

Team 041: *EntertainMe Maps*

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This is Bob



Agenda

**1. Choose
Map**

**2. Find
location of
interest**

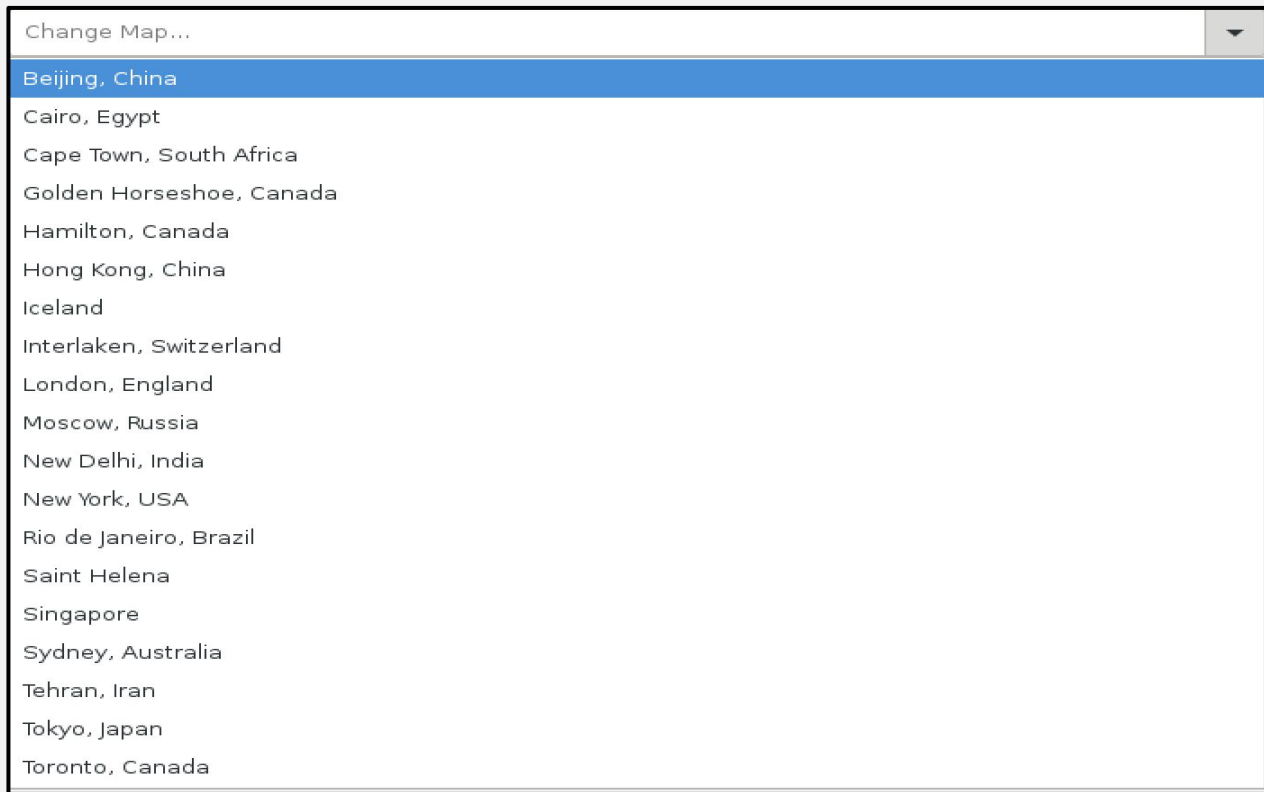
**3. Visualizing
Entertainment
Venues**

**4. Path to the
Entertainment
Venue**

**5. Reading the
User Guide**

**6. Creating an
Entertainment
Plan**

Dropdown Menu to enhance UX.

