# **Study Room Finder**

Real Name Pending, Designated as PROJECTNAME within Current Documentation

Web Science Systems Development

Group X

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# **Problem Summary**

Rensselaer Polytechnic Institute has gained a reputation as one of the most difficult schools on the east coast, with high academic demands of students from all Majors. The ability to find a quiet area to study is critical for the success of many of these students, but one not often obtained when in one’s dorm or apartment. Furthermore, many on campus organisations require study hours for their individuals that need a safe, quiet, and registerable location to complete. Currently, students must explore the entirety of the Folsom Library and the Student Union to identify available study rooms, and have no way of knowing where or when a room will be available. Group X has identified this lack of availability as a severe, yet not well known problem on campus, and has decided to tackle this problem through their 2018 spring term project.

**Proposed IT Solution**

Team X will create a web application to allow students to identify and register study room reservations across campus. By logging in with their RCS ID, students will preserve their identities and have a built in method of authenticating their reservation. They will have 3 options: to view which rooms are currently available, to reserve a room now or for a later time period, or to set notifications for when a specific room is available. Through usage of this app, PROJECTNAME will serve as the time and energy efficient solution for finding open study rooms on campus.

**Functional Requirements**

The assessed requirements for this project’s functionality regards a consideration of processes, people, a Graphical User Interface, and a database, which together forms the core of the project and its efficacy.

General

* Use of LAMP Stack to host website
* Web interface
  + Secured by user login
  + Ability to integrate with RCS login
  + Create and manage room reservations
* Frontend to educate visitors on how/why to use PROJECTNAME

Graphical User Interface

* The visual and functional design of our website have to flow without interruption
* All elements will be responsive to given users

Database

* Integrity of the database has to be preserved by working on a copy of the database
* Backups must be maintained
* The database must be able to be modified as necessary to gather the information required by the application
* Database must be secure to avoid individuals taking advantage of the system

Hardware:

* (Stretch Goal) Create a mock device that could be installed in library rooms to further demonstrate availability.

Mobility:

* (Stretch Goal) Create a mobile version of the application for better student access
* Have an messaging API integrated to deliver notifications to users

**Non-Functional Requirements**

General

* The user interface must have a pleasant appearance
* The user interface has to be easy to use in all regards and for any user
* All interactions with the interface have to be visible and clear to the user
* Style and branding has to be consistent throughout our product to maintain brand image continuity and recognition

# **Anticipated Technologies**

We anticipate the use of the following technologies:

* RPI RCS ID login / API
* SQL Database
* Javascript
* LAMP Stack Technologies
* Some sort of Notification API (for alerting users of free rooms).
* Front-end framework(e.g. Bootstrap)

Security

Given the potential integration with the school system, we will keep safety as our utmost concern.