

The background of the slide features three horizontal, overlapping brushstrokes in a vibrant green color. These strokes are contained within a white rectangular frame that has a thin border. The overall aesthetic is modern and artistic.

# **BullTracker Application**

The Disambiguators

Motto: *"Don't be boring"* -H2

A large, diagonal green brushstroke graphic that spans across the left side of the slide, partially overlapping a white rectangular frame.

## **Business Problem**

Students and staff are struggling to navigate and find their routes on the Bull Tracker in the MyUSF application and are opting to drive to campus rather than use the Bull Runner.

A large, diagonal green brushstroke graphic that serves as a background for the 'Motivation' section header.

## **Motivation**

Users can confidently navigate the system for a more user-friendly experience, thus leading to more Bull Runner users and reducing University costs.

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## User Story

- My name is Jordan and I am a new USF student who does not know what bus route I am supposed to use and therefore drive from my apartment to campus.
- My name is Rachel and I know which route I am supposed to ride but am frustrated from constantly checking the bus ETA and wish there was a way to schedule my normal transit to school

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## **Solution Requirements**

1. Customizable schedules to automatically select routes, time, and destination
2. Search option so find a specific bus
3. Notify users of reminders, delays, and ETAs

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## **Hardware, Software, & Network Specifications**

### **Development**

JustInMind: used for BullTracker wireframes/ User Interface

For Apple Devices: the basic tool is Xcode

For Android Devices, Windows OS: the common tool for software development is Android Studio.

### **Deployment**

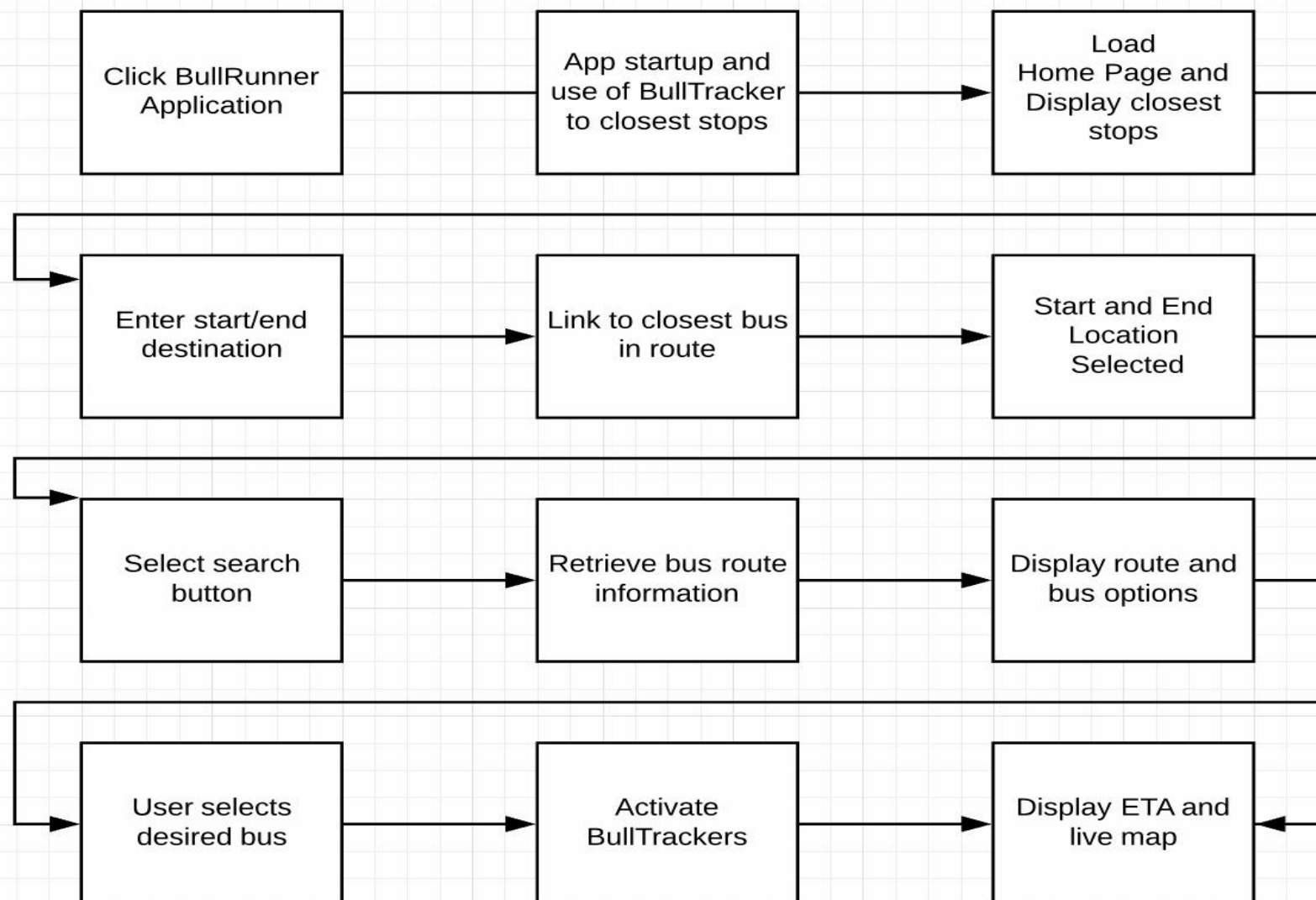
Antivirus Software: McAfee Endpoint Security