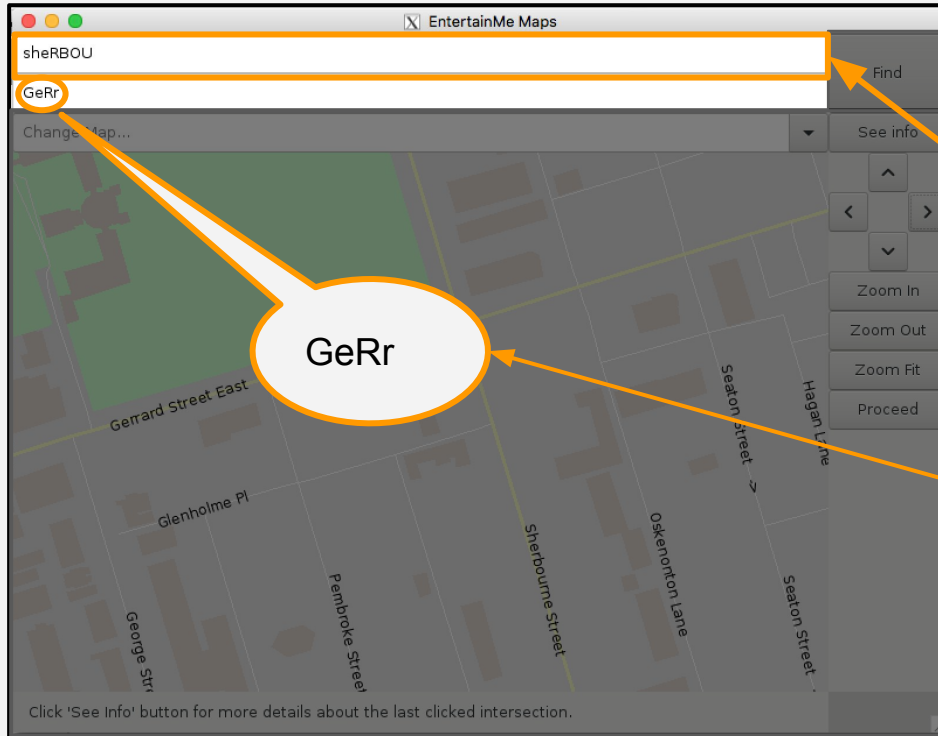


Change Map...

- Beijing, China
- Cairo, Egypt
- Cape Town, South Africa
- Golden Horseshoe, Canada
- Hamilton, Canada
- Hong Kong, China
- Iceland
- Interlaken, Switzerland
- London, England
- Moscow, Russia
- New Delhi, India
- New York, USA
- Rio de Janeiro, Brazil
- Saint Helena
- Singapore
- Sydney, Australia
- Tehran, Iran
- Tokyo, Japan
- Toronto, Canada

Change map
within two clicks
[1].

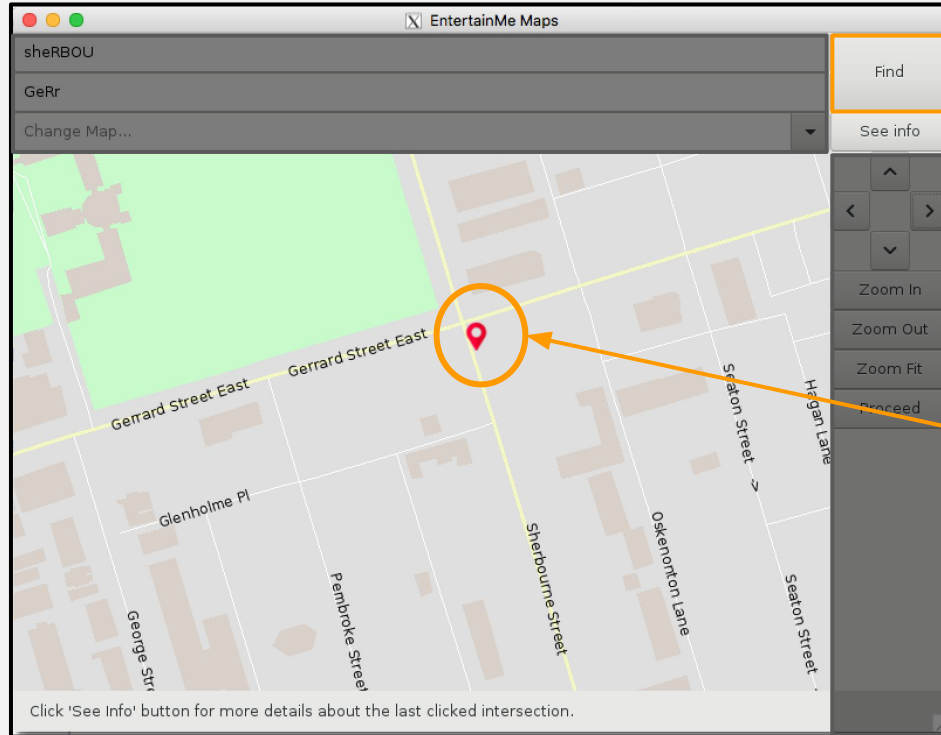
Case-Insensitive and Autocomplete Search Feature



