6. SUMMARY

Conclusion

This thesis aimed to develop a UI web application to collect data from the university's hydromast sensor as well as JSON data from AWS Lambda that would make it easier for the user to communicate with the device, provide better capabilities for data management, and make the user interface ready for integration from hydromast sensor data visualization.

First, the JavaScript language was selected as the core language along with React, Mapbox, Chart.JS, SASS and JSON. React JS framework was selected for UI because it is lightweight. These instruments allow to start developing faster and save the time for the writing the program code.

Secondly, the design of the interface and its intuitive placement of the elements were discussed with the supervisors. The expected result was obtained.

In conclusion, the main goal of this thesis was done successfully. The UI web-app that was developed is currently in use by the user interface to make this data useful, allowing the users to read, comprehend, and view the data with ease.

Further development

There are few scopes for further development in this system. As the author discussed with the supervisor, this project can be extended in the future and add more features and functionality. In which cases it needs further development are described in given below:

- Progressive Web Application
- Addition of more functionality
- WebSocket
- Implementing Accessibility

To start the further development, the developer should get the source code from this project's GitHub repository, which they can get upon request.

GitHub Repository Link: https://github.com/smsabir/UI-under-waterSensor
Some basic requirements should be fulfilled to start the application,
For example:

- NodeJS should be installed on the computer
- A code editor or IDE
- Clone the git repository
- Install all dependencies from package.json

A detailed guide on how to start the application is written on the README file of this project. It would be also helpful for a future developer to check the '5.1 Challenges' section to avoid the issues the author has faced.