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*Team Titan*

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

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# Introduction (KG)

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 sufficient 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 be the 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 for 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 (AL)

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. Furthermore, there will be an option to display the current term courses on a calendar. This particular feature will leverage Google's Calendar API for its mobile friendly design and ease of use. In addition to these functions, this menu will also redirect users 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’ 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 rooms on campus .

### Student ID

The final menu item 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 folder for Use Case Diagram

# Use Case Scenarios

See included folder for Use Case Scenarios

# System Sequence Charts

See included in folder for System Sequence Charts