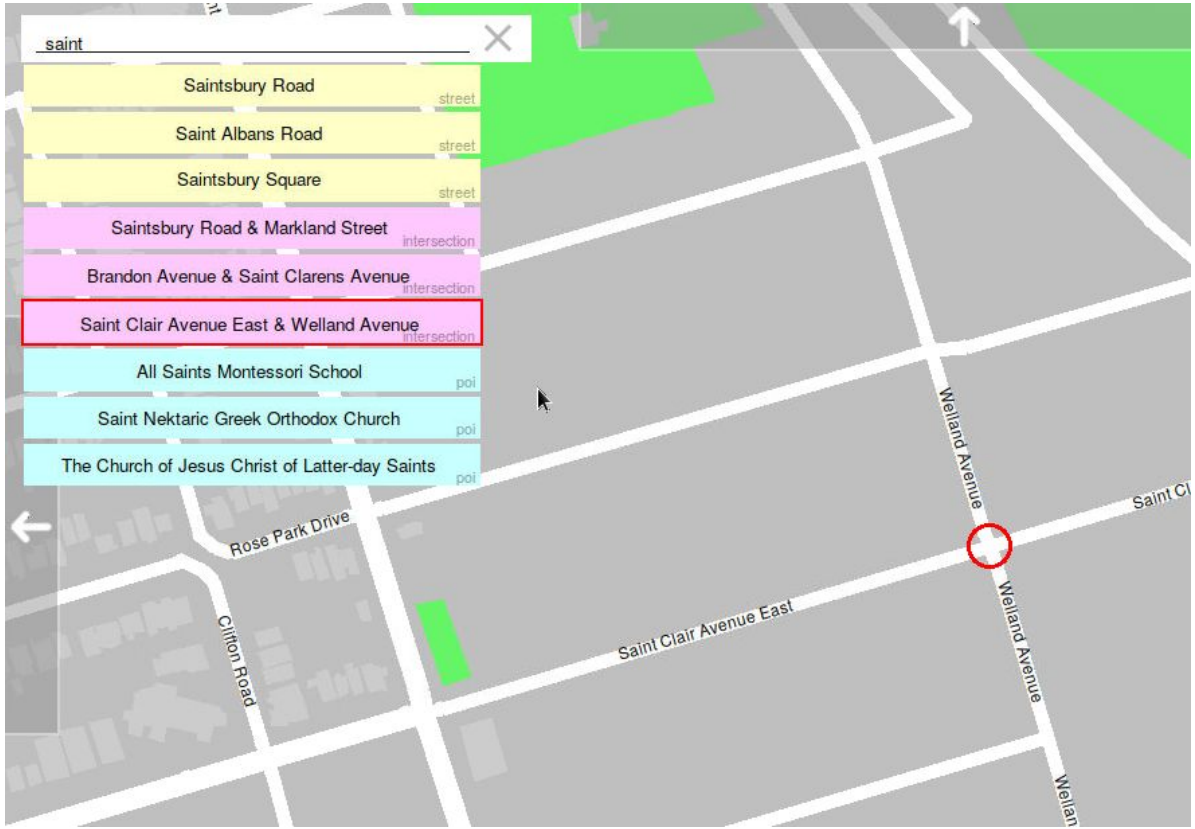
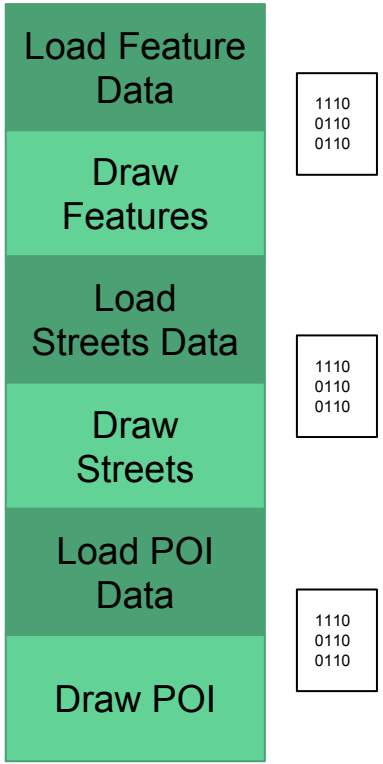
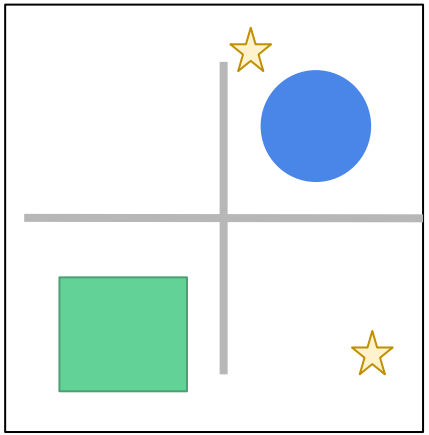


