

ITWS 2110/CSCI 2960
Web Systems Development
Dr. Callahan
Fall 2021

Project Proposal



Project Name: Discover Troy
Team Name: CRE8
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Summary of proposed project

Troy is a city with rich history and many unique landmarks. From the savory Dinosaur BBQ to the prestigious Rensselaer Polytechnic Institute on the hill, Troy has it all. Although these landmarks are well-known to many Troy residents, not everyone is familiar with these locations. The lack of location discovery resources makes it difficult for tourists and foreigners to navigate and explore Troy. Prospective RPI students may be discouraged from applying due to similar reasons. CRE8 aims to resolve this by providing a simple and engaging way for people to discover Troy. Highlighting Troy's landmarks will help increase tourism to the city, improve Troy's reputation, and attract college prospects to RPI. The Discover Troy web application will provide an easily accessible tool that highlights Troy's landmarks. Users search for local landmarks and get relevant information about these locations. If a user is feeling adventurous, a random landmark can be generated along with information about that location. QR codes placed throughout Troy can be scanned to reveal information about specific locations. Users can choose to create an account and log in to track places they have been to and places they want to visit. If a location is missing, users can fill out a form to add new landmarks. The form will be reviewed by site administrators and approved if deemed suitable.

Stakeholders and potential users

The stakeholders for our app include Troy residents, Troy tourists, Troy business owners, and the RPI community-- which includes, but is not limited to current RPI students and faculty, relatives of RPI students, RPI alumni, and potential RPI students. Anyone in, passing through, or potentially coming to Troy benefits from our app. Discover Troy provides an easy way to populate one's Troy itinerary full of unique destinations. Troy residents can discover and learn about new places and promote their city by contributing their favorite spots on the app. Troy tourists can get the most out of their visit by dining at the best restaurants and touring Troy's famous, as well as the lesser widely-known, points of interest. Troy business owners will largely benefit from this app because it offers free marketing for their business which will, in turn, generate more consumers, customers, and overall revenue. The entire RPI community can derive value through our app by exploring the city beyond campus grounds. According to collegefactual.com, in 2019, about 20% of RPI's student body were foreigners and over 60% of the students from the U.S. came from out of state. With such a large percentage of students coming from afar, our app would make a positive difference in their college experience. Current students can cultivate an appreciation for their college town as they uncover the hidden gems of Troy. This then extends towards relatives of RPI students as they come to visit during move-in, family weekend, graduation, etc. With the help of our app, families can enjoy eating at local favorites and checking out obscure attractions. RPI alumni can take advantage of our app as they revisit campus and find spots they never knew about or hadn't previously existed when they were students. They can also reminisce in and share their favorite old spots (secret hangouts, hole-in-the-wall restaurants, etc) with the current community. Apart from those already associated with RPI, our app is valuable even to potential RPI students as they may be more

inclined to attend RPI after touring Troy.

Technologies we intend to implement

We intend to use QR codes in our application to allow users to get more information about the location they scan at. We decided to use QR codes because many people are familiar with them and a lot of phones today have built-in scanners. These QR codes would be printed as stickers and placed at the locations we have provided within our application. These codes would then take the user to our web application and give them more information about the location. We also plan to have QR codes that could link to our location input form, so Troy residents can have the chance to add important landmarks. Another set of QR codes will be linked back to our homepage to encourage the surrounding community and visitors to use our application. We also plan to use Mapbox to provide the map functionality of our web app. It will allow people to access locations on the map depicted by pins which will be color-coded depending on if it's a food place or a landmark. Mapbox will also allow users to place their own locations on the map if they're not already there while providing the location and some pictures as well.

Functional and non-functional requirements

One primary purpose of the CRE8 app is to make Troy's landmarks more accessible to all. To accomplish this, the Discover Troy application must be mobile-friendly and browser-friendly. CRE8 envisions that most users will utilize small, portable devices to access the CRE8 web app. A mobile-friendly app will make it easy for users to use the web app on the go. All users will access Discover Troy through a browser. There is an abundance of browsers used today. It is important that the web app is easily accessible by all commonly used browsers to support CRE8's purpose. An important requirement that is often overlooked is security. With

modern web development, it is crucial for proper security features to be implemented in all applications. Discover Troy is no different. By utilizing security-focused database frameworks, users will be able to log in to the Discover Troy application without worrying about exposed usernames and exposed passwords. Additionally, users can log in and view saved locations or personalize the web app to their liking.

