BooStRadley
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SoftDev1 pd6
P #01: arRESTed Development
2018-11-21

International Space Station(**ISS**) World Tour

Interactions

The website allows users to use all the features without creating an account except for saving information and viewing profiles. User information will be stored in table in the database. Users can view the current location of the ISS on a map. They can see the weather there and also search for places near the location with key words on a separate page. User can save the information they want there, too. The information will be stored in their respective databases. They will be retrieved when the user visits their profile page. They can also view their achievements if any.

Component List

APIs:

- International Space Station Current Location (once every five seconds recommended)
    - Track the current latitude and longitude of the ISS
- Map Quest (15,000 per key per month)
    - Places to visit near an address
    - Displays current ISS coordinates on a map
    - Convert latitude and longitude coordinates into a readable address
- Dark Sky (1,000 per day)
    - Historical, current, and future data on the weather given latitude and longitude

Authenticator: Users can create an account to login and logout. Not required to use the site, but some features will not be available for them to use
Track: shows the current location of the ISS in latitude and longitude as well as an address if available
Search: look for attractions near the current location of the ISS
Forecast: displays the current weather conditions
Save: users can save where the ISS is currently at the time, along with places and the weather (which could be of interest if there's extreme weather at that location)
Profile: users can view all the locations and associated data they have saved (chronological order) and possibly even others (and if possible, we can mark all the saved locations on a map)
Accomplishments: How many countries the user has saved and we will reward certain feats such as visiting all 7 continents (if we can)

Database Schema

User Info Table		
ID	username	password
PRIMARY KEY	TEXT	TEXT

Saved Location				
username	date/time	Latitude	Longitude	address
TEXT	TEXT	FLOAT	FLOAT	TEXT

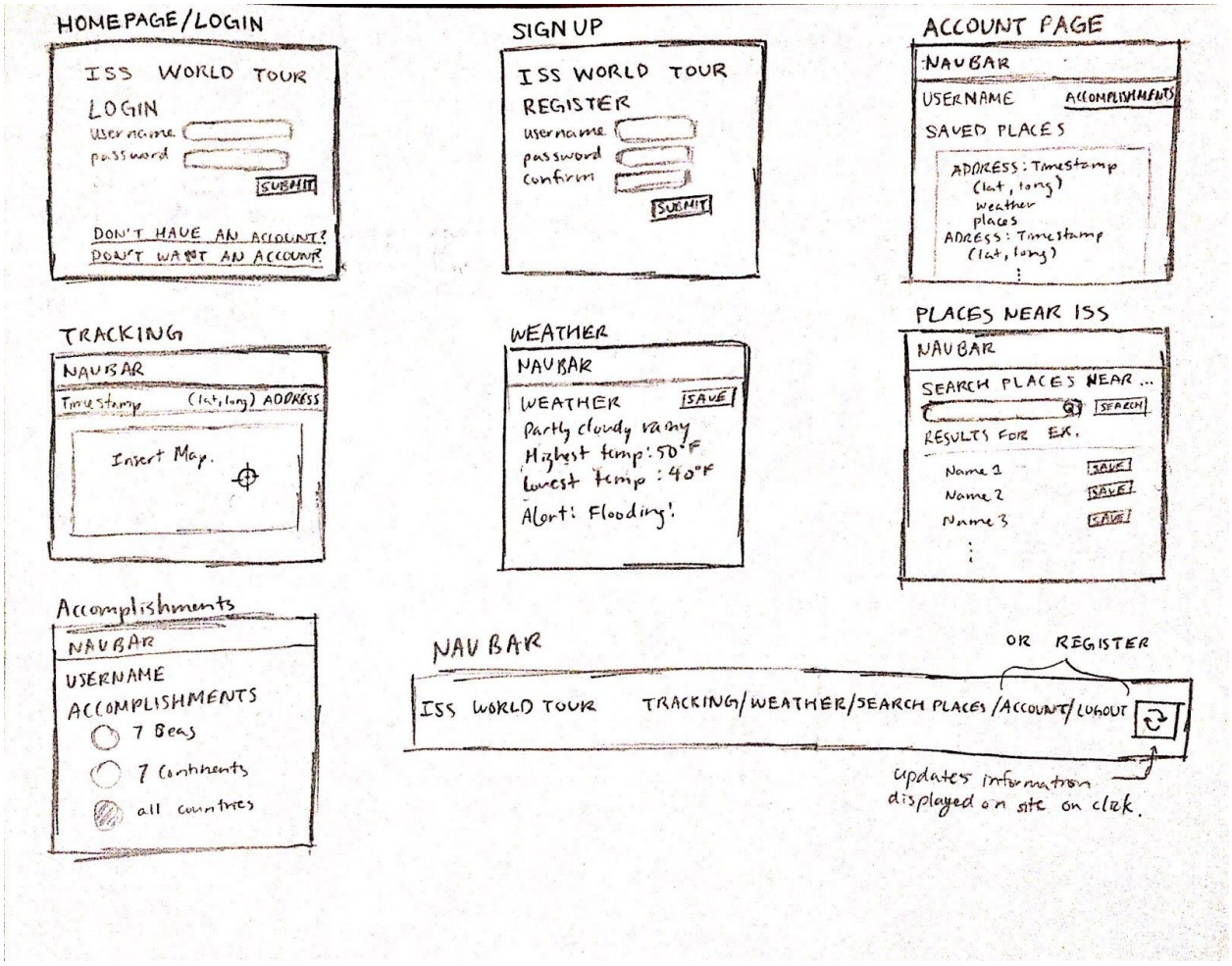
Saved Weather					
username	date/time	summary	highest temp	lowest temp	alerts
TEXT	TEXT	TEXT	FLOAT	FLOAT	TEXT

Saved Attractions		
username	date/time	attractions
TEXT	TEXT	TEXT

Achievements	
username	accomplishments
TEXT	TEXT

All of the saved information and achievements is related to a certain user at a certain time where the ISS was

SiteMap & ComponentMap



Tasks

Stage 0: The Bootstrap (Instead of The Foundation)
Project Manager Ricky: Create basic flask app that displays data from APIs, work with Sophia with make sure the templates are properly displaying data pulled from the APIs and/or database
Matthew: Responsible for understanding the APIs the most and obtain the necessary data from them, work with Mohammed to store the data in the database
Mohammed: Decide how to format database tables to store necessary information, write methods to add, edit, delete, and find useful entries in the database
Sophia: Code the basic HTML templates with jinja placeholders, responsible for designing the layout of the website

Stage 1: The MVP
Ricky: Logging in and out, registration, and saving user data about where he/she's been
Matthew: Work with MapQuest to pull and display nearby attraction data to the user
Mohammed: Work with the ISS to pull and display a map with the ISS' location
Sophia: Work with the Weather API to show the current weather in the location

Stage 2: The Sprinkles
Ricky: Possibly implement the Trivia API for more achievements
Matthew: Viewing other people's profiles
Mohammed: Achievements
Sophia: Extra CSS Fanciness