Enter street names in the search bars

Works with partial names

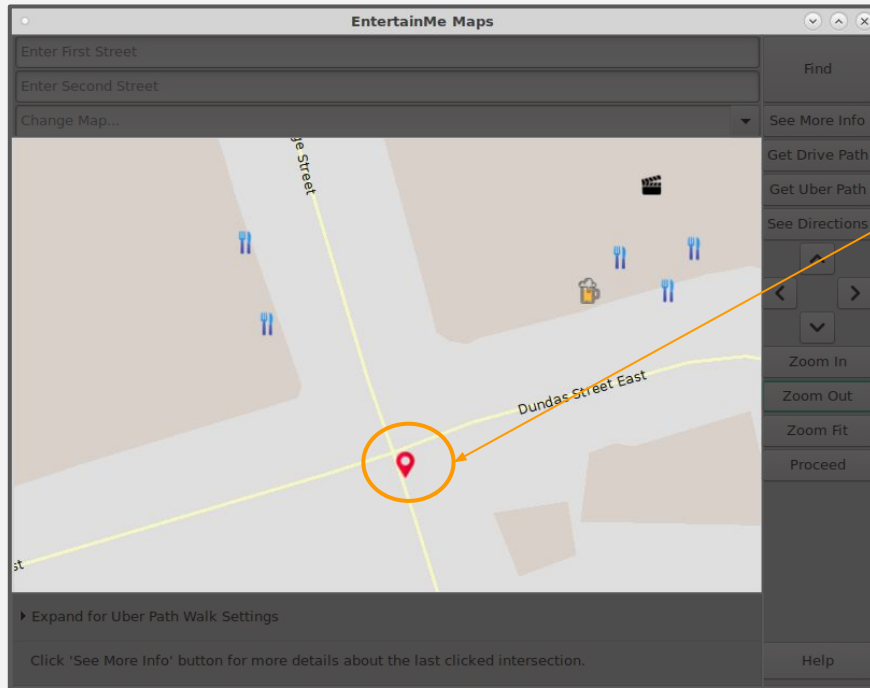
Single click to find the location of interest



