ITWS 1100

**PROJECT RECAP**

RPI DORMS PROPOSAL, PROJECT, AND RESULTS

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Bomy Rhee, Kenneth Dong, Mei Huang, Shanelle Kan

**PROPOSAL**

**Overview**

Incoming freshmen and others alike struggle to seamlessly access information about RPI’s dorms. Oftentimes, these resources are outdated or scattered over several different resources. Our mission is to condense all of the information into an organized website to provide updated information for those who need it.

**Scope**

In order to accomplish this task, we scoped out our goals, project milestones, and some setbacks that we may face.

**GOALS**: Through the creation of this website, we hope to help incoming freshmen transition into RPI with less stress by providing all the necessary information to adjust. Additionally, we hope to share insight into RPI’s student life. As students at RPI, we have valuable experiences and insight that others may find useful. We believe our platform could serve as an essential resource for incoming students.

**PROJECT MILESTONES**: We have three main milestones.

First, to create a general Information Architecture for our website. Based on our IA, we would make a general template in html and css that can be reused in the other pages as a default layout.

Then, create pictures to fill our website and continue to push changes and issues into github.

For every major update, we will meet up to discuss any improvements that could be added and give each other feedback.

**SETBACKS**: With every project comes challenges and potential risks that come. For this project that includes the possible time limit to implement all of its functionality such as finding bugs or finding particular features difficult to implement. Furthermore, this project may be a financial burden to uphold for long periods of time. In order to combat the time limit, each team member must do their roles in a timely manner. If we run into bugs or any difficulties, then the best solution would be to work together to solve these issues. Finally we could use ads or run a fundraiser as a way to fund the website so that this project could be upheld as a resource for those who need it.

**PROJECT**

**Team**

There are four members in our team. Each member holds an essential role throughout the development of RPIdorms. Every member has participated in writing for the documentation process of the project which includes the proposal, mockup, script, presentation, and final recap. (All documents listed can be found in our Github’s repository located in the *Resources* folder)

**Kenneth:** Designed and developed the FAQ and About page (HTML/CSS).

**Mei:** Designed and developed the main dorm pages and each of the dorm’s individual pages (HTML/CSS).

**Shelly:** Designed and developed the body of the main page (HTML/CSS/JS).

**Bomy:** Created the default header and footer for each page and the Map page (HTML/CSS). Implemented the JSON and Javascript file for the main dorm page. Created the Information Architect.

**User Interface**

Head over to [*https://octopus.do/wau4007fvi*](https://octopus.do/wau4007fvi)to see our IA.

Our website consists of six major pages: the home page, Dorms page, FAQ page, Upload Images page, Map page, and the About page.

The home page consists of two parts excluding the header and footer. The first part of the body is the welcome screen with a large image to portray the overall mission of our website. The second part displays three of the most popular dorms at RPI for students to have quick access to each respective dorm’s page.

The Dorms page displays all of the dorms available to the freshmen in a grid fashion. Each dorm has an image of the building from outside (majority are pictures taken by us!) and general information for students to get a gist of what to expect. If the user is curious about a specific dorm they see, they can click on the “Learn More” link located at the bottom of each dorm portion or the dorm title. They will be redirected to the dorm’s page which consists of even more specific information about that dorm. It also includes more images and a comment/review section at the bottom of the page. Users can share their own experiences by rating from one to five stars and commenting.

If the user wants to see more questions, they can head over to the FAQ page where there are a set of frequently asked questions. The top of the page has links to each of the questions listed on the page that will direct them to the answers. Each question and answer has a “Back to Top” link that will direct them to the top of the page for the inconvenience of scrolling. At the bottom of the page, the user can ask their own question. Again, for the inconvenience of scrolling, there is a link at the top of the page labeled, “Question Not Answered?” that will bring them to the bottom of the page if they wish to add their own question.

If the user has been on campus and has pictures of the dorm, they can submit them on the “Upload Images” page. There is a short form they will have to fill out that asks for the dorm name, room number, and the room type before they submit the file(s).

If the user wants to see the location of the dorm building they are interested in or they are curious about other nearby facilities, they can head over to the Map page. The map displays the twelve dorms with a blue pinpoint. When the user clicks on the blue pinpoint, the left sidebar shows more information that is derived from Google Maps. The user can zoom in and out by scrolling and move about the map by clicking and dragging.

If the user is curious about how the website came to be, they can head over to the About page. On this page, the user will be able to read more about the team and learn about our mission.

**Nielsen’s 10 Usability Heuristics for User Interface Design**

**Visibility of System Status**

Users will have the ability to determine their next steps by clicking on any of the links because the text changes color and expands when hovered over. Such indicators will assist users in determining whether they want to be redirected to the page or not.

**Match Between System and the Real World**

Our website incorporates natural mapping throughout every page. It can be more evidently seen in our Map page. If the user wants to zoom in, scrolling in corresponds with such an outcome and vice versa.

**User Control and Freedom**

We created the website with the intention of ease of use for students at RPI. The header and footer remains consistent throughout all of the pages which allows the user to move between the pages with no room for confusion. For the comment section on the specific dorm pages, we have also incorporated a cancel button for users that no longer wish to comment.

**Consistency and Standards**

Again, our website structure remains consistent throughout reducing any unnecessary confusion for our users. The titles of each page in the menu are very straightforward and easy to understand so that even if the user has not clicked on the page, they will be able to understand what to expect from the page.