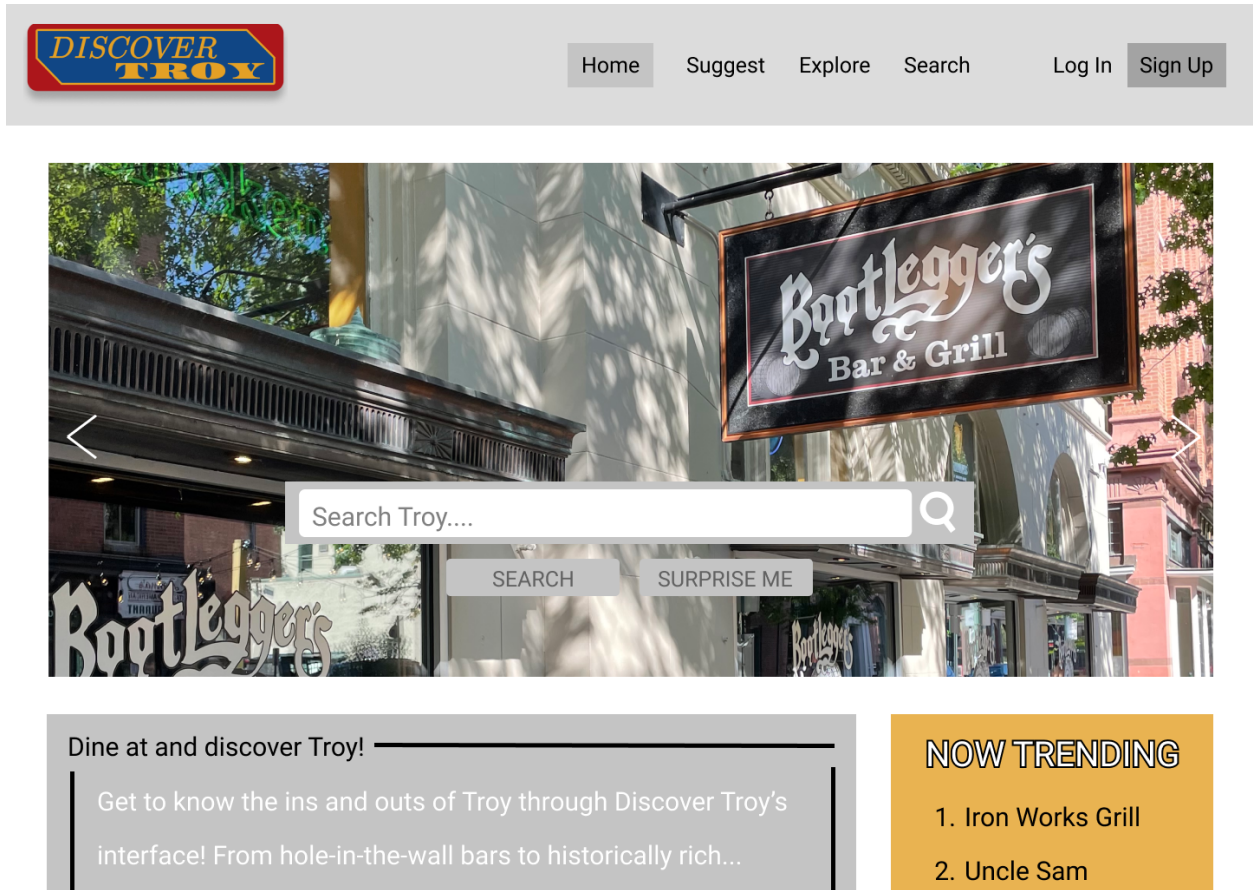
Estimated Project Schedule

Proposal Due	Friday, September 17
HTML & CSS Outline	Friday, September 24
jQuery/Javascript Implementation	Friday, October 1
Project Detailing	Friday, October 8
Midterm Presentation	Friday, October 15
Security Implementation	Friday, October 29
Final Project Detailing/Bug Fixing	Friday, November 19
Project Review/Presentation Preparation	Monday, November 29 - Thursday, December 2
Final Presentation	Friday, December 3, or Tuesday, December 7

