



TAMU Transit

Scrum Squad

Cole Bui, Alizain Ali, Edgardo Garcia, Emmanuel Oyervides, Erik Swanson, Jose Garza



Introduction

- Searching for your bus route can be hard and tedious

Off Campus

All

Off Campus

12

Reveille

12-25

Nights & Weekends

15

Old Army

22

Excel

25

Centerpole

26

Rudder

27

Ring Dance

31

E-Walk

34

Fish Camp

35

Hullabaloo

36

Cotton Bowl

40

Century Tree

47

RELLIS

N15

Thursday & Friday

On Campus

All

On Campus

01

Bonfire

01-04

Nights & Weekends

02

Replant

03

Yell Practice

03-05

Nights & Weekends

04

Gig Em

05

Bush School

06

12th Man

07

Airport

08

Howdy

Jyotikrishna Dass's Goals and Visions

- Similar to Google Maps layout
- Integrate TAMU bus routes to our search
- Handicap Accessibility routes (less walking)
- Easy to use UI



Golden Gate Bridge, San Francisco, CA

Chinatown, San Francisco, CA

Leave now

OPTIONS

Send directions to your phone

1:13 PM—2:15 PM

1 h 2 min

>

>

>

30

>

>

1

1:39 PM from Alexander Ave & Bunker Rd

\$10.00

28 min

DETAILS

1:13 PM—2:26 PM

1 h 13 min

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>

>

30

>

>

8

1:13 PM—2:32 PM

1 h 19 min

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30

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>

49

>

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8

1:44 PM—2:55 PM

1 h 11 min

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>

>

92

>

>

1

SCHEDULE EXPLORER

Explore Chinatown

Groceries

Takeout

Pharmacies

Hotels

More

A map of San Francisco showing a route from the Golden Gate Bridge to Chinatown. The route is highlighted in blue and passes through the Presidio, Crissy Field, and the city center. Key locations marked include the Golden Gate Bridge, Battery Spencer, Fort Point National Historic Site, Golden Gate Bridge Welcome Center, Marshall's Beach, Baker Beach, China Beach, Presidio of San Francisco, Presidio Golf Course, Crissy Field, The Walt Disney Family Museum, Cow Hollow, Russian Hill, North Beach, Jackson Square, and Chinatown. The route is labeled with a duration of 1 h 11 min. A small inset map shows the route from Alexander Ave & Bunker Rd to the Golden Gate Bridge, with a duration of 1 h 2 min. The map also shows various landmarks and streets, including the Golden Gate, Marin Headlands, Alcatraz Island, and the Embarcadero.

Our Application



Walking Routes

The screenshot displays a Google Maps interface with a walking route highlighted in blue. The route starts at point A (Beutel Bus Stop) and ends at point B (Reed Arena). The map shows various campus landmarks, including the Academic Plaza, Memorial Student Center, and Reed Arena. The left sidebar contains the following information:

- Transportation mode: Walking (indicated by a pedestrian icon).
- Start location: Beutel Bus Stop, College Station, TX, USA.
- End location: Reed Arena, Olsen Boulevard, College Station.
- Date and time: 04/22/2020 05:05 PM.
- Destination: 1264 TAMU, College Station, TX.
- Mode: Walk.
- Estimated time and distance: About 17 mins, 0.9 mi.

The map data is from 2020, and the interface includes standard Google Maps controls like zoom in/out and a street view pegman.

Bike Routes

The screenshot displays the VeoRide mobile application interface. At the top, a red navigation bar contains icons for car, bicycle, pedestrian, wheelchair, and stroller. Below this, the app shows the start and end points of the route: "Zachry Engineering Center, Spence Street, College Station" and "Reed Arena, Olsen Boulevard, College Station". A date/time selector is set to "mm/dd/yyyy --:--". The VeoRide logo is visible in the bottom left of the red bar.

