Overview

The fundamental goal of this project is to replace the paper-based system currently in place for handling move-in and move-out for on-campus housing with a fully digital solution that is more efficient and featureful. Over the course of the school year, students will need to fill out a check-in form, a room condition form, and a check-out form. With almost 9000 students living in on-campus housing, this creates a lot of paperwork and administrative overhead. This process is resource intensive, susceptible to human error, and unacceptable in the 21st century.

Functionality

When students arrive on campus for move-in, they will be directed to a website. On the first visit, the website will show the student a login page. After logging in, the website will redirect students to a dashboard where they can see a list of forms they need to fill out. The forms and their contents will be tailored to each student based on their personal details and the details of their housing contract. For the purposes of this project, these details will be pulled from a SQLite database, although if this were ever to go into production, it might make more sense to pull the data directly from whatever database system StarRez uses. When a student clicks on one of the forms on their dashboard, they will be redirected to a page rendered from a Flask template. The page will be an HTML form with a variety of fields. Some may be pre-filled and un-editable like the student's ID number, building, and room number. Others may be pre-filled and editable like the student's preferred name. The rest would be unfilled and editable. The fields might also come in a variety of types like text, radio buttons, and checkboxes. When the student is done filling out the form, they will submit it and be redirected to their dashboard. Their submission data will be stored in a SQLite database and the student's dashboard will show that the form has been completed with an indicated of some sort accompanied by the date and time of submission.

Data

This project will require a database of student and housing contract information with the following fields: **ID Number**, **First Name**, **Last Name**, **Preferred Name**, **Student Email**, **Phone Number**, **Building Name**, **Room Number**, **Bedroom Letter**, **Room Key Number**, **Bedroom Key Number**, **Pet Approval Status**, and **Pet Species**. Not all fields will be relevant to every student.

Module Structure

There will be a module dedicated to handling the database functions and other modules will be determined as the project evolves.

Libraries

This project will make use of the flask and sqlite3 Python libraries. Other libraries may be added as the project evolves.

Project Structure

Database creation and integration: Brendan Whaley

HTML form creation: Giselle Echeverria

Website appearance design: Haley Young

Assorted glue code: Jason Pham