**Error Prevention**

All of our forms warn the user if they have not included the required information once they click the submission button. In addition, upon submission, we store every users’ response into an excel sheet with timestamps to collect and review the provided information to ensure that none are spam.

**Recognition Rather Than Recall**

Our header and footer makes it easy for users to recognize the interface of our webpage. Each link and text serves a visible function that makes it accessible.

**Flexibility and Efficiency of Use**

On the home page, we have incorporated a section for three of the most popular dorms for quick access to the specific dorm. The “Dorms” in the menu bar also has a drop down option so that users can also navigate to the specific dorm without moving to the dorms page.

**Aesthetic and Minimalist Design**

The website focuses more on functionality than design. However, that doesn’t mean we have discarded the design of our website entirely. Instead, we designed our website in a way that will have users focus on the essential content of the page. For example, the dorms page is neatly designed in a grid fashion to make it easy to skim through for the users.

**Help Users Recognize, Diagnose, and Recover from Errors**

When there is an issue with the forms, the error will be displayed in red text to warn the users of invalidation.

**Help and Documentation**

On each page, we made sure to incorporate textual information that makes it easy for the user to understand how to complete any necessary tasks. For example, on the Upload Images page, we have provided text above the form that explains the purpose of the form below.

**Personas**

**CASE 1:** Boblino

* Incoming freshman (18 y.o)
* From California
* Loves working out

Boblino is residing in California over the summer before he moves to New York to attend Rensselaer polytechnic Institute. The housing application has just opened, but Bobino is unsure about all the different housing options there are. He heads over to “RPIdorms.com” and arrives at the homepage. Seeing “dorms” on the menu bar, he clicks on it to see several freshman dorms appear on his screen. Each one has a picture of the dorm and also some key features listed on it. His eyes quickly skim the dorms and he clicks on “BARH” which has no air condition. This is an important feature as Boblino prefers the hot climate similar to California. Scrolling through the detailed information and pictures, BARH becomes a viable option to dorm in. As Boblino looks up at the menu again, he sees that there is a map option. He clicks on the map and sees that BARH is very far away from the Mueller center. This is an important factor as working out is very important to his routine and he simply can’t be that far away from the Mueller center. Thus, Boblino clicks on the dorm page again and continues his search for the perfect dorm that suits all his needs.

**CASE 2:** Boblina

* Mother (57 y.o)
* Allergies to animals
* Conscious about cost of living

In the fall, Boblina’s daughter will be attending RPI. However, her family has severe allergies to many common animals such as dogs and cats, which would prove a problem if the dorm her daughter resides in has these animals. Furthermore, with Covid-19, she was laid off from her job, and since then, her family has struggled to recover. With this situation in mind, Boblina hopes to get some of her concerns off her plate by researching information about RPI’s living conditions. She heads over to “RPIdorms.com” and immediately goes to the “FAQ” page, where hopes to get her questions answered. She sees that animals are not allowed in the dorms, but Boblina wonders if there are special cases where pets are allowed. However, this question has not been answered yet, so she scrolls down and types out her questions. Then, Boblina heads over to the dorms page and clicks on the first option. She notices that if her daughter lives in a triple, the cost will be reduced by $2,000. Since money is an important factor, she notes down that this is a possible dorm that her daughter could live in. Boblina then continues her search for other dorms that have similar living costs.

**Prototypes**

**LOW FIDELITY:** See *Mockup.pdf* in the *Resources* folder.

**RESULTS**

**Overall Success**

**HTML/CSS**: We succeeded in creating a simplistic and intuitive layout to display the dorms. We utilized the grid layout CSS in order to line up each of the dorms neatly. Additionally, we utilized a grid in order to display a warm landing site with three popular dorms underneath, somewhat applying the “F” layout. Additionally, we embedded maps and forms using Google in order to provide a way for users to upload images onto our site. This also allows us to ensure that all the content uploaded by users is appropriate before we update the website ourselves.

**USAGE OF JSON**: We had success implementing JSON into our website by reducing the amount of code by around 70-80% on the dorm pages. By building the websites through JSON, we did not need to hardcode every single dorm page and can change them dynamically by just updating the JSON files.

(See [RPIdorms](https://docs.google.com/spreadsheets/d/12oLPbeMVRmachlXZFxYecZBL06Ha1wranOD12Ye_8io/edit?usp=sharing)to gain access of our users’ data from our forms located on the “Upload Images” and “FAQ” page.)

**Future Implementations**

**DORMS**: Our focus was on creating a website for incoming freshmen such that their transition to college would be easier. Thus our website has dorm information geared towards freshmen and not the other dorms available for sophomores, juniors, and seniors. As we continue our development, we would like to expand our website to cover these additional dorms for upperclassmen.

**FUNCTIONALITY**: As we expand the amount of information we provide, it might be a good idea to include a functional search bar such that each person could easily look up a particular dorm they have in mind. Additionally, we could implement our own forms so that we have more flexibility with the functionality and also design it so that it matches with our website's architecture. Lastly, we can create a database in order to ensure the functionality of the comments sections so we can store and dynamically update each dorm’s comments section.

**Conclusion**

There is a need for RPI’s dorm information to be condensed and organized into one resource. We believe that our website will fulfill that need such that individuals will be able to search for the perfect dorm and gain insight from current RPI students. This will be accomplished through our intentional focus of HTML/ CSS to increase the ease of use of our website. Finally, we will provide a magnitude of useful and accurate information by also focusing on loading data from a JSON file with Javascript.