

# RaiderNAV

Category: Education applications

## General Overview and Application Description

The **RaiderNAV** app is intended to provide college students at Texas Tech University with a better way to find their classes, navigate through campus, and schedule their day. This app is motivated by current troubles faced by students at TTU--especially freshmen--with finding the buildings to their classes in the first days of school terms. This problem is caused by the fact that TTU has a very large campus, and because class schedules unhelpfully only provide the names of buildings (sometimes even as acronyms!) where a student's classes are. TTU currently employs two resolutions for this problem: 1) a static map on the official TTU app and website, and 2) a touch-screen device in the Student Union Building which only shows you directions from the Student Union Building to campus buildings of your choice. These resolutions can be improved upon.

The **RaiderNAV** app will allow students to input their schedules in order to generate active, GPS-supported navigation maps with the shortest walking directions to all of their classes, in order, from wherever they are. The app will translate those cryptic building names and acronyms into easily-understood destinations on the map. Because students do not generally have the same schedule every day, students will be able to save multiple schedules and refer back to them quickly. The schedules can be easily deleted or edited by the student as needed. The app will also be conscious of time, prioritizing showing directions to classes which are not yet out for the day, but also giving students the option to show all directions. The app will also keep the student informed about the estimated travel time to class from their current location and the amount of time before class begins, and display warning notifications (configurable by the student) if the student is in danger of running late. The app will also support dynamic scheduling situations, like temporarily fitting other destinations between classes or disabling map paths and notifications for classes which the student marks as cancelled for the day.

## General Overview of Similar Apps

### Google Maps

Google Maps is a standard in real-time GPS navigation. It comes with support for traffic condition information, using public transportation, adding pit stops along your route, discovering nearby places supported with reviews and detailed business information, and can even work without an internet connection.

However, Google Maps is not tailored to the specific problem addressed by **RaiderNAV**. Students do not generally know the addresses of the buildings on their schedule, and sometimes not even the names of the buildings when they are presented on their schedules as acronyms. Even armed with this information, the student must tediously input their destinations one by one. Google Maps does not keep track of class times or keep the student helpfully informed about their danger of running late for class. **RaiderNAV** makes keeping track of entire class schedules with time-conscious GPS navigation much easier for the TTU student.

## Texas Tech Mobile

Texas Tech Mobile is the official app of TTU. It provides such features as keeping track of athletics schedules and scores, checking class registration status, directory search by first and last name, a map of dining locations, a campus map, a list of events from the TTU calendar, news from TechAnnounce and the Daily Toreador, the ability to browse the library catalog, and access to emergency contact information.

Unfortunately, while the Texas Tech Mobile app is tailored to the students at TTU, the closest feature it offers to what is provided by **RaiderNAV** is a static map of the campus. The student who must rely on the Texas Tech Mobile app to quickly find a building is doomed to failure.

## My Class Schedule: Timetable

My Class Schedule features a color-coded timetable in either day or week view which shows a student their class schedule. It also shows the student an overview of their grades and mutes their phone during class hours. A widget will display all remaining classes for the day. The app will also remind the student about upcoming homework and exams. The paid version of the app supports cloud backup and provides two additional widgets: one a graphical timetable and the other for homework and exams.

Some of the features of My Class Schedule are outside the scope of **RaiderNAV**--namely tracking homework and exam deadlines and keeping track of student grades. Like our app, My Class Schedule keeps track of upcoming classes and reminds the student about them. However, unlike our app, My Class Schedule is not tailored to Texas Tech University, does not provide maps, and ultimately cannot help the student get to class on time if the student does not know where they are or where their class is. Because My Class Schedule does not support any map features, most of the functionality proposed in **RaiderNAV** is not available in My Class Schedule.