# **Project Writeup**

Team 12 - Alex Litchfield, Quinn Sharp, and Sree Laysa Gogineni

## **Proposal Summary & Description of Project**

Our application is intended to be a website that documents information and locations of all of the greek organizations affiliated with the RPI campus. Some of the information included about each greek organization would be but are not limited to: greek council, photos, insignia, founding date, chapter house location, membership size, academic standing.

This application would serve both prospective RPI students as well as current RPI students who are interested in Greek life. It would be a hub of information for those who want to learn more about the Greek organizations on campus. One of our group members, Alex, has been in a fraternity for several semesters now and vocalized how much he wished an application like this existed when he was looking into fraternity recruitment. At the moment, there are no websites which serve this purpose. The websites that do show up upon searching for "rpi fraternity and sororities" on google are different pages of the RPI website, Wikipedia, Reddit, Facebook, and Greekrank. The RPI website shows some information on fraternities and sororities, but most of the information is outdated or lacking. The RPI website for the most part only includes a list of organizations, judicial reports, and academic reports (the latest of which is from spring 2021). In addition, the website is riddled with typos and inconsistencies, making it more confusing for students looking into joining. The Wikipedia page relating to RPI Greek life is outdated by over half a decade, sporting fraternities that no longer have any members, and listing several active chapters as defunct or suspended. The one Reddit post, believe it or not, is the most reliable source at the moment on the internet that addresses RPI greek life. Despite being 2 years old and giving generalized information, it comes from the students of RPI and for the most part is accurate. The Facebook Group that follows is an extension of the RPI FSC instagram page, which in itself says nothing about Greek life. Finally, Greekrank provides a rating system for fraternities related to RPI, but provides no real information on them, their current status, or even if they are currently present on the campus.

Our application would differ from others listed before because it would provide accurate and up to date information, which none of the previously mentioned websites do. Additionally, it would provide a hub for information that allows users to learn more about organizations they are interested in, as well as providing links and resources to each organization's social media, local chapter websites, and international headquarters websites.

The inspiration for this website originally came from an idea proposed by one of our group members, Alex. As stated prior, he wished that a website like this existed when he was looking to join a fraternity as a freshman. Quinn, another group member, also expressed how helpful this application would have been as he just finished up with his own recruitment process. Since 2017, fraternities on the RPI campus have been facing an all time low in interest and membership. While several chapters that have been gone since that time period are returning, and those who remained have continued to grow significantly since the initial new sanctions on Greek life, having accurate and publicly accessible information on the organizations would certainly only prove to help them continue to grow back to their peak size.

# **Project Plan**

Our project plan consisted of doing research for each of the organizations and the councils. We divided up the work equally between the three of us. Each of us tackled at least one council as a whole, including its council page and its organizations. However, since the IFC has so many fraternities, we divided the organizations three ways. For each of these assignments, the task was for the individual to not just create the web page for the listed organization or council, but also do any research needed on it.

The first step of our application development depended on research for each of the greek organizations on the RPI campus and their councils. This was a lengthy process, as we had to navigate through every single headquarters and local chapter website for the 32+ organizations. In addition, we had to locate images of their crests, flags, and houses, which were not always on the website.

Once this was completed, we planned on creating a template for each organization and hardcoding the information into the files. However, we quickly realized it would be more efficient to place the information into a JSON file and have a javascript file dynamically build each organization page. This also makes it much easier to update existing information and add new or returning chapters to campus. Once these pages were complete, we needed council pages to link users to each organization's page, as well as provide additional information on the council itself.

#### **Architecture and Decisions Made**

When designing the layout of our site, we decided it would be best to divide the site into five sections: the FSC home page, IFC orgs, MSFC orgs, Panhel orgs, and Professional Orgs. We kept the data, css, and JS for the individual organization pages in a resources folder, and stored the individual council information in their respective folders. Each of these council folders contains the council page, a folder for all the Greek organizations that belong to said council, and a resources folder containing other necessary files pertaining to the council or individual organizations, such as the council CSS file.