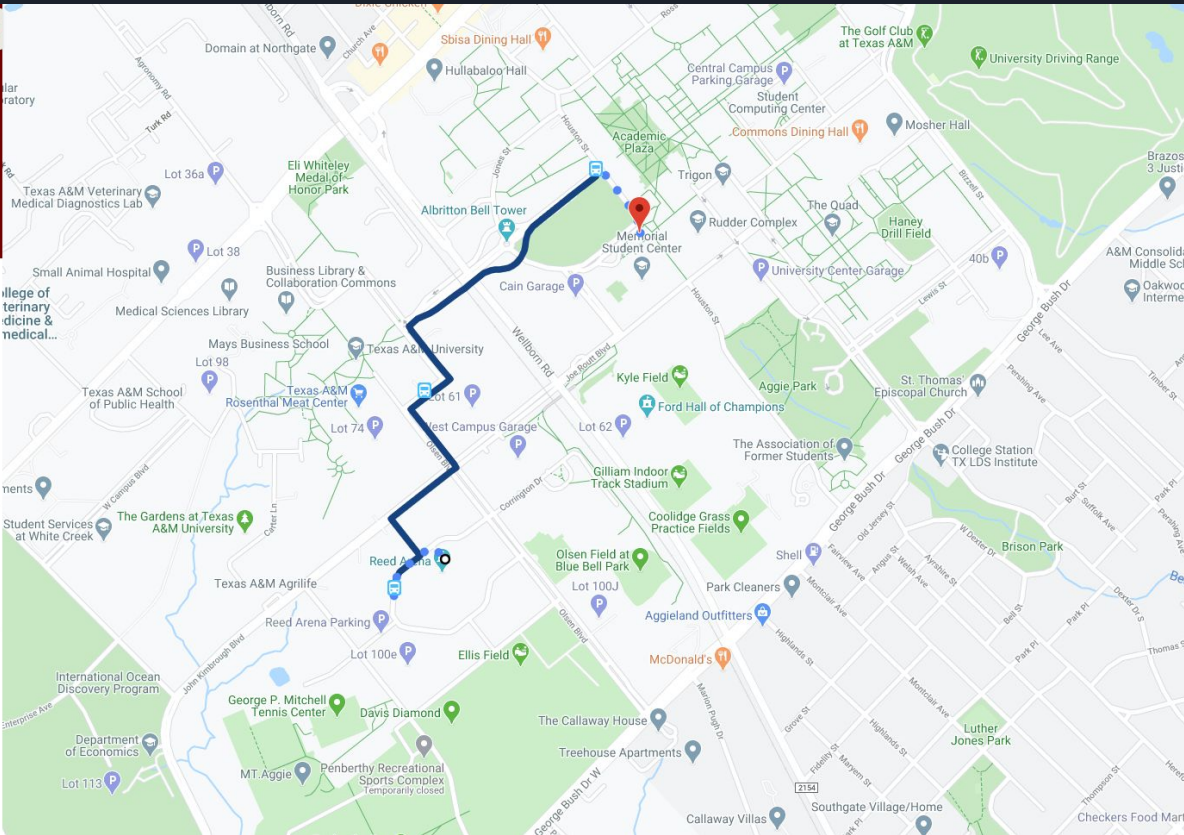
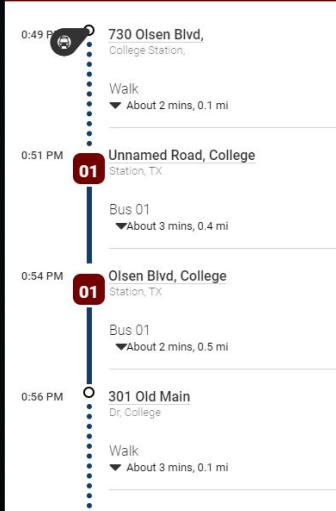
On the left side, a sidebar provides additional details: the start time is "7:45 PM", the destination is "Zachry Engineering Center, 125 Spence", and the mode is "Biking". It also indicates the estimated time and distance: "About 7 mins, 1.5 mi".

The main area is a map of the Texas A&M University campus. A blue line traces the recommended bike route from the Zachry Engineering Center (marked with a red 'A') to Reed Arena (marked with a red 'B'). The map includes various campus landmarks, buildings, and parking lots, such as the Student Center, Mays Business School, and the Reed Arena. The map is overlaid with a grid of streets and green spaces.