Clicking on the find button

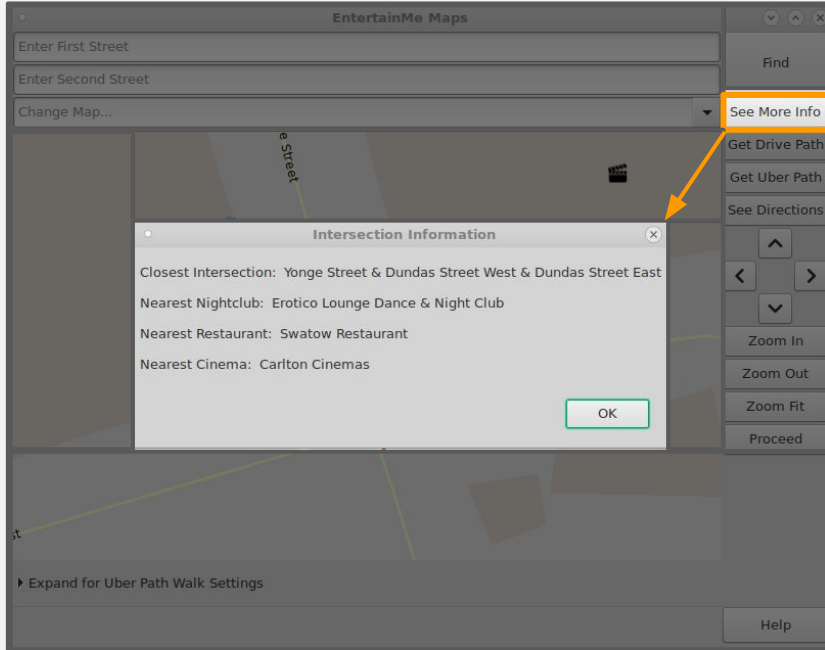
A pin drops on the searched location

Click at the interested location of interest on the map



A pin drops at the clicked location

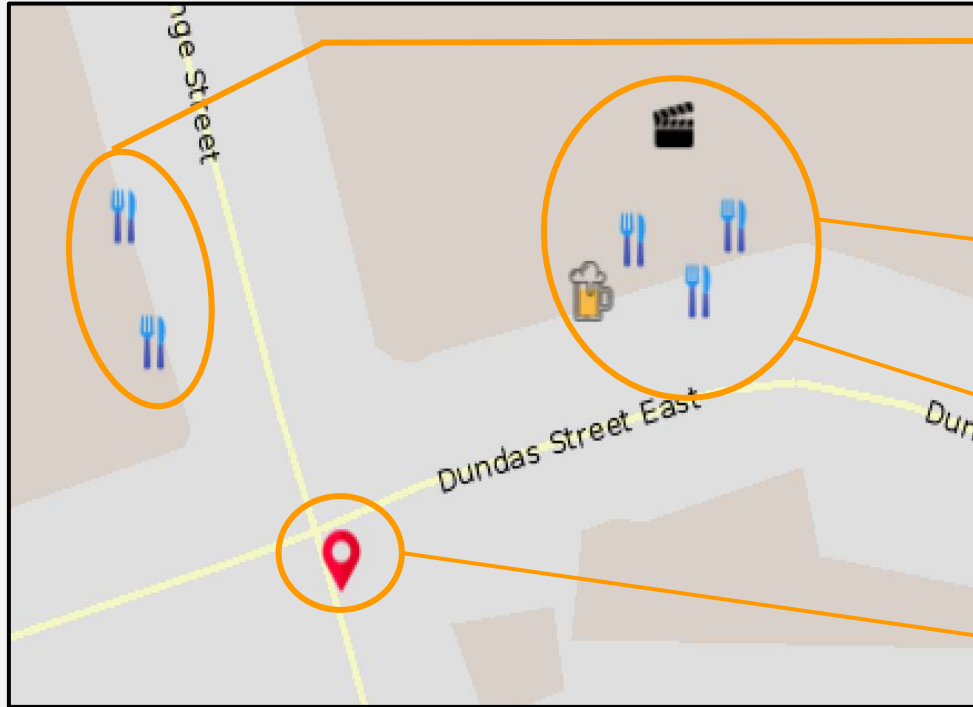
Intersection information button



Nearest entertainment locations shown

Dialog box overlays the map

Incorporation of standard icons for user convenience



Recognizable at a glance [2]

Visually distinguish data types [2]

Enhance aesthetic appeal [2]

Specify a precise location[2]

Distinct Colours are used to highlight the driving and the walking path.

EntertainMe Maps

Enter First Street

Enter Second Street

Change Map...