- IFCSite [Folder]
  - documentation [Folder]
    - Documentation files
  - o src [Folder]
    - Landing Page [HTML]
    - Interfraternity Council (IFC) [Folder]
      - Interfraternity Council (IFC) Landing Page [HTML]
      - IFC organizations [Folder]
        - o HTML files for each organization
      - Resources [Folder]
        - Other images
        - CSS file for Council Page
      - Multicultural Sorority and Fraternity Council (MSFC) [Folder]
        - Multicultural Sorority and Fraternity Council (MSFC) Landing Page [HTML]
        - MSFC organizations [Folder]
          - o HTML files for each organization
        - Resources [Folder]
          - Other images
          - CSS file for Council Page
    - Rensselaer Panhellenic Council [Folder]
      - Rensselaer Panhellenic Council Landing Page [HTML]
      - Panhel organizations [Folder]
        - o HTML files for each organization
      - Resources [Folder]
        - Other images
        - CSS file for Council Page
    - Professional Fraternity or Sorority (PFS) [Folder]
      - Professional Fraternity or Sorority (PFS) Landing Page [HTML]
      - Prof organizations [Folder]
        - HTML files for each organization
      - Resources [Folder]
        - Other images
        - CSS file for Council Page
    - Resources [Folder]
      - Blanket CSS File for organizations
      - Landing page CSS file
      - GreekInfo JSON file
      - dataFill Javascript file
      - Crests [Folder]
        - o Images of chapter crests
      - Houses [Folder]
        - o Images of chapter houses
      - Flags [Folder]
        - o Images of chapter flags
      - Other images

# Discussion of Challenges and What You Did About Them

Two of the biggest challenges we faced were gathering information and actually displaying that info on our website. For the first of these, our original plan was to send a google form out to the individual chapters, asking them to fill it out with information they wanted displayed. We quickly realized that it would be a while before we heard back from every organization on campus, so we opted for a more time efficient route: sourcing data from online. We researched each organization and found the details that we felt were most important. Then we had to display this data. Our initial plan was to write out each page and insert the information manually, but that was not as efficient as we would have liked. So, instead we opted for using JS and JSON to dynamically load the data onto each page. That way we could simply copy and paste the html for each page, and name the file specifically to determine what data is loaded. This was a very effective solution, and it made the development process much faster. This took some time as we now had the additional task of moving the research information into a JSON file and organizing in a manner which would be useful to our JS file.

## **Project Summary**

In the end, we accomplished all that we wanted to with this project. We created a simple, yet effective application that allows users to navigate between the RPI Greek life system and find out what each chapter is all about. Our site has significantly more features than that of the current RPI FSC website, such as unique pages, chapter information, pictures of the chapter houses, and links to the respective web pages related to the organization. We initially wanted to add a search functionality that would allow users to search for tags that would bring up certain organizations. However, due to our group members' course load and our inexperience with PHP, we decided this would be saved for a future feature update to the site if this project were to be expanded in the future.

During the course of this project, we learned how to communicate deadlines to the other group members and express our concerns over certain code implementations. Each of us are now much more comfortable with Github than before the semester began, as between the labs and this project, we learned how to use Github repos as an individual and as a team. There were many times were we had to have a last minute meeting to discuss what would be the course of action for developing a new section of the website, as we would find that the original plan was no longer possible due to certain alterations such as the change in our Information Architecture and our ability to dynamically load organization pages. We also learned that while it may be equally as efficient to hard code data into an HTML file as using JSON and Javascript, the latter is

significantly better for allowing future developers of the project to modify information and add new structures.

Once the semester has concluded, we plan to hand this project off to the executive board of the FSC in hopes that they can launch the website and allow prospective members and their parents to get a better look at Greek life at RPI. In addition, Alex plans to continue to work on the project for RCOS next semester. Hopefully the RCOS project pitch will bring in new developers that will bring new ideas to the table and help make the site even better with more features. Some features that Alex already plans to lead the charge on during the next semester are listed in the readMe file. These include adding current chapter leadership to each organization page, creating an FSC advisors page, adding philanthropy information to each organization, creating a database which stores tags that can be utilized by the aforementioned "search" feature, a login system for both admins (FSC executive board members) and council members (individual chapters), and a chapter houses map for the Panhellenic Council that mirrors the one that exists for the IFC. Between all of these possible future additions, the project will surely become one that is used by the RPI community for years to come and hopefully create a greater sense of community and facilitate communication between the RPI greek system and the outside world.