CS106S: Week 5

Safe Google Maps

Download the starter code:
bit.ly/gmaps-code

Follow the slides:
bit.ly/gmaps-slides

Plan For Today

1) Recap of Warmup Assignment

2) Coding

3) Analysis

4) Coding Pt. 2

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Inspiration

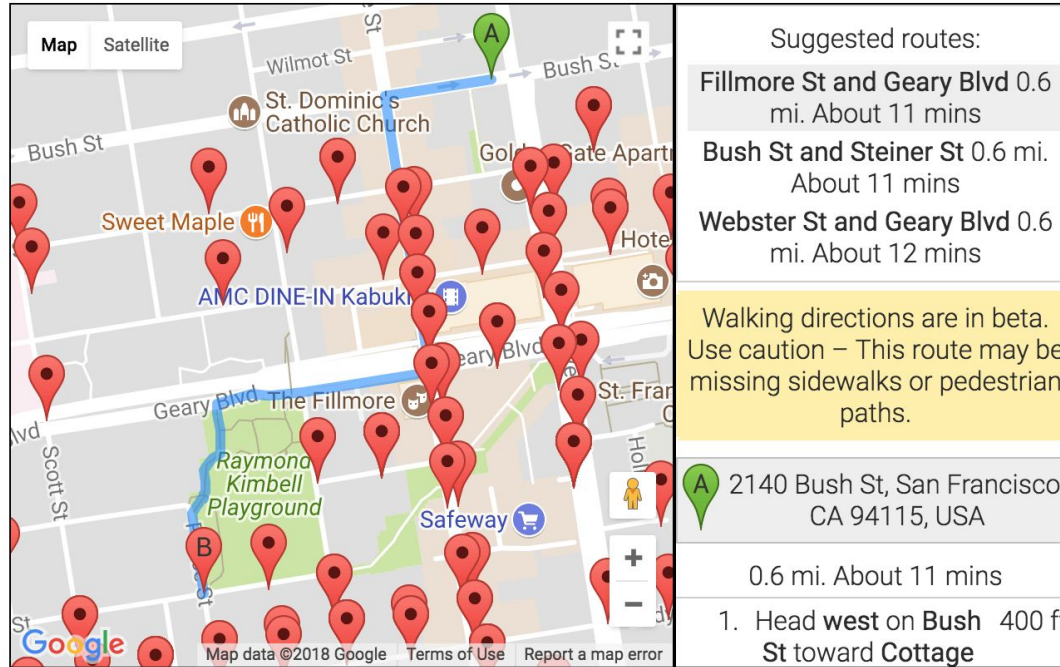Google Maps is super great!!!! but…….

Ethics?

Something to consider as we do this assignment

The Warmup

Safety Score (lower = safe, higher = risky):

0

index.html

Suggested routes:

Fillmore St and Geary Blvd 0.6 mi. About 11 mins — 1

Bush St and Steiner St 0.6 mi. About 11 mins — 2

Webster St and Geary Blvd 0.6 mi. About 12 mins — 3

Walking directions are in beta. Use caution – This route may be missing sidewalks or pedestrian paths.

A 2140 Bush St, San Francisco, CA 94115, USA

0.6 mi. About 11 mins

1. Head **west** on **Bush** St toward **Cottage** 400 ft

Safety Score (lower = safe, higher = risky):

0.64

The Goal:
Calculate the "Safety Score" for each possible route given
Lower Score = Safer, Higher Score = "Riskier"

Let's Talk A Basic Approach...

And then y'all will get a crack at this

Safety Score (lower = safe, higher = risky):

0

Any ideas?

Suggested routes:

Fillmore St and Geary Blvd 0.6 mi. About 11 mins

Bush St and Steiner St 0.6 mi. About 11 mins

Webster St and Geary Blvd 0.6 mi. About 12 mins

Walking directions are in beta. Use caution – This route may be missing sidewalks or pedestrian paths.