Car Routes

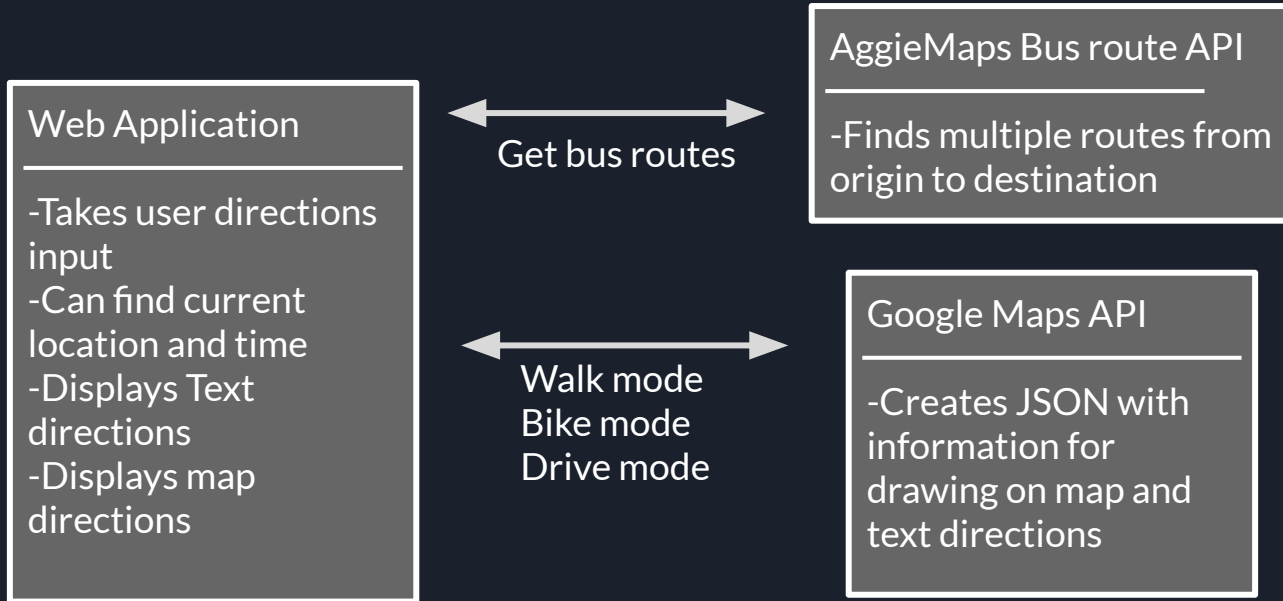
The screenshot displays a Google Maps interface with a red sidebar on the left and a map on the right. The sidebar contains a navigation menu with icons for car, bicycle, pedestrian, and wheelchair. Below the menu, there are three input fields: the first contains 'Zachry Engineering Center, Spence Street, Colleg', the second contains 'Reed Arena, Olsen Boulevard, College Station', and the third is a date/time selector 'mm/dd/yyyy --:-- --'. Below these fields, a car icon is shown with the text '7:43 PM' and 'Zachry Engineering Center, 125 Spence'. A 'Drive' button is visible, followed by the estimated travel time and distance: 'About 8 mins, 1.4 mi'. The map on the right shows a blue route starting at point A (Zachry Engineering Center) and ending at point B (Reed Arena). The map includes various landmarks and buildings, such as the Texas A&M University campus, the Reed Arena, and the Zachry Engineering Center. The map is zoomed in on the area around the Reed Arena and the Zachry Engineering Center.

The screenshot displays the VeoRide mobile application interface. On the left, a dark red sidebar contains navigation icons for car, bicycle, pedestrian, and wheelchair. Below these, a white text box shows the destination: "A.P. Beutel Health Center, Houston Street, College". Another white text box shows the starting point: "Reed Arena, Olsen Boulevard, College Station". The current time is displayed as "04/21/2020 05:02 PM". The VeoRide logo is visible at the bottom of the sidebar. The main area of the app is a map of the Beutel Health Center area. A blue line indicates the route from the Reed Arena to the Beutel Health Center. The map includes labels for various locations such as Texas A&M University, College of Veterinary Medicine, and the Reed Arena. The app also shows the current time as 5:02 PM and the estimated travel time as about 10 minutes.





Design Schema





Design Challenges

- Google Maps Transit API not public access
- A&M bus system not open to public, only students and faculty
- Veorides API not being public




Proof of concept










- Developed two routes
- Uses departure time
- Uses values from Aggie Map time table
- Calculates shortest bus route to take

Sponsor feedback

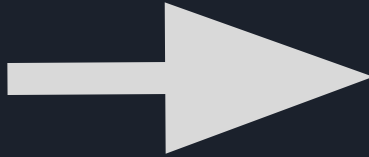
Bicycling directions are in beta. Use caution – This route may contain streets that aren't suited for bicycling.