Find

See More Info

Get Drive Path

Get Uber Path

See Directions

Zoom In

Zoom Out

Zoom Fit

Proceed

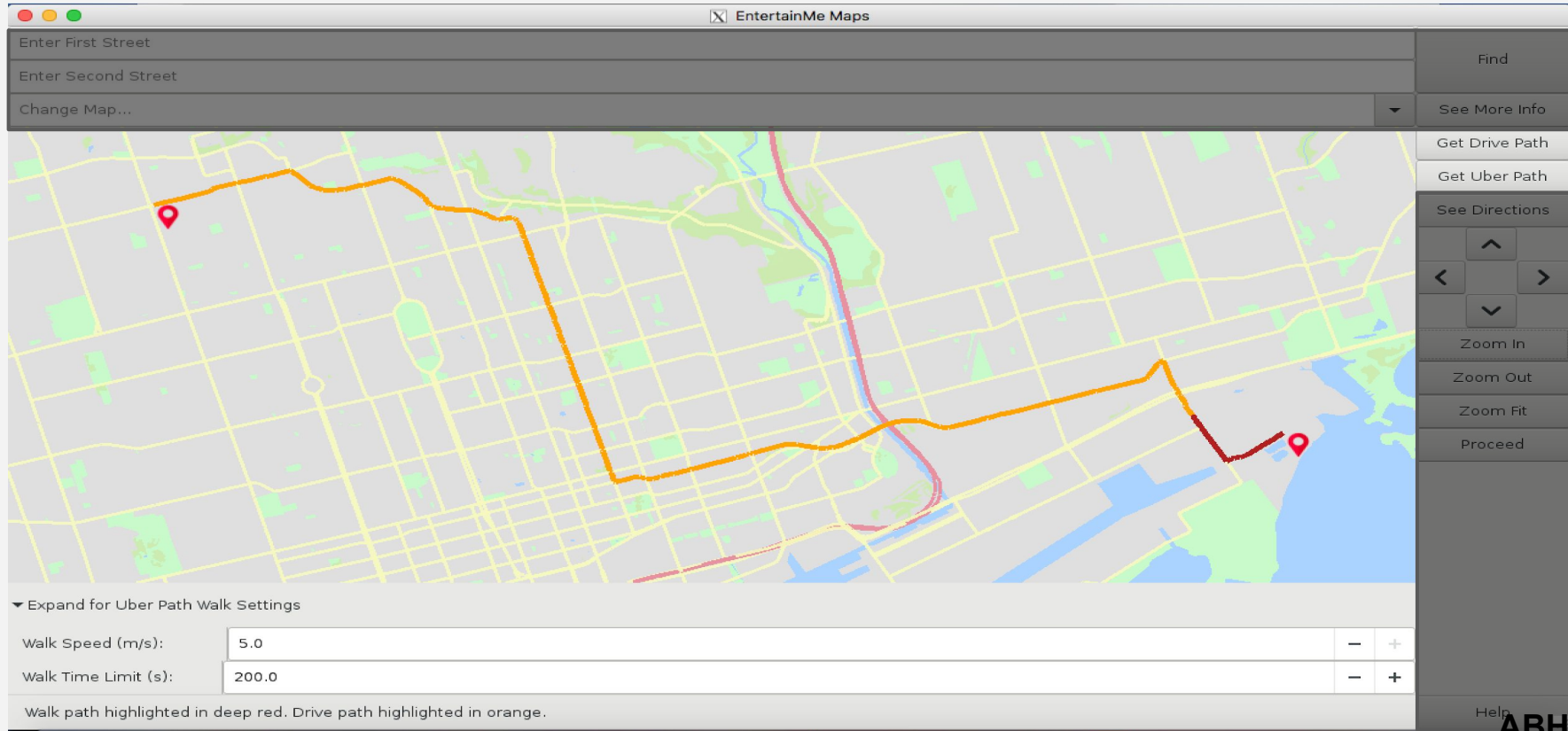
▼ Expand for Uber Path Walk Settings

Walk Speed (m/s): 5.0

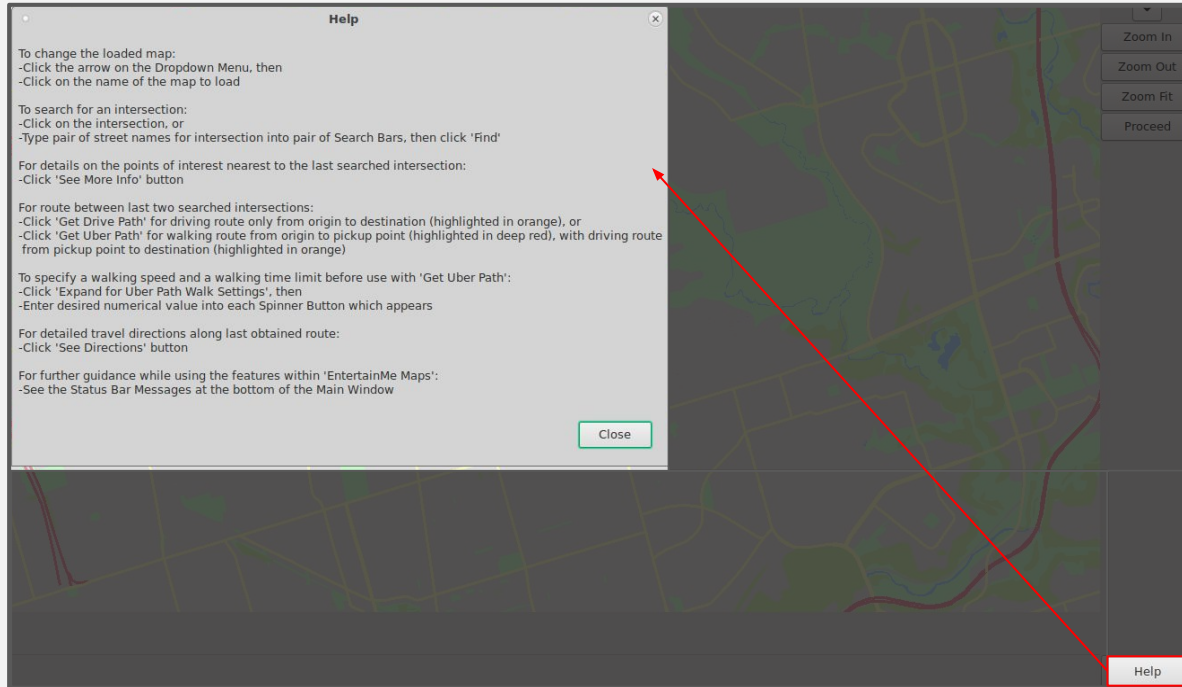
Walk Time Limit (s): 200.0

Walk path highlighted in deep red. Drive path highlighted in orange.

Help

The image is a screenshot of a web application titled "EntertainMe Maps". It features a map of a city with a grid of streets. A path is highlighted on the map, consisting of an orange segment (driving path) and a deep red segment (walking path). The interface includes a search bar at the top with fields for "Enter First Street" and "Enter Second Street", and a "Change Map..." button. On the right side, there are buttons for "Find", "See More Info", "Get Drive Path", "Get Uber Path", "See Directions", "Zoom In", "Zoom Out", "Zoom Fit", and "Proceed". At the bottom, there is a section for "Uber Path Walk Settings" with input fields for "Walk Speed (m/s)" (set to 5.0) and "Walk Time Limit (s)" (set to 200.0). A legend at the bottom states: "Walk path highlighted in deep red. Drive path highlighted in orange."