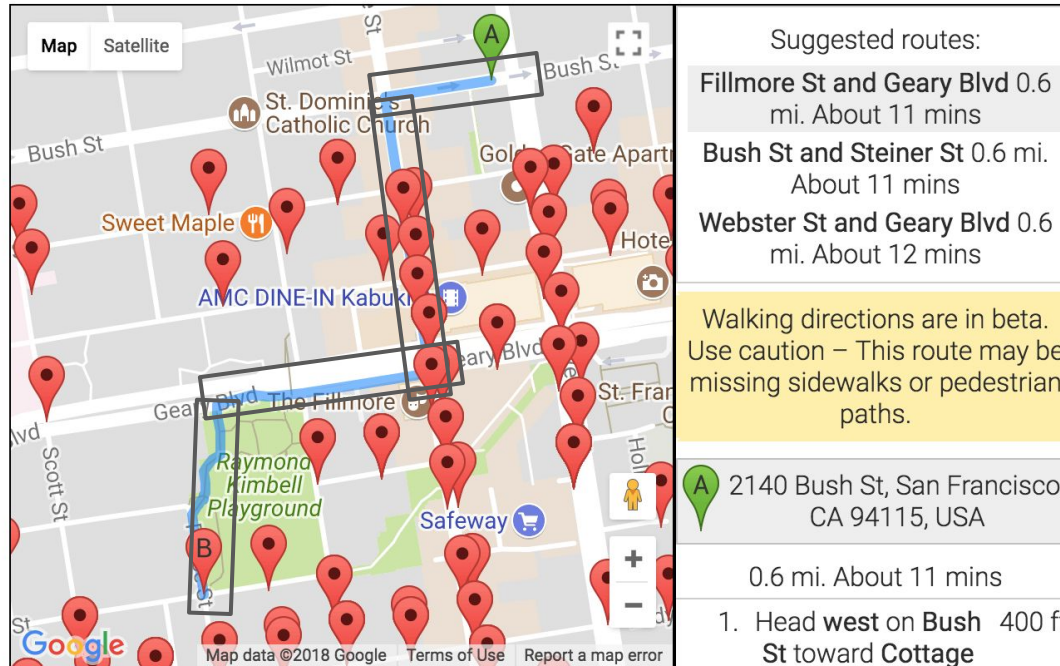Ⓐ 2140 Bush St, San Francisco, CA 94115, USA

0.6 mi. About 11 mins

1. Head **west** on **Bush** 400 ft St toward **Cottage**
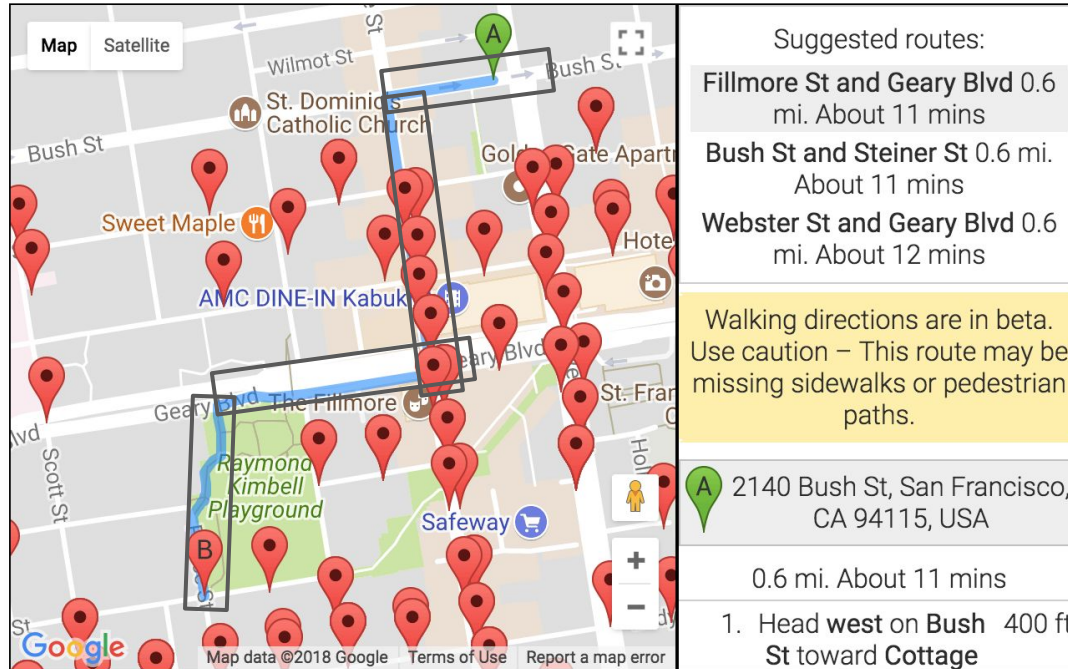
Safety Score (lower = safe, higher = risky):

0

Hint: Latitude and Longitude are practically coordinate points.