 Zachry Engineering Center, 125 Spence St, College Station, TX 77840, USA

0.8 mi. About 4 mins

1.	Head southeast on Spence St	0.2 mi
 2.	Turn right	0.2 mi
 3.	Turn left	308 ft
 4.	Turn right	312 ft
 5.	Turn left	108 ft
 6.	Turn right	371 ft
 7.	Turn left toward Lamar St	112 ft
 8.	Turn right toward Lamar St	180 ft
 9.	Turn left onto Lamar St	0.1 mi
 10.	Turn left	157 ft

Destination will be on the right



8:4 PM 

153 Spence St,
College Station,

Walk
▼ About 6 mins, 0.3 mi

Head **southwest** toward **Spence St**

Turn **left** onto **Spence St**

Turn **left**

Turn **left** toward **Bizzell St**

Turn **right** toward **Bizzell St**

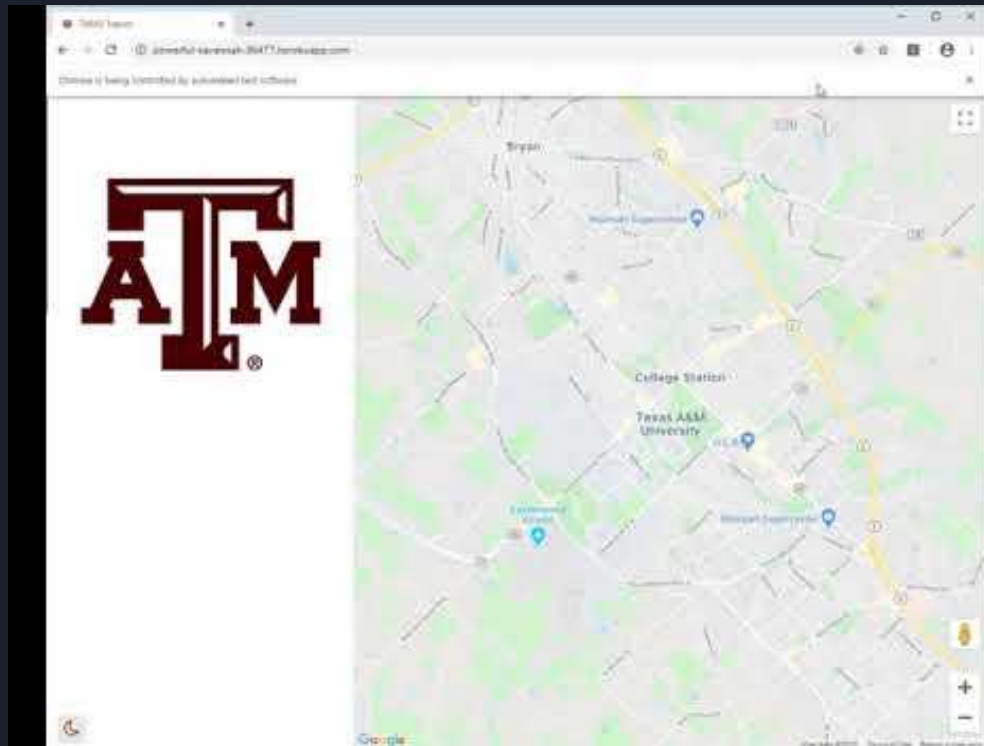
Turn **left** toward **Bizzell St**

Turn **left** onto **Bizzell St**
Destination will be on the right

Testing

- Selenium (Python)
- Unit_Test
- Testing all elements
 - Followed user stories as test cases flow

```
def test_walk_1(self):  
    map = AggieMap()  
    map.click_walk()  
  
    map.send_start('Zachry')  
    map.send_end("Mosher Circle")  
    map.send_date()  
    map.click_flip()  
    map.click_flip()  
    map.click_drop_down()  
  
    result = map.dir_visible()  
  
    self.assertEqual(result, 'Passed')
```





What we've learned

- Agile Process
- Importance of team oriented projects
- SAAS Web Development
- Heroku Deployment
- Collaborating on Github



Demo



Future work

- Develop a Readme file for future development
- Transfer control to transportation services or future students
- Implement Departure time to live A&M bus routes
- Implement Veoride option