

**Overview of the Project:** Provide a **general description of the project**, its **purpose**, and its **context**.

The project is a lab equipment rental system that allows users to log on to an online website and create reservations for the equipment they desire. The reservations and usage logs of who used the equipment will all be handled internally by the system, and can be manually edited by a system admin with high tier credentials. Students and Researchers have the same level of clearance in the database and can rent any equipment that is available in the system.

**Problem Statement:** Clearly define the **problem your project addresses**.

Developing a secure and efficient way for students and researchers to reserve equipment with ease and no conflict. If equipment is broken and should not be used by another lab member, the online system for rentals and tracking equipment will display whether an item is broken or not, and can then be properly removed and disposed of instead of someone not knowing the equipment is broken- and mistakenly reserving it for a potentially risky experiment.

**Objectives and Scope of the Project:** Outline specific **goals** and **scope**.

The most important goal of this system is to effectively rent equipment and gear to any person who has logged onto the site and requested equipment that is available, and not rented by someone else. The scope of this project is somewhat limited in a grand scheme of who can access it, and the global usage of this system as it is only for a laboratory, designed to help with equipment rental, and tracking. Many people may be a part of the lab, and the database can hold a lot of records, but users that access this system will all be a part of the same category and in the same location at one time.

**Importance and Potential Impact:** Explain the **significance** and anticipated **impact** of the project.

Science lab equipment can be very limited, or hard to track when the facility does not use an efficient database to store records of the equipment usage and last renter. Without a system to track this information, trying to keep watch of the equipment with physical notes and peoples word of mouth on where something has gone is inefficient. Using a database is much faster, and secure for renting equipment to users who have credentials they can verify through the system, and log their equipment condition and time used so that all other users may view that information and avoid confusion about availability.