

## EE/CprE/SE 492 Biweekly Status Report 6

11/9/19 – 11/22/19

Group number: sddec19-22

Project name: Vehicle-Operator Behavior Monitoring System

Client & Advisor: Andrew Guillemette & Daji Qiao

### Team Members/Roles:

Andrew Damon

Freya Gaynor

Skand Gupta

Sydney Ehlinger

### Biweekly Summary

Past two weeks have been repriorizing what we want to get done before the end of the semester with our client. We have added two new pages, one page is a list of the drivers in the system and the other is a driver's details page showing more information about the driver and details about their trips.

On our map, the color of the segment now correlates to their scores. We have also been working on getting our database set up to handle multiple laps, as we only have one lap in right now.

The next couple of weeks will be working on a couple of remaining requirements we want to get implemented and working on our final report, poster, and presentation to wrap up the semester.

### Screenshots



# KeepVSafe

HELPING DRIVERS SINCE 2019

Our project will help make buses safer by monitoring bus drivers for complacent driving that could eventually lead to an accident. Using data collected from the bus, we will look to identify bad trends/behaviors and correct them before an

Figure 1.1 - New homepage

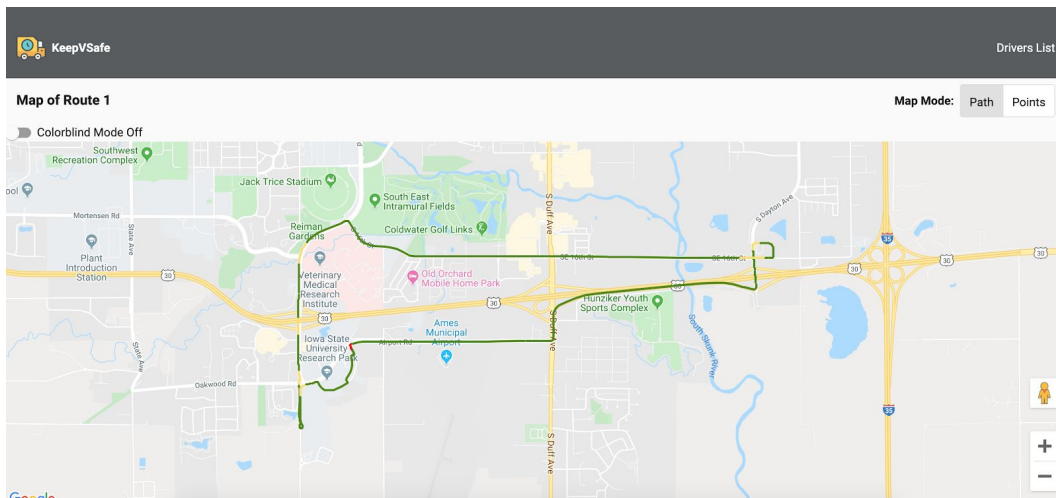


Figure 1.2 - Displaying the route, now has a color blind option, and segment's color now changes with the score. Upper right corner has a link to the drivers page

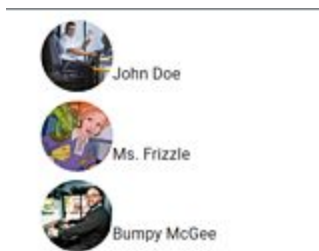



Figure 1.3 - Drivers list displays a list of driver with their picture

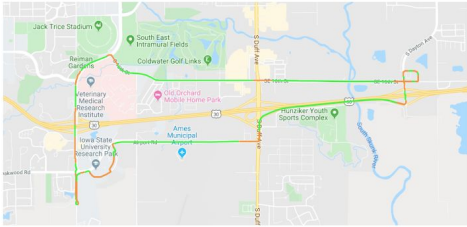


**John Doe**  
ID: 1  
Overall Grade: 95%

**Segment Scores from Most Recent Trip**

| Segment ID | Score       |
|------------|-------------|
| 0          | 98.26766461 |
| 1          | 100         |
| 2          | 79.71849465 |
| 3          | 93.67616297 |
| 4          | 90.16995931 |
| 5          | 92.52910637 |
| 6          | 93.35847243 |
| 7          | 100         |
| 8          | 97.5237954  |
| 9          | 99.80581799 |
| 10         | 88.15968597 |
| 11         | 100         |

**Map of Most Recent Trip**



**Previous Trip Data**  
Dates of all the trips that you can click on and see previous data

**Figure 1.4** - Drivers details page shows details about the driver and their segments scores from their most recent trip. A map of this trip is also shown.

### Past 2 Weeks Accomplishments

- Andrew Damon: Created the homepage, set up the avatars for the drivers, started removing unnecessary raw data so that the important info easily recognizable at a glance, and made the segments' colors based off its grade. The map segments also have an option for the highlighted segment to use colorblind colors.
- Freya Gaynor: Determined requirements for remaining deliverables, reviewed codebase and cleaned up bugs, and setting up database to handle multiple laps.
- Skand Gupta: Came up with a rough design for the lap vs lap page.
- Sydney Ehlinger: Drew mock ups for drivers list and drivers details page. Started implementation on these two pages. Started working on data that will be hard coded in for the demo.

### Pending Issues

- Andrew Damon: The master CSS may have been overridden when avatars were added, so there are a few CSS bugs.
- Freya Gaynor: Load in remaining CSV data and get averages together. Set up a navigation menu for the new pages.
- Skand Gupta:
- Sydney Ehlinger: None.

### Individual Contributions

| Name         | Individual Contributions  | Hours This 2 Weeks | Hours Cumulative |
|--------------|---|--------------------|------------------|
| Andrew Damon | Created the homepage, set up the avatars for the drivers, started removing unnecessary raw data so that the important info easily recognizable at a glance, and made the segments' colors based off its grade. The map segments also have an option for the highlighted segment to use colorblind colors. | 14                 | 44               |
| Freya Gaynor | Determined requirements for remaining deliverables, reviewed codebase and cleaned up bugs, and setting up database to handle multiple laps.   | 10                 | 40               |
| Skand Gupta  | Worked on dynamic charts and looked into creating a page for lap vs lap comparisons   | 10                 | 38               |

|                 |  |    |    |
|-----------------|--|----|----|
| Sydney Ehlinger | Mock ups for drivers list and drivers details page. Started implementation on these pages. Started work on data that will be hard coded in for these pages for the demo. | 11 | 37 |
|-----------------|--|----|----|

### Plans for the Upcoming Week

- Andrew Damon: To fix the CSS and help Skand integrate the graphs of the raw data.
- Freya Gaynor: Load in remaining CSV data and get averages together. Set up a navigation menu for the new pages. Start work on poster/final report/presentation. Work on application ease-of-use and planned demonstration.
- Skand Gupta: Get more details about the lap comparison page
- Sydney Ehlinger: Finish up driver list and driver details pages. Start work on poster, final report, and presentation.