Introduction:

The purpose of this document is to summarize the design requirements for the functions of the CCM Student Aid application. In this document you will find a detailed summary of the function requirements as well as diagrams outlining different design utilities. The *Class Diagrams* will outline all the design objects, and their different methods and attributes. The *StateChart Diagrams* will model each object’s states in order in which they happen. The *First Cut Domain Sequence Diagrams* will display the “uses” of each system within a sequence.

Description Model:

1. Parking Lot Tracker
   1. The parking lot tracker’s function is to allow students and staff to find a parking spot easier. Instead of driving in and out of the parking lots looking for any parking spot at all, the app would notify you what lot has vacancies within it. It would work with counters at each entrance that would increment and decrement based on cars leaving the lot and manipulate the total number of spots available accordingly. This ties with the notifications part of the app because you can toggle times of day and certain days you would like to receive said notifications about parking.
2. Calendar
   1. The calendar’s function is to be used to clearly display important information and events for the students and staff on a calendar. Encapsulating the student’s schedule, due dates for classes, and general information such as opening for registration or club meetings, etc. The calendar draws from Blackboard, Tian’s Direct, and the CCM website. Again tying into the notifications, you can toggle what you would want to be displayed within the calendar temporarily for ease of view and permanently as a consistent point to return to when the app is closed and reopened.
3. Map
   1. The map’s function is to be used for ease of finding things on campus. Removing the unknown of where certain buildings are, what is contained within said buildings, where parking lots are, or even the location of the professor’s offices. The map will have hot spots on each building listing what is within the said building as well as a search function to find things quickly. The map will draw from general information, displaying a professor’s office hours, contact info, as well as where their office is located.
4. General Information
   1. General Information will take information from CCM’s website and display it in an easy-to-view format. General Information is any information any student should know such as hours of buildings, office hours and professor’s office locations, upcoming events, beginning and ending of semesters, etc. A quick search at the top will find any information needed that would take a long time to dig for on the CCM website. General Information shares information with different functions of the app to display anything that could be perceived as useful information to a student or staff member.
5. Notifications
   1. The notifications function will be a very user-friendly interface used to streamline the way the app runs for each individual using it. The user can toggle the app experience and choose what they can view and toggle off what they don't want to view. Club meetings and sporting events can be toggled on and off, and parking lot tracker notifications can be completely shut off, always on or you can choose a time frame or frames on certain days by which you want to receive notifications about it.