WEB/ DATA DEVELOPER ASSESSMENT
LATIM RONNIE DAVID

Task 1:

Pollicy is interested in building an interactive dashboard to display insights from a data collection project previously conducted. As the web developer, your task will be to design the layout structure of the dashboard and work closely with the design lead to create appropriate graphics for the dashboard. To assess your creativity, design a wireframe (or graphical representation) of what you propose to develop.

My Task 1 Attempt

I presume that Pollicy Uganda collaborated with the Ministry of Health to conduct a data collection project based on gender and age, where the collected information was required to be displayed on an interactive dashboard outlining the consequences of the lack of knowledge regarding the rate of Ebola infection in the Mubende district.

I designed a basic wireframe prototype of my suggested dashboard for the aforementioned project below. I designed the sign-up and login pages below since I think users will need to register accounts before they can log in and view the data.

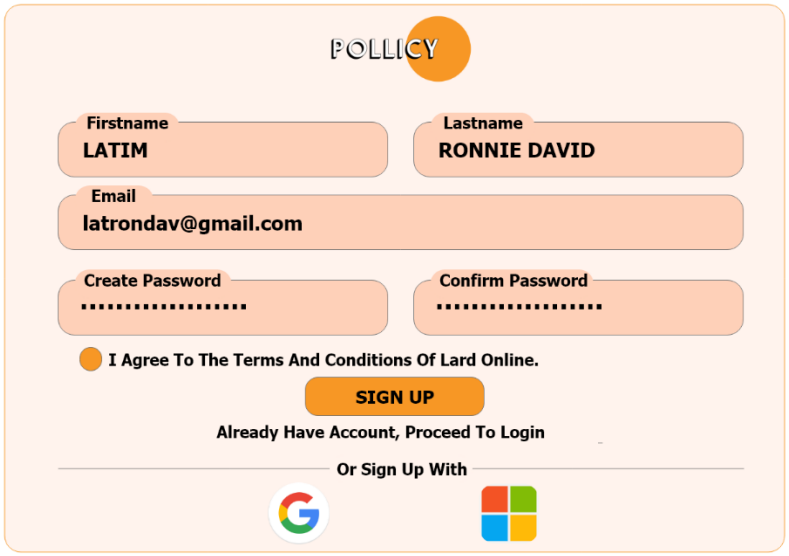

Figure 1: Sign Up Wireframe

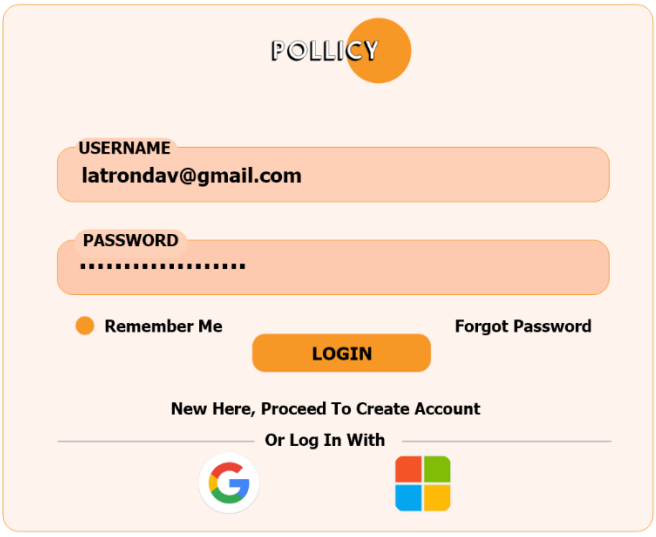

Figure 2: Log In Wireframe

The user will be able to see the visualized data and understand how the lack of knowledge about Ebola influenced its infection rate based on age and gender as shown in the wireframe below once they have successfully registered in as shown above.

