**Project 1: TravelSafe**

**Project Members:** Mathew Hall, Jordan Isenberg, and Anhelina Yarichevska

**Description:** Our application helps travelers be more knowledgeable about the safety and healthcare in unknown, foreign, and remote countries.

**Motivation:** Being a former doctor in the UK, Mathew was hoping to create an application pertaining to healthcare. All of us travel a lot and felt the need to know more about the safety of each country before we visit. We were hoping to get UP TO DATE information about safety, hazards, and healthcare instead of older or outdated information from other literature.

**Results:** Using typeahead, website scraping, and bootstrap we were able to create a search bar selector to accurately choose a country and the correlated country code. Using the country code, we referenced the WHO Global health registry suite of APIs to gather up to date health and safety data from every country around the world. Information gathered includes homicide rates, natural disasters, communicable disease, as well as healthcare personnel and infrastructure. The data was gathered and displayed each country findings to the web interface. We used google maps to create a marker to aesthetically represent major hospitals and healthcare locations in each country query. We used firebase to save past search information, and pasted this data to the web interface.

**Team Efforts:** Mathew was responsible for the WHO Global Health API, gaining its raw data and processing it for our web use. Jordan was responsible for setting up the firebase database and search bar to determine the country code for each country query. Anhelina was responsible for the user experience, bootstrap implementation, and google maps API.

**Individual Responsibilities:** Mathew dove head-first into the WHO data and its management. Parsing difficult data and processing it for our use, Mathew created a rankings system for each country to determine the overall safety, compared to more dangerous and safer countries. Mathew used the WHO API to pull all of our data and he pushed that data to the search results. Anhelina created the healthcare markers for google maps, the repository and management of github, bootstrap design, and user experience. Anhelina and Jordan worked on the typeahead function to autocomplete and assign each country to a 3-digit country code. Jordan was responsible for the backend database saving each search query to Firebase and displaying the previous searches to the user interface.

**Challenges:** Typeahead was a challenge to find the correlated country code for an input country. The WHO database was accessed by country codes, so we were able to use the typeahead bootstrap function and scrap data from a public country code webpage to match each input country with a specific 3-digit code. The WHO data was in lots of different forms, languages, and syntaxes. The difficult forms of data required additional javascript to create meaningful information. Google maps API was a challenge to show a particular country and to show the markers that are necessary to indicate the largest hospitals in each country. Additional challenges included setting up log-in authentication through google.

**Improvements:** We would love to compare each country to each other based on WHO data to create an accurate rankings system for each country. We would add more relevant health data to google maps to help people search for alternative health resources. Additionally, we would clean our javascript to create functions to avoid repetitive tasks and code lines. We would like to limit the number of countries shown on the web page (instead of prepending each search). We would like to include log in authentication to save specific user data. We would like to save the past searches of each user and paste that to the user interface instead of using the past searches from all users.

Presentation Responsibilites:

Description & Motivation – Mathew

Results, Team Efforts, & Individual Responsibilities – Anhelina

Challenges & Improvements – Jordan