Debugging: Bugit (iOS) PocketBugz (Android)

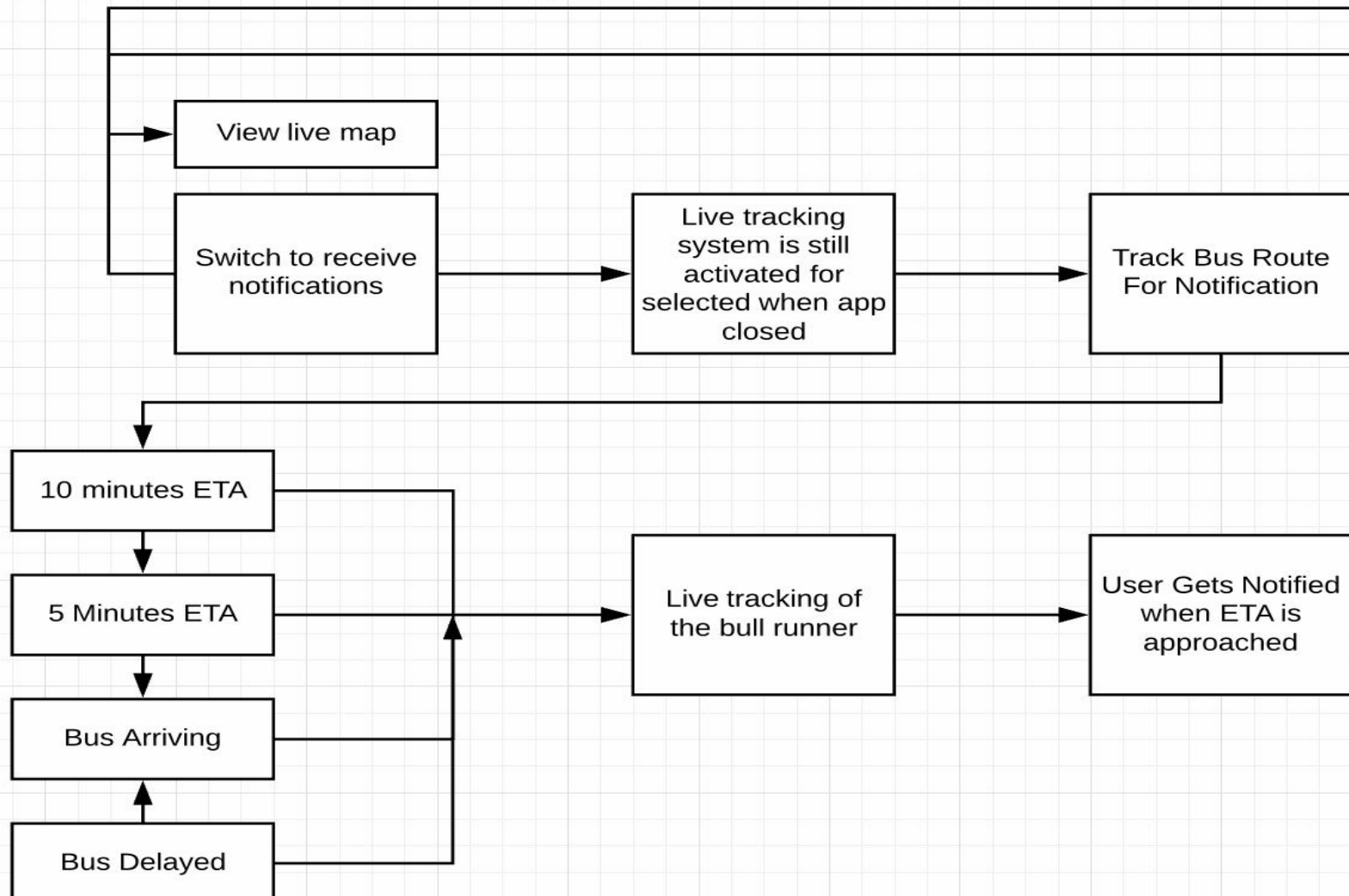
System powered by GMV-Synchromatics

Housed in the USF IT Data Center

42U Universal Server Racks



# Bull tracker GPS system





Assignment title

System Specification Review

Project

USF BullRunner

# BullTracker Requirements Cost Modeling

## BUS SELECTION

- \* Current Location
- \* Destination Entry

**Feature : Map Integration**  
Time: 18h  
Cost: \$900

**Feature : Detect User Location**  
Time: 11h  
Cost: \$550

**Feature : Set pickup Bus Stop**  
Time: 17h  
Cost: \$850

**TOTAL : \$2,300**

## NOTIFICATION SYSTEM

- Triggered Alert
- Push Notifications
- Live feed Tracking

**Feature : Push Notification**  
Time: 40h  
Cost: \$2,000

**Feature : SMS Integration**  
Time: 40h  
Cost: \$1,500

**TOTAL : \$3,500**

## ROUTE SCHEDULER

- Schedule Repeat
- BullRunner ETA

**Feature : Route Scheduling**  
Time: 110h  
Cost: \$5,500

**TOTAL : \$5,500**

## USER LOG ON

- User ID and Password
- Database

**Feature : Profile Screen Integration**  
Time: 32h  
Cost: \$960

**Feature : Database**  
Time: 15.4  
Cost: \$770

**TOTAL: \$1730**

Time: labor- HOURS  
Cost: DOLLARS

## Application Components Estimation

Components	iOS Application	Android Application
Backend	\$5,000	\$5,000
Development	\$10,000	12,000
Design/ FrontEnd	\$9,000	\$11,000
Quality Assurance/ PM	\$6,000	\$7,000
TOTAL	\$30,000	\$35,000

