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***Titan’s Direct Mobile Application* Requirements Document Draft**

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# Introduction

The purpose of this document is to summarize the system requirements for the functions of the *Titan’s Direct Mobile Application*. In this document, you will find a detailed summary of various function requirements, along with diagrams outlining the utilities. The *Description Model* will describe the requirements for the system. The *Class Diagram* will outline all of the system’s objects, attributes, and known methods. The *Use Case Diagram* will review all of the uses of the system. The *Use Case Scenarios* will outline all of the possible activity events and any outlying conditions. Finally, the *System Sequence Charts* will provide sequence diagrams for each Use Case Scenario.

# Description Model

## Initial Requirements

Being a mobile application, the Titan’s Direct Mobile Application (TDMA) will operate on both Android and Apple systems, and has many requirements critical to the app’s design. The user of TDMA should have the ability to access the internet to access the Titan’s Direct systems, and have a currently undisclosed amount of available storage space to download the app from their respective app store.

## 

## Security

TDMA’s security works internally, as well as in conjunction with Count College of Morris’s (CCM) web security, to maintain a secure connection with the Titan’s Direct systems. Our application verifies users through their logins specific to the CCM systems, utilizing the same login system as the desktop website. The app’s map and calendar features are secured using Google’s privacy subsystems.

## Processes

### Login Screen

Upon opening the application, the user will be presented with a login screen. The user will input their login, which will contain the exact same credentials as their login to the desktop Titan’s Direct website. Upon inputting the correct username and password, the user will be redirected to the main menu.

At this time, there are no plans to include a feature to fast-track logging in for users who have used the app previously. Every time the app is opened, users will have to re-input their credentials to improve security within the app.

### Main Menu

The main menu is the initial tab presented to users upon a successful login. This menu includes access to the course schedule, grades, Campus ID, and the campus map. The Main Menu essentially acts as a hub the the TDMA, as well as grants the user the ability to get a sneak preview of any features coming to the application.

### Course Schedule/Calendar

From the main menu, users can select the Course Schedule menu. This menu will present users with several options and displays. The first is the time of the course, followed by the section number and course name. This section will also display the start and end date of each course, as well as allow for users to search for classes to add to their current or future semesters.

In addition to these functions, this menu will also have two additional redirects. One will download and upload a calendar file to Google Calendar, using Google’s proprietary calendar API. The second will redirect you to the Campus Map section of the application.

### Grade View

The second menu option available from the main menu is the Grades menu. This menu will show the user grades for the current term, including individual course grades, and the overall GPA for the term. The user will be able to select each individual course to view assignment grades, and provide the weighted grade for the class.

### Campus Map

The third menu option is the Campus Map menu. Once redirected from the Course Schedule menu, users can view a map of campus, which will use Google Maps’s API. The map will have a pin for the location of the class, and will offer basic directions for the user to follow from their current location to the classroom.

### Student ID

The final menu currently available to users is the Student ID section. Upon initially entering this menu, users will be prompted to upload an image of their Student ID card. Once uploaded, users will have the option to either view their card within the app, or update the digital ID card, returning to the initial process of uploading said card.

# Class Diagram

See included in folder for Class Diagram.

# Use Case Diagram

See included in folder for UCD

# Use Case Scenarios

## Role: Teacher

The professor will have access to a few areas within the app. The user will have access to input grades, another option to view all student grades for a course section, and find the location of the class, with the ability to also redirect to Google Maps to get directions to the classroom.

## Role: Student

The student will have access to the most functionality of the application. Just like professors, students will have access to the location of the class, with the same ability to get directions via Google Maps. Students will also be able to view their individual grades for each registered course.

Students will also have the ability to pay for their registered courses, receive any financial aid sent from the school, view their full course schedule, and view their uploaded Digital Student Identification Card.

## Role: School

While the school will not need to necessarily use the application directly, they can still send students financial aid, and receive money from students for their course payment. However, the school can perform this action from the desktop site, and will relay from the servers to display on the mobile application.

# System Sequence Charts

See included in folder for SSC