Software Requirements Specification

for

RUVacant

Version 0.1

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Revisions

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| --- | --- | --- |
| **Date** | **Name** | **Revision Description** |
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# 1.0 Introduction

## 1.1 Purpose

The purpose of RUVacant is to inform users which classrooms within Rutgers University is empty. It will display information such as how many classrooms in a building is empty, what percentage of the selected times will the classroom be empty for, and more information about specific rooms in the building.

## 1.2 Intended Audience

RUVacant is intended to be used by traditional college students in Rutgers University. This includes both Undergraduate and Graduate students.

## 1.3 Intended Use

RUVacant is intended to be used during an active semester, when classrooms are in use. It is to be used when a student needs a currently unused classroom. However, this application only takes into case course information and not event information. Hence, the application will not be aware of event details; so if an event is placed in a classroom, the application will not know.

## 1.4 Scope

The goal of this application is to ease the process of finding an empty classroom. Students will no longer need to look at every classroom to determine whether it is being used. The student shall open the application, search for the building, and immediately discover which rooms are empty and for how long.

## 1.5 Product Perspective

### 1.5.1 System Interfaces

This application runs in Android phones and tablets

### 1.5.2 External Services

This application uses the Rutgers Course and Places API to fetch necessary data

# 2.0 Requirements

## 2.1 Splash Activity

S01 – The application shall display the app logo

S02 – The application shall transition to the next activity with a transition animation on the app logo

## 2.2 Options Activity

O01 – The application shall display the app logo

O02 – The application shall allow the user to select a semester, from the current semester and 2 past semesters

O03 – The application shall allow the user to select a campus, New Brunswick, Camden, or Newark

O04 – The application shall allow the user to select a level, Undergraduate or Graduate

O05 – The application shall only allow one selection per option

O06 – The application shall allow the user to click the save button once one selection is chosen for each option

O07 – The application shall disable the save button if any options have not been selected

O08 – The application shall indicate when the save button is enabled or not

O09 – Once the save button is clicked, the application shall download and save necessary data into persistent storage

O10 – Upon transitioning to the next activity, the application shall use the semester text as a shared transition element

## 2.3 Building Listing Activity

B01 – The application shall list all buildings along its necessary information

B02 – The application shall show a dynamic circular “progress bar” for each listing, which indicates the percentage of empty classrooms from the total classrooms

B03 – The application shall allow the user to fast scroll

B04 – The application shall allow the user to search for buildings

B05 – The application shall do a search and show results as the user types or clicks the submit button

B06 – The application shall allow the user to click a listing, which will take the user to the next activity: the Room Listing Activity

B07 – The application shall allow the user to click a “menu button”, which will open the navigation drawer

B08 – The application shall allow the user to open the navigation drawer upon swiping from the left to the right

B09 – The application shall allow the user to add or remove a building as a favorite

B10 – The application shall list favorite buildings before the actual building listing

## 2.4 Room Listing Activity

## 2.X User Interface

U01 – The application shall support portrait mode

U02 – The application shall support landscape mode

U03 – The application shall inform user of errors

U04 – The application shall support varying screen sizes

U05 – The application shall support varying screen densities