Safety Score (lower = safe, higher = risky):

0

1.   Create coordinate boxes for each leg of the route

Suggested routes:

Fillmore St and Geary Blvd 0.6 mi. About 11 mins

Bush St and Steiner St 0.6 mi. About 11 mins

Webster St and Geary Blvd 0.6 mi. About 12 mins

Walking directions are in beta. Use caution – This route may be missing sidewalks or pedestrian paths.

A 2140 Bush St, San Francisco, CA 94115, USA

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1. Head **west** on **Bush** St toward **Cottage** 400 ft
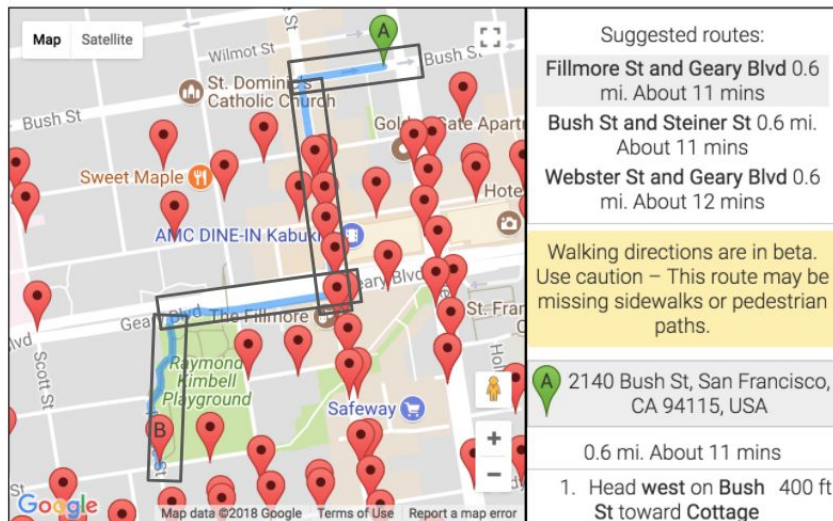
Safety Score (lower = safe, higher = risky):

0.64

2. Count the number of past crimes in that box

Safety Score (lower = safe, higher = risky):

0

1. Create coordinate boxes for each leg of the route

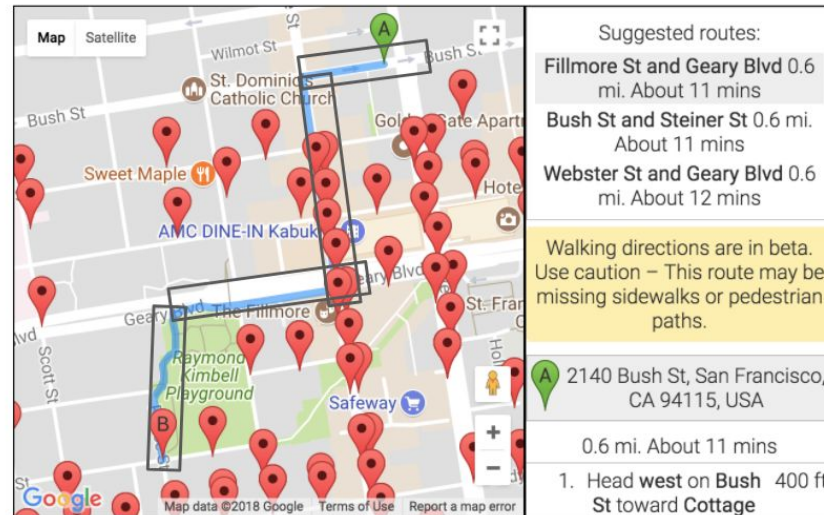Safety Score (lower = safe, higher = risky):

0.64

2. Count the number of past crimes in that box

Try that!

Today's Assignment:
The "Real" Safe Google Maps!

- The warm-up from last week was honestly this week's assignment

- Differences:
  - This week, your solution won't be just for a fixed path.
    It will be for ANY route in SF (see demo)!
  - Upon completing the assignment (if we do), your goal will be to make Safe Google Maps better than it already is……. Because honestly right now it's fairly basic
  - We will work together to do all this!

Let's get coding

bit.ly/gmaps-code

Analyzing Our App So Far

Q1: Do you see this as being useful?

Analyzing Our App So Far

Q2: How can we improve this application? In other words, in what ways does it suck in its current state and how can we improve it?

Remainder of Class: Free For All

Your Final Goal: Look into possible extensions and implement/try to implement a feature that would augment our current app.

Check-Off

bit.ly/gmaps-checkoff