Phase 1: Group 8 Technical Report

Motivation:

The motivation behind our project, SeniorUplift, stems from the growing need for easily accessible welfare resources for the elderly population in Texas. As healthcare needs increase with age, it is crucial to ensure that seniors can quickly locate nearby healthcare centers and nursing homes to receive proper care. Moreover, promoting mental health and well-being by providing information about local entertainment and social activities helps seniors maintain an active and enjoyable lifestyle. By integrating these resources into a user-friendly platform, we aim to uplift the quality of life for the elderly, ensuring they have easy access to the support and services they need in their community.

User Stories:

Easy Navigation and Overview :

As a first-time visitor, I want to navigate the site easily and learn about the team to understand who contributed to the platform and the motivation behind why it was built. This issue was completed by having a navigation bar on the website to easily navigate to certain pages. We were also able to add an about page that explains information about each of the group members.

View Details of My Options :

As a user, I want to click on the places the website provides to easily get more detailed information, including addresses and contact info so I can attend these places. This issue was resolved in our model pages, in which we have 3 separate cards that navigate the user to the instance page that provides more details about the specific place. Each instance page has lots of information to help the user with their needs.

Nearby Activity Options :

As an elderly user, I want to discover new entertainment options near me so that I can participate in activities that are accessible and enjoyable. This issue was resolved by creating one of our model pages based on entertainment that currently shows different instances about entertainment options around Texas.

Find Local Nursing Homes :

As a family member looking for elderly care, I want to have a list of local nursing homes so that I can compare different options for my loved one's care. This issue was resolved by having a model page dedicated to Nursing homes in which we have several instances of nursing homes around Texas. Each instance page for nursing homes provides details on the different ratings and services that each place has in order to compare what is the best fit for the user.

Display Healthcare Centers Information :

As an elderly user, I want to view a list of nearby healthcare centers so that I can easily find the closest medical support that matches my needs. Our final model was based on locating different health centers around Texas in which users can find their nearest healthcare option that is best

for them near their specific location. We have different instances of healthcare options around Texas located in the model page.

Frontend Architecture:

Navbar that consists of links to splash page, about page, 3 model pages
Splash page contains brief description of website and welcome image
Relevant files: src/front-end/index.html
- About page contains information on each of team member: biography, major responsibility, number of commits, issues, unit tests
    - number of commits and issues dynamically pinged from GitLab API
    - Relevant files: src/front-end/about.html
- Model pages for nursing homes, health centers, and entertainment centers
    - contains 3 instance cards including image and 5 attributes
    - Relevant files:
        - src/front-end/entertainment.html
        - src/front-end/healthcare.html
        - src/front-end/nursing_homes.html
- Instances pages (9)
    - contains image, location map embedded from google maps embedded, name of place, address, detailed description,
      featured services, 5 attributes (same as ones on card), connection links to other two models, link to location's website
    - Relevant files:
        - src/front-end/instance_one_health_care.html
        - src/front-end/instance_two_health_care.html
        - src/front-end/instance_three_health_care.html
        - src/front-end/instance_one_nursing_home.html
        - src/front-end/instance_two_nursing_home.html
        - src/front-end/instance_three_nursing_home.html
        - src/front-end/instance_one_entertainment.html
        - src/front-end/instance_two_entertainment.html
        - src/front-end/instance_three_entertainment.html

RESTful API:

We will implement a RESTful API in a future phase for users to scrape and fetch data of model instances from our website. We have 6 request methods relating to getting a single instance or all instances for a model. For each model, users can request information on a single instance given an instance ID, or all instances of a model with parameters given to sort or filter instances.

Tools:

Bootstrap is used for styling effects and to make designing UI easier for our frontend template
We wrote the .gitlab-ci.yml file to validate whether the html syntax within the frontend folder is working.

Hosting:

We found our domain name on NameCheap and utilized our student emails and status to reserve the URL for free. We will have access to it for at least the remainder of the school semester. To host our website, we uploaded our front-end folder to AWS Amplify to allow for later backend integration. We do not currently use any backend features, but it will be easy to integrate it in the future.

Challenges:

We found it challenging to find a single time that everyone was available to meet and collaborate due to overlapping schedules. Additionally, it was tedious to also delegate tasks to each group member as everyone would be editing the same files within our codebase. Utilizing the GitLab API was also a struggle; identifying how it is used and incorporating such into our repository took some doing. The main thing we struggled with was figuring out how to deploy our site to AWS to host it on the internet. We ran into issues with slow deployments and out of date pushes.