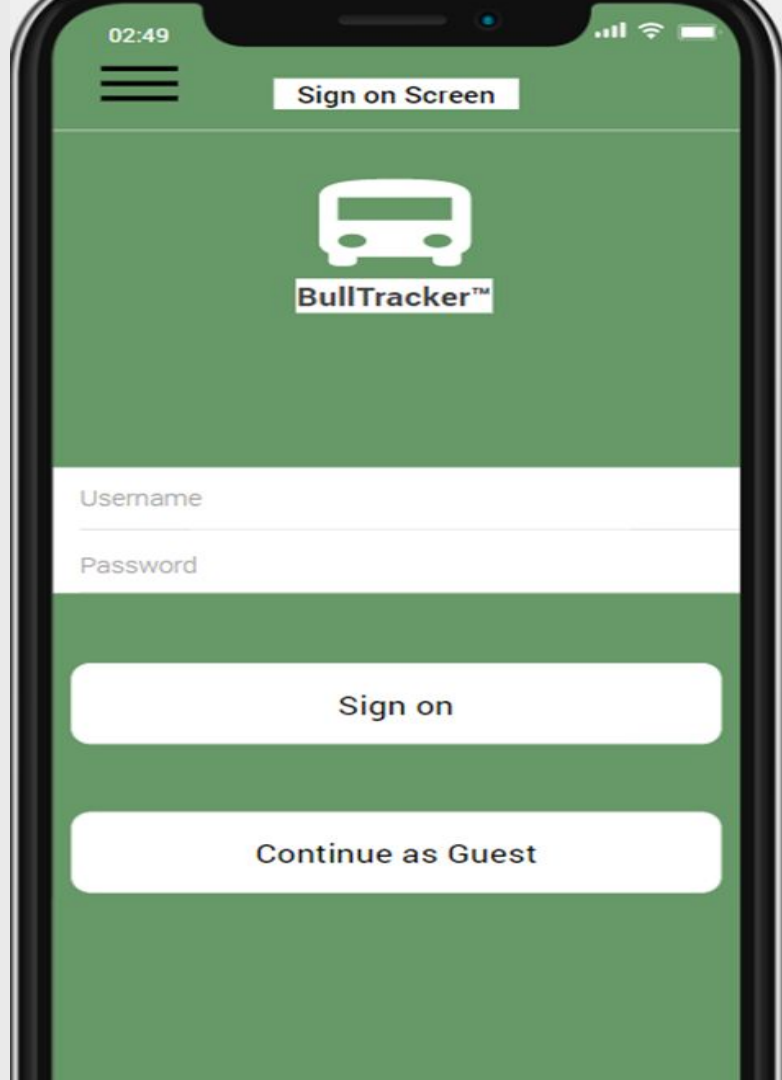
## Approximate UI/UX design Cost

FEATURE	Time	Cost
Android UI/UX design	110h	\$5,500
iOS UI/UX design	130h	\$6,500
TOTAL	240h	\$12,000



## **User Acceptance Test**

- ✓ Re-engineered Independent Application
- ✓ The Bull Trackers' GPS system is synced with the user
- ✓ Live Map button feature is available to watch the bus move to its destination.
- ✓ The user will be notified whenever the bus has a delay, driver break, and most importantly when their bus will be arriving.
- ✓ Users have the option to sign on with a username and password or continue as a guest. If user does sign-on, user is granted access to use the Scheduler.\
- ✓ An enabled switch allows the customizable schedule to be repeated either every day, every week, or every 2 weeks.



21:41



## Nearby and Recommended Stops

Arriving 0.07 Miles Away | Route D: Library

4 min 0.07 Miles Away | Route A: Library

18 min 1.20 Miles Away | Route C: MSC

Start Location:

Destination:

## Select Available Buses

Routes: 

Bus 123 | ETA 4:15 in 11 min

Track Recieve Notifications



Bus 456 | ETA 4:30 in 26 min

Track Recieve Notifications



01:39



## Scheduler

Start Location: Destination: 

Depart Time: Dec 9, 2019 12:00 - 12:30

Return Time: (Optional) Dec 9, 2019 6:00 - 6:30

Repeat:



Never ☒

Every Day

Every Week

Every 2 Weeks

Every Month

Every Year

Custom >





# Fond Farewell

Goodbye from your team The  
Disambiguators!