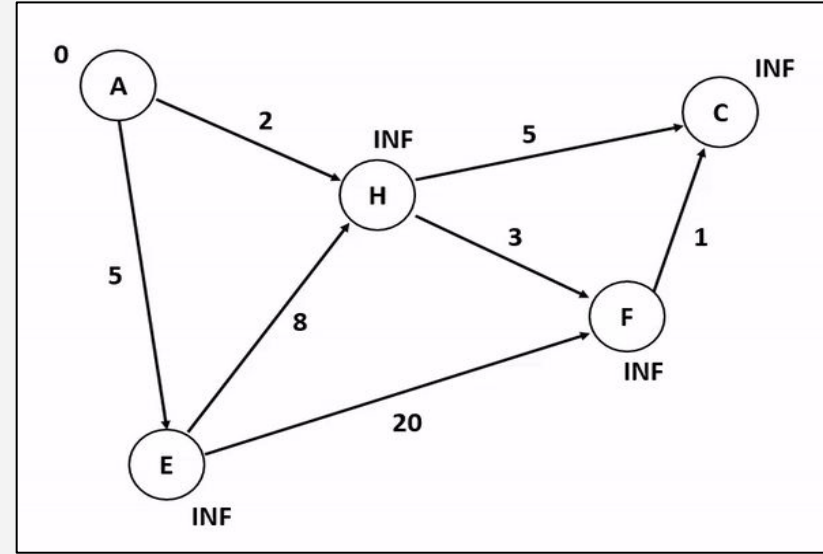
Help button to guide the user



A single click
to see all
instructions

Pathfinding Algorithms

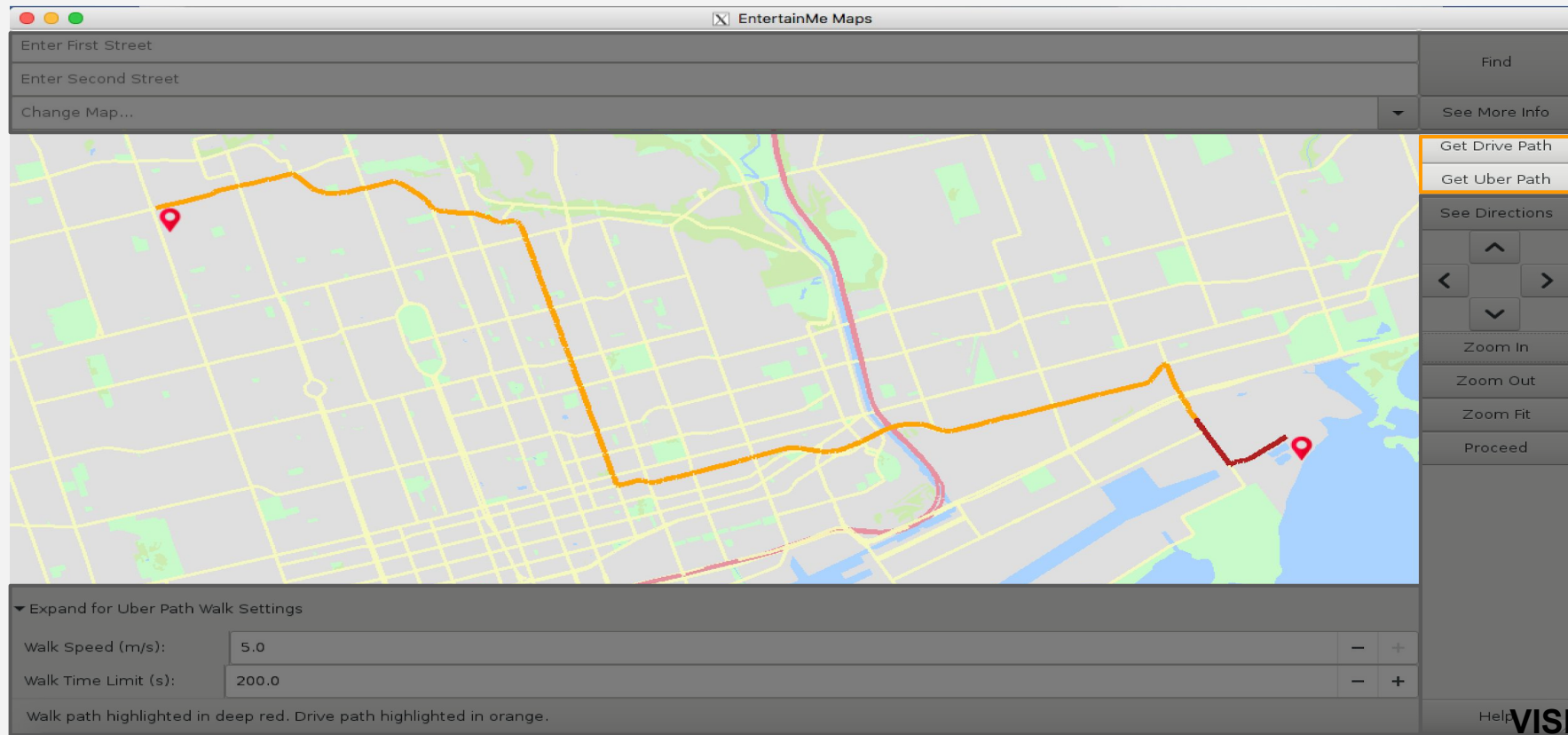
- Dijkstra's Algorithm
 - Guarantees the shortest path
 - Can be slow in a large map
- Made it quicker
 - A* heuristic
 - Highest driving speed limit in Canada(120 km/h)
 - Geometric Distance
 - Always want to underestimate



Source:

<https://www.globalsoftwaresupport.com/dijkstras-algorithm/?fbclid=IwAR0nrxdx-yFiObmVtZqSeyZ2AHUpvhl4HmDCRU PgiIGIABFbbLA3b3JX6kh4>

Uber path algorithm



Performance of our delivery man algorithm

Algorithm	Algorithm's Impact	QoR[4]
Naive Algorithm	Picks up any item & delivers it.	315,617.267
Greedy Algorithm	Picks up the closest item & delivers it.	226,975.699
Greedy Algorithm ++	Picks up the closest item & goes to the closest pickup or drop off.	104,054.377

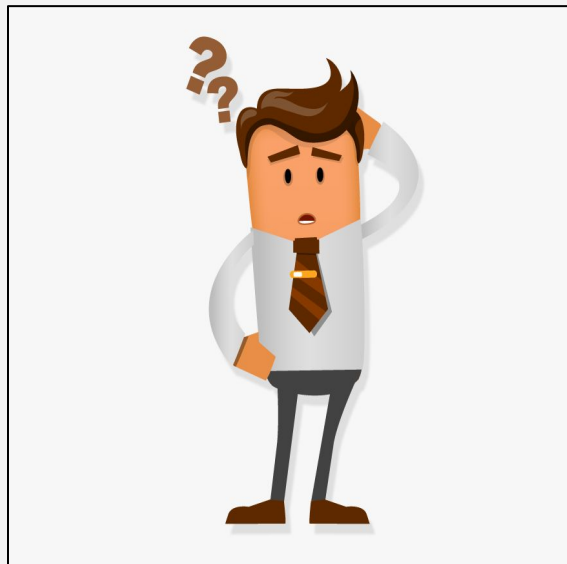
Pitch: Creating an Entertainment Plan for our user