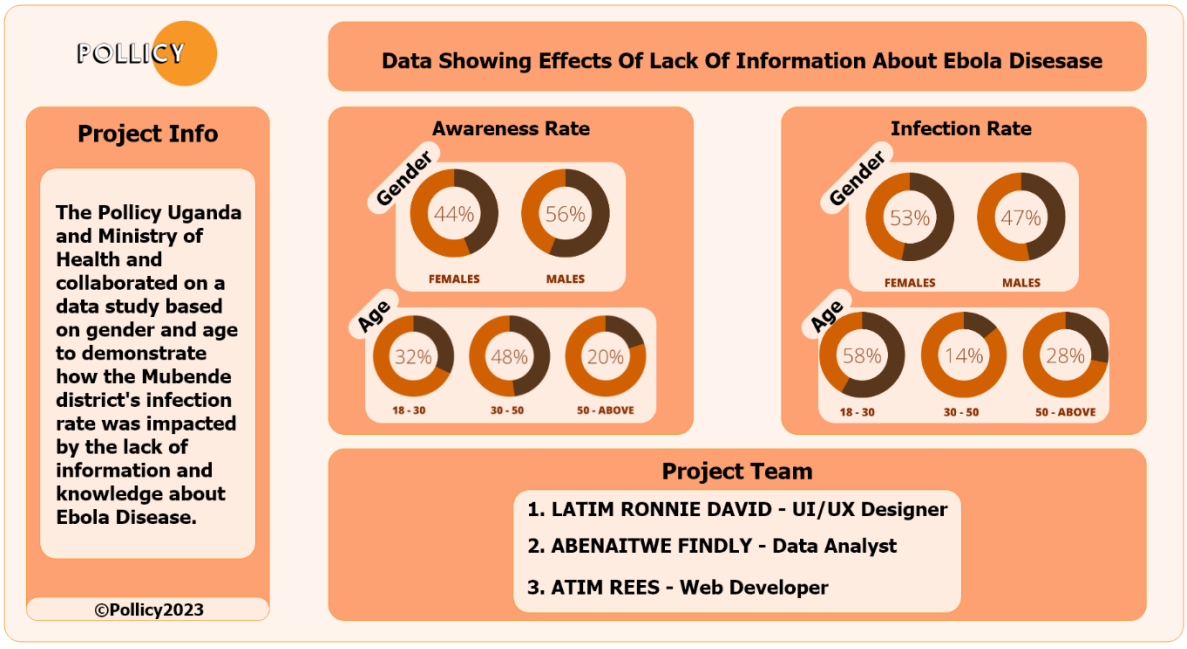

Figure 3: Data Project Dashboard

As a user who checked in to access the data from the aforementioned study, I gained insight into which gender was more aware of the sickness than the other and which gender had a greater infection rate, which was seen to be among males as opposed to females.

I learned that the age range between 30 and 50 years had the highest virus awareness, followed by the age range between 18 and 30 years, and the age range between 50 and above had the lowest disease awareness, indicating that persons in these age ranges had a high infection rate.

In conclusion, I would advise using efficient lines of communication to spread knowledge about diseases like Ebola to those who are least aware of them in order to reduce infection rates in the Mubende region.

NB.

I have attached my GitHub link to the Wireframe File

https://github.com/latrondav/Pollicy-Assignment.git

And I have also attached a link to my Adobe XD wireframe

https://xd.adobe.com/view/9188c8ca-4be3-4987-9408-83f5bbed2818-c4db/

Task 2:

Briefly describe the tools and steps you will use and follow to build the above project, from the proposed wireframe above to a functional demo on one of the online free hosting platforms. Please bear in mind that this task is testing for skills.

My Task 2 Attempt

When building the interactive dashboard above I followed these steps and tools:

1. I created the wireframe for the dashboard layout, which shows where various components, such charts, tables, and text, should be placed. Tools like Adobe XD and Figma may be utilized for this; I used Adobe XD to create the project wireframe seen above.
2. I would utilize HTML, CSS, and JavaScript to carry out the wireframe design and produce a useful, interactive dashboard after Pollicy Management had given the go-ahead. Some of the tools I use to make dynamic user interfaces include JavaScript libraries like React and CSS libraries like Tailwind CSS.
3. I would utilize JavaScript libraries like D3.js, Chart.js, or HighCharts to construct charts and other data visualizations that can be used to present data on the dashboard in order to incorporate data visualization in the dashboard.
4. Using Python Django REST APIs, Java Spring Boot APIs, or GraphQL for backend development, I would establish a connection to the data source and get data from the data collecting project.
5. The dashboard should then be tested on various hardware and browser combinations to make sure it functions properly and looks excellent.
6. Finally, upload the dashboard to a web hosting service. I can host the project for free and make it available via a URL on free hosting platforms like GitHub Pages, Render, Railway, and Firebase.