5. CONCLUSION AND FURTHER WORK

5.1 Problem Encountered

The implementation of this project was not an easy task. It requires a new approach from a new programming framework. The library was not big enough to handle all the needs of this application. There were some problem encountered during the implementation process of this Jogja Guide application that can be listed as follows:

- 1. There was insufficient time to implement all the functional modules on the application. The modules that could not be done are tour guide and transport.
- 2. The lack of information made the development process slow. For example, there was no clear official information about Yogyakarta in English.
- 3. Insufficient amount of Google Cloud Provider services because of the fact that this project was developed with a free account. For example, this application could not implement the map tracking system because it was not free to use.
- 4. The hardware was getting slower due to the heavy weight of Android emulator.

5.2 Conclusion

Jogja Guide is an Android mobile application to help Yogyakarta tourism industry. It has been developed with the implementation of React Native for the front-end and REST API for the back-end. Based on what has been developed, there are several conclusions that can be described as follows:

- 1. Designing and developing a tourist friendly mobile application was not an easy task. It requires a good user interface yet still need to be informative. Hence, the design process took longer time than the initial schedule. The biggest problem encountered from this process was the application functional designs were too simple to be implemented. There were no distinctive functions on the initial design. However, after some conducting some observations and experiments, there was a conclusion about the aforementioned problem. The function on the application was not the important part, but the implementation was, because tourism application needs to be user friendly and appealing. Hence, React Native was chosen to be the front-end framework for this project.
- 2. Jogja Guide application was designed to be the alternative for Jogja Istimewa application. It aims to help to improve tourism industry in Yogyakarta alongside and not a replacement of Jogja Istimewa.
- 3. The development process of Jogja Guide used a waterfall model that starts with research problem, analysis problem, designing architecture, designing user interface, implementation with React Native, implementation REST API, testing, and deployment.

5.3 Further Work

This thesis paper was written on limited time. Hence, this project is far from perfect and still needs a lot of improvements. There are some improvements that could be made in the future. The list can be described as follows:

- 1. Implement more functions inside the application. It can be done by doing more in depth research about the tourism industry.
- 2. Compile the mobile application for iOS operating system that could not be implemented on this thesis paper due to the hardware limitation.
- 3. Add more login choices for user to make it more flexible. As for now, this application only available for Google user. Hence, this limits the potential of the application because some tourist may not have a Google account.
- 4. Create a chat bot for help page to make it more intuitive and dynamic.
- 5. Add a proper recommendation system on the API side for creating an accurate result.

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