Bob wants to:

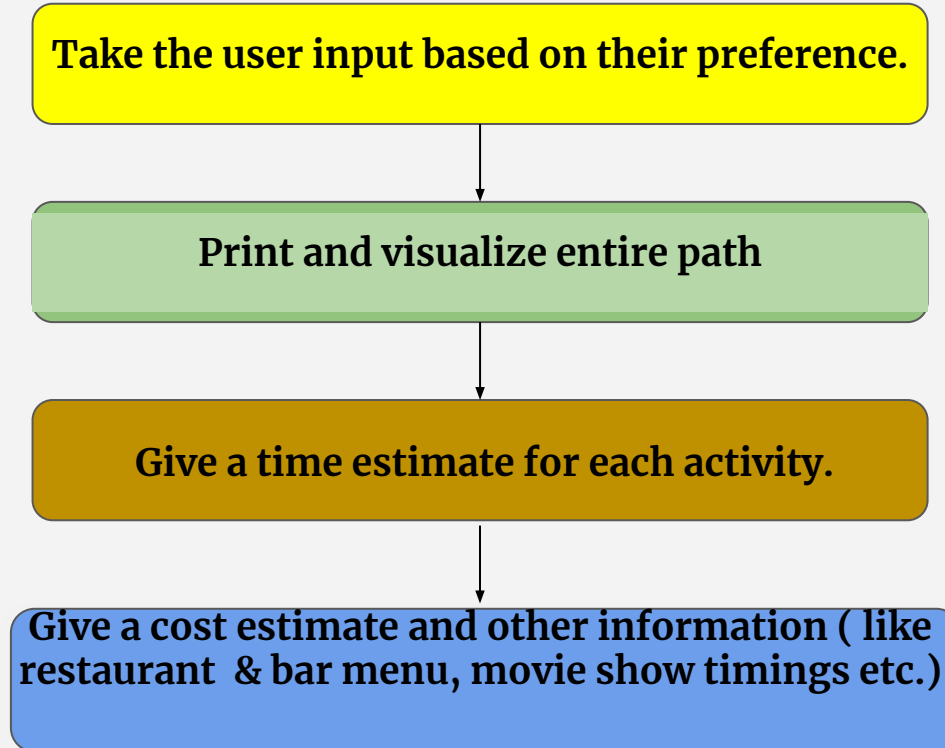
1. Eat
2. Watch a Movie
3. Get some drinks at a bar
4. Watch a Game

He has only 5 hours.

He is having a hard time to plan.



Our proposed idea



EntertainMe Maps Takeaway



Employs usable and responsive features to find nearby entertainment venues.

Can remove the stress from planning your next thrill.

References

- [1] J.Vacca, Computer and Information Security Handbook, Saint Louis: Elsevier Science, 2017. Available:
https://books.google.ca/books?id=zb916YOr16wC&pg=PA105&lpg=PA105&dq=fewer+steps+enhances+usability&source=bl&ots=PShGgQtV2D&sig=ACfU3U2KYmvR77gUH-4gyKWPV29cIMXI_A&hl=en&sa=X&ved=2ahUKEwjPsp6Ai6joAhXDrJ4KHWpYChkQ6AEwCXoECAgQAQ#v=onepage&q=fewer%20steps%20enhances%20usability&f=false
- [2] Aurora Harley “Icon Usability.” Nielsen Norman Group, 27 July 2014,
www.nngroup.com/articles/icon-usability/.
- [3] Nielsen, Jakob. “Powers of 10: Time Scales in User Experience.” Nielsen Norman Group, 4 Oct. 2009, www.nngroup.com/articles/powers-of-10-time-scales-in-ux/.

References (continued)

[4] M4 Leaderboard: http://ug251.eecg.utoronto.ca/ece297s/contest_2020/