Ukraine Crisis: Phase I

IDB Group 6
Chuma Anigbou, Derek Chen, Samuel Osibamowo, Akhilesh Bitla, Alex Jimenez

Our Mission:

Ukraine Crisis is a platform dedicated to raising awareness among those affected by the ongoing situation in Ukraine. Our goal is to provide users with the opportunity to explore stories of numerous refugees, discover resources and support groups that raise awareness or funds for the cause, and keep them updated on the current events unfolding in Ukraine

User Stories:

Overview of History - You say that you will give Support Groups/Resources Attributes, News/Media Attributes, and Refugee Profile Attributes. However, I would like an overview of the history behind the Ukrainian refugees on the main page.

During this phase, we successfully implemented the user story by enriching our homepage with additional context. This included a paragraph detailing the history behind the conflict and its profound impact on Ukrainian citizens.

Get real-time updates (like from twitter for example)-

We also incorporated this feature on our splash page by embedding timelines of Twitter accounts that consistently post about the topic. We believe this approach ensures that the information comes from credible sources.

Links to Organizations that support Ukrainian Refugees -

This story was a huge incorporation into our model because it will allow users to check out the sites of the organization directly instead of having to search around for the referenced organization. This implementation helps take away some of the brute work behind supporting these refugees and other impacted individuals.

Building upon Organizations, I would also like to see links to charity resources.-

This was a great suggestion as our original scope didn't have charities included so this story helped us gain more instances for the future as well as this current phase.

Where refugees have traveled from - You say that you will show personal struggles for the refugee profiles. In this, I would also like to see where or how far the refugee from each testimony traveled. This will really show the struggles they faced.

This user story enabled us to leverage the Google Maps API, which we had initially planned to use but were uncertain about its specific application. This suggestion not only provided a clear scope but also served as an additional source of media for two of our models.

Api Documentation:

Our RESTful API documentation can be found at this link. This API will include endpoints to retrieve all instances of news and media, refugee testimonials, and support groups. Furthermore, it will offer endpoints for obtaining specific instances of each model. Additionally, the API will provide endpoints for retrieving connections between instances and a dedicated endpoint for searching all models based on specific parameters.

Models:

Our project utilizes three models: refugee testimonials,news and media and support groups . Each model has five attributes associated with each individual instance of the sed model.

Model 1: Refugee Testimonials

Instances -

Our first model contains many instances of testimonies from Ukrainian refugees. These specific instance cards all contain a picture of the refugee(s) as well as a map of their asylum country as the two forms of media. In terms of attributes, the refugee testimonials contain: names, asylum

countries, date, time displaced in years, and caption. These cards are connected to related news and media, and support groups.

Model 2: News and Media

Our second model contains many instances of related news and media from the ongoing crisis. These specific instance cards all contain a picture or video relating to the news , as well as a map of the related city or country as the two forms of media. In terms of attributes, the news cards contain: publisher, type of source, location, date and a title/caption. These cards are connected to related resource groups and refugee testimonies.

Model 3: Support Groups

Our third model contains many instances of related support groups to the crisis. These specific instance cards all contain a picture of the support groups logo and an accompanying video for each support group as the two forms of media. In terms of attributes, the support cards contain: location based in, date established, name, status and contact information. These cards are connected to related refugee testimonies and recent news or media.

Hosting

We are currently hosting our site at ukrainecrisis.me using AWS Simplify.

Architecture:

Our code is well-organized, with different folders corresponding to the tabs or models they belong to. Each model page has its dedicated folder within the 'pages' directory. Inside these folders, there is a single [id].js file that houses the actual cards for each instance, accessible by clicking the 'read more' button within their respective models.

The id.js file within the 'refugee-testimonials' and 'news-and-media' directories also contains our calls to the Google Maps API. The code relevant to our splash page is located in the index.js file, which also serves as a temporary holding place for all instances within our models. As the project progresses, this data will be migrated into a database.

For the 'about us' page, the code resides in the about-us.js file. Here, you can find all the displayed information, along with calls to the GitLab API. These API calls automate the updating of statistics displayed for each team member.

Tools:

During this phase, we are leveraging several tools to streamline our project development process:

- **AWS Amplify**: Facilitating easy development, deployment, and hosting of our full-stack website.
- **GitLab**: Serving as our repository for storing project files, and facilitating project planning through its issue tracker and milestones.
- **Next.js**: Empowering us to create an interactive user interface efficiently.
- **Tailwind**: Offering design templates and a framework for crafting our website's UI.
- **Node**: Allowing us to build a scalable website capable of handling multiple concurrent requests.
- **Zoom**: Facilitating remote meetings for discussing various project aspects.
- **Ed Discussion**: Providing a platform for project-related communication via messaging.
- **VS Code**: Serving as our integrated development environment (IDE) for debugging and version control with Git.
- **Postman**: Enabling us to effectively plan, document, and test our API endpoints.
- **Name Cheap :** Allowing us to own temporary rights to our domain name

Challenges:

Challenge 1: Hosting

We ran into many issues with initially trying to host our website using AWS because the build kept failing. This was due to us trying to use an updated node version which was not supported. The TA's were very helpful with dealing with this issue and eventually we were able to host it by just downgrading our node version which got rid of our build issues.

Challenge 2: Pivoting

We needed to pivot on some of the attributes of our models due to difficulties in scraping certain attributes from our data source. After thorough research, we found it challenging to extract specific attributes uniformly across all instances. For instance, our original attribute of 'age group' for refugees was deemed unusable, as not all testimonies included it. To address this and other attributes , we replaced it with easier attributes to scrape such as 'time displaced.

Challenge 3: Front End Tools

This was a challenge that took all hands on deck. Throughout the group there was not much front end experience so we all had to pitch in ideas as this first phase was a learning experience for all of us. For example, we utilized Next.js which was a tool not many of us had familiarity with so there was a but of a learning curve but it all worked out in the end.