Multithreading increases responsiveness

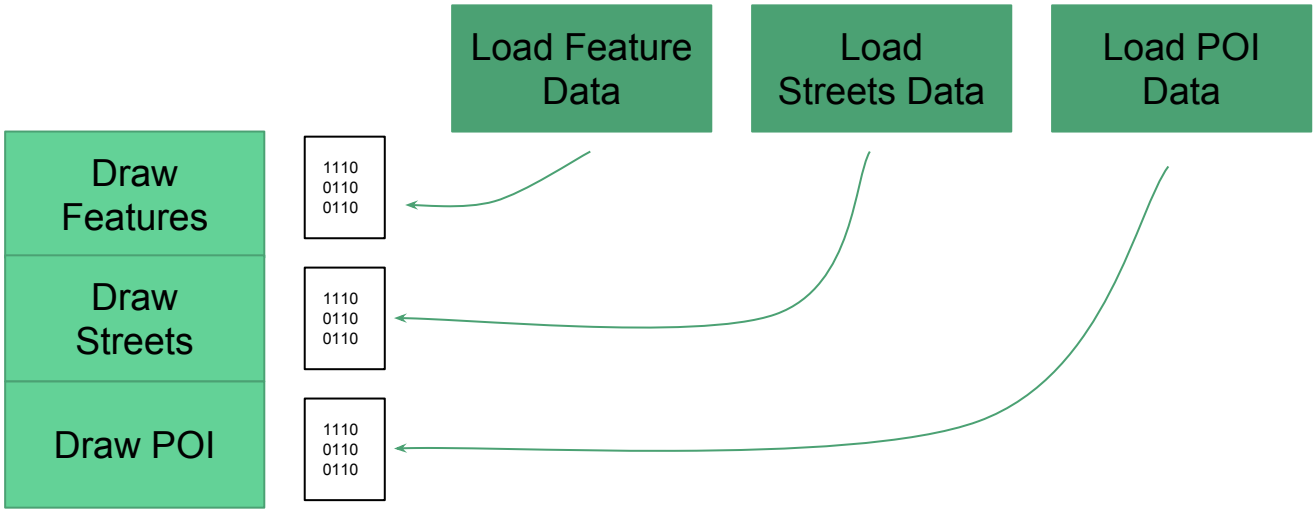
- What is multithreading?
  - What is a thread?

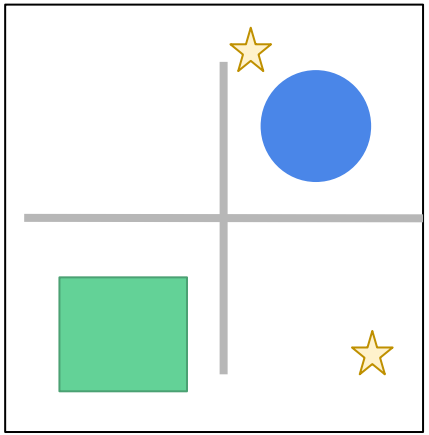
Single thread execution is inefficient





Multi thread execution is faster





Conclusion