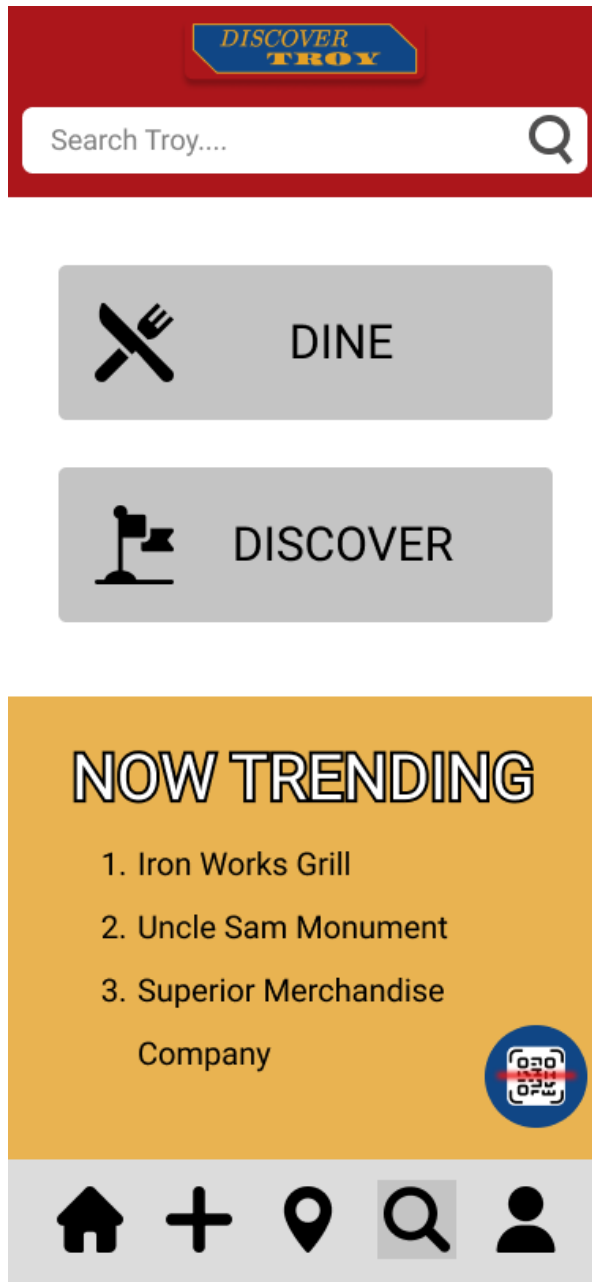
Sitemap of our web app

Wireframes

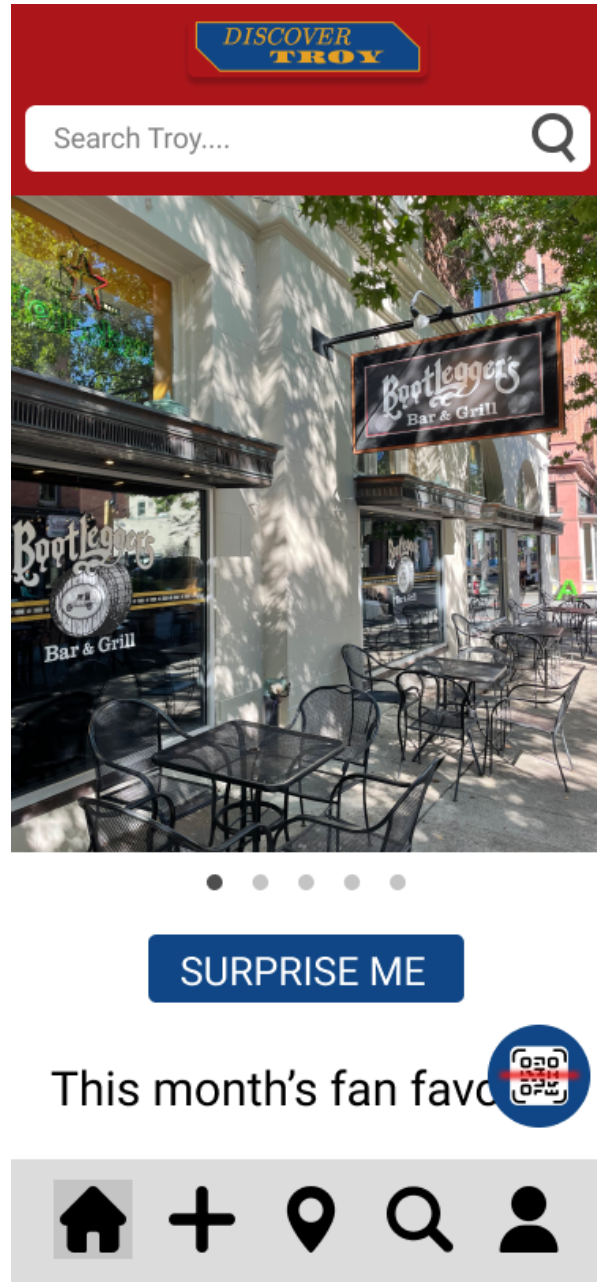
Desktop - Home Page



Mobile - Search Screen



Mobile - Home Screen



Works Cited

“Where Are Rensselaer Polytechnic Institute Students from?” *College Factual*,
www.collegefactual.com/colleges/rensselaer-polytechnic-institute/student-life/diversity/chart-geographic-breakdown.html.

“Rensselaer Polytechnic Institute International Student Report.” *College Factual*,
www.collegefactual.com/colleges/rensselaer-polytechnic-institute/student-life/international/.