Analysis of Alternatives

Native or Web App

This was not a very difficult decision to make. Our client explicitly stated that they would like to choose the web application route after our meeting with her. We all agreed to this decision since it allows large flexibility in the user base as it allows usage of the app from different devices and also is very fitting to the purpose of displaying different kinds of data and statistics. Publishing a native application is also costly while web application provides free alternatives which is favourable for the budget our team has.On top of that, our team does not have much skill in developing native applications thus we decided to develop a web app for our client.

Cloud storage mediums

Firebase is a very popular medium for storing data provided by users. This will come in handy since our client needs to access information from the user which includes their mobile number and email. Since our team is most familiar with this route, we will be using Firebase in order to store data. It is dynamic and is perfect for storage since there are only two types of data.

Backend development

An alternative approach to building this project can be by using JavaScript. It is one of the most used platforms to develop websites from scratch and allows customization that cater to anyone's needs. It is very in depth and allows you to manipulate every single component that forms the website, be it the margins, text font, background colour and many more. You can also have buttons display animation by importing MDL which makes the user experience much more pleasant. Other than that, you can also add navigation drawers to the left side that allows you to easily navigate to desired pages. This makes navigation much more viable, and the user will have good browsing experience. You could also import apis to your project, but it is a complicated process since the code to implement apis must be done from scratch.

The second option in this category is to use Python in combination with Django. Again, this has a lot of potential since it is a very powerful tool and is very advanced in the options it provides for web development but large web developing companies are rarely found using Python as their base. It is not ideal since it requires more memory and slow processing speed compared to other programming alternatives.

Conclusion

In conclusion, we decided to use JavaScript for this project since it is the best suited for our purpose. It allows us to be creative and design our website that caters to our client's needs as well as being efficient since it is on the high end of performance compared to Python.