Client Background:

The Arthur Lakes Library fosters a rich and responsive information environment that empowers learning, discovery, critical thinking, and knowledge creation for Mines and a sustainable global society. It supports the research interests of students, faculty and staff at the Colorado School of Mines. The Arthur Lakes Library is the collaborative partner and intellectual nexus that bridges disciplines and communities across the Mines campus.

Project Description:

Arthur Lakes Library has two services that describe how study space is being used. The first is LibCal, a service that shows study room availability and allows users to reserve study rooms online. The second is Occuspace, which is a series of sensors throughout the building. These sensors collect Wi-Fi and Bluetooth traffic and use algorithms to estimate the number of people currently in that area. This estimate is then displayed on a webpage.

LibCal Interface
Occuspace Webpage

Both of these services have an API. The goal of this project is to take the information from LibCal and Occuspace and integrate it with a map of the building. This map will give users more contextual information about what spaces are available and allow them to see what spaces are available at a glance.

**Team size:**

This project would be ideal for a team of 3-4 students.

**Location:**

The students would be able to do much of the work remotely. The students may need to do some work onsite at the Arthur Lakes Library.