**Temp Name: Find My Bus Stop**

**Description:** This web site would allow for admins to use a website to create a database of States, School Districts, Schools, and Bus Routes.  This will allow school admins or the bus company to register for an account, and once approved, enter the bus number, the stops, the time and routes each school bus takes for that school.  Then students and/or parents go browse to the web page front end, and search for their school and then based on their geolocation or entered address, the program will check with the database to find the close bus stop and provide walking/driving directions for the student from their location to their closes bus stop for their school.

**Non-functional requirements:** This would be an HTML5 based web app with a backend web based SQL database such as MySQL

**Database elements:** STATE, SCHOOL\_DISTRICT, SCHOOL\_NAME, SCHOOL\_ADDRESS, SCHOOL\_PHONE, SCHOOL\_ADMINISTRATOR\_NAME, SCHOOL\_ADMINSITRATOR\_EMAIL, SCHOOL\_ADMINISTRATOR\_PHONE, SCHOOL\_BUS\_NUMBER, SCHOOL\_BUS\_NUMBER\_STOP\_ADDRESS, SCHOOL\_BUS\_NUMBER\_TIME

**Committed 5 user stories for Iteration 1**

All pages, User stories need to be finished by Sunday 10-26-2014 11:00pm.

Monday 11-27-2014, we will do integration.

Tuesday we will test everything, and add unit test if possible.

Wednesday night: quick 20 minute phone meeting to prepare for presentation.

Page: User.html

Assigned: Scott and CJ **[1]As a Student/Parent, I want to search for my school in my state and school district, so that I can search for the bus stops.**

1) Ali's section will test connectivity to the database via unit test (test writing, reading, modifying, and deleting)

2) Ali's php or Javascript will connect to DB and load states in the table then populate Scott/CJ's State drop down list.  This drop down will have a listener for the user to click and select a state

3) Once the user selects a state, the listener will query the database for the districts in that state, and it will populate and show the District selection drop down.  This drop down will also have a listener for a selection

4) Once the user selects a district, the listener will query the database for the schools in that district, and populate them on a drop down then show the drop down list

5) Once the user selects a school, the listener will query the database for the buses and bus stops for each bus for that school, then show and display them in a list.

Page: user.html lower section hidden initially until school is chosen

Assigned: Marlon

**[2]As a Student/Parent, I want to find the Closest Bus Stop to my address so that I know which bus to take at what time. (Marlon)**

6) The user will then have the ability to enter their address in a text box to search for the closes bus stop to that address.

7) Javascript will use the loaded bus routes for that school, and use Google Maps api to find the closes bus stop, and display the Bus number, Bus stop address, and Bus stop time to the user.

Page: user.html

Assigned: Marlon

**[3]As a Student/Parent, I want to Display Bus Stops on a map so that I can see how close they are. (Marlon**

8) A google map will appear and show markers for the user's entered address, and the bus stops within 1-2 miles of that address.

Page: login.html

Assigned: Scott, CJ

**[4]As a Webmaster, I want to login to the Dashboard, so I can manage districts, schools, and bus routes.**

9) A login.html will allow the administrator to enter an user name and password that will query the database, and check the credentials, if successful it will load admin.html (no session keepalive or auth after this for now)

Page: admin.html

Assigned: Scott, CJ

**[5]As a School Administrator, I want to manage Bus Stops so that I can add, remove and modify them.**

10) An admin.html page will have a similar interface to steps 1-5 above, and then allow the admin to enter Bus Number, which then will have entries for Bus Stop Time, Bus Stop address, and enter as many as needed, then save them to the database.   This User story should have connectivity to DB.

# User Stories

As a School Administrator, I want to register for a School Account so that I can manage the bus stops.

**As a School Administrator, I want to manage Bus Stops so that I can add, remove and modify them.**

**As a Webmaster, I want to login to the Dashboard, so I can manage districts, schools, and bus routes.**

As a Webmaster, I want to Manage School Accounts so that School Administrators can manage bus stops for their schools.

**As a Student/Parent, I want to search for my school in my state and school district, so that I can search for the bus stops.**

**As a Student/Parent, I want to Display Bus Stops on a map so that I can see how close they are.**

**As a Student/Parent, I want to find the Closest Bus Stop to my address so that I know which bus to take at what time.**

As a Student/Parent, I want to get directions from the closes bus stop so that I can walk or drive there.

As a Student/Parent, I want to print directions to the bus route so that I can talk them with me.

As a Student/Parent, I want to email directions to the bus route so that I can have them on my phone.

**Agile Programing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sprint** | **From** | **To** | **Task** | **Assigned** |
| 1 | 9-25-14 | 10-1-14 | 1. **Setup Admin Page**    1. Create login page with static credentials    2. Create editable dropdown list for State, school district, school names, school administrator, saved to a temp list    3. Hard code 2 values for each item 2. **Setup User Page**    1. Create user front end with down list of hard coded 2 hard coded items    2. Set screen dimensions to be dependent on device size (cross platform)    3. Put map place holder on school 3. **Setup Database, and Integrate**    1. Setup MySQL DB on webhost    2. Create database tables to use    3. Test integration by passing static info 4. **Setup** [**Google Maps API**](https://developers.google.com/maps/documentation/javascript/tutorial)    1. Get Google Maps API key    2. Test displaying cross streets on map using API    3. Test getting directions from 2 addresses |  |
| 2 | 10-2-14 | 10-8-14 | 1. **Update Admin Page**    1. Create editable dropdown list for State, school district, school names, school administrator, saved to variables    2. The variables should call function to write and read from MySQL 2. **Update User Page**    1. Read variables from MySQL and display on drop down list    2. Add Display Bus stops button, show map 3. **Connect Database**    1. Create function to query database and read data    2. Create function to query database and write data    3. Update functions to pass variables 4. **Setup** [**Google Maps API**](https://developers.google.com/maps/documentation/javascript/tutorial)    1. Test geolocation for PC    2. Test geolocation for mobile    3. Get directions from geolocation to static address   Setup School Administrator page |  |
| 3 | 10-9-14 | 10-15-14 |  |  |
| 4 | 10-16-14 | 10-22-14 | 1. Setup School Administrator page    1. Create registration and login pages    2. Setup Administrator confirmation    3. Login page should allow to enter info for registered school only |  |
| 5 | 10-23-14 | 10-30-14 | Test and debug sections |  |
| 6 | 10-31-14 |  | Continue feature development |  |
|  |  |  |  |  |

**Ideas for expanding the scope**

1. Setup School version, in which a new School database would host student information including home address and email address
2. The school administrator can choose to select a list of students and in a batch get the bus stop for each student and notify the students via email of the new bus route for the beginning of the year