# Project Overview

The CaMS Maker Lab Scheduling System (CMLSS) enables Lewis University students to reserve time to use the Lab’s 3D printers. This can be done through a mobile-friendly website interface. The website will also display the full schedule for each printer, which will include open, reserved, and unavailable time slots.

Lewis University students must first register user accounts before reserving times in the CMLSS. The requirements for a user account will be a Lewis University email address, password, and verification of training in the use of a 3D printer. Because of this verification step, students will apply for an account via the CMLSS, and await acceptance. This process will be described more in-depth in chapter two of this document.

The software will also generate weekly usage reports of the 3D printers. The report will include the use time for each printer, printing materials used, the users that reserved time, which printer they used, and how long they used that printer. This scheduling information will be stored in a database and will be maintained through the website. Passwords for normal user accounts will not need to be stored in the database because each user will have the same credentials as their Lewis University email account.

Administrators, or admins, have special privileges. These accounts can set the times that printers are available for reservation. This means that admins can set the hours that the lab is open, and they can set when certain printers are available. Admins also have the responsibility of accepting or rejecting applications for user accounts and time slot reservations. Only administrators can register users and confirm time-slot reservations. This will all be done by the same website interface.

Requirements Modeling  
Select two functions from the project described above. Create use cases for each of these functions. Each use case should include a use case diagram, a list of pre-conditions, a list of post-conditions and any narrative to required to completely define the function. For one of the two functions, draw a sequence diagram. Be sure to include arrows that explain the sequence of actions and flow of information.

Requirements Prioritization  
Derive 3-5 user requirements for the project. Use AHP to prioritize these requirements. Show your work.