Introduction

This assignment report shows the implementation of a Web User Interface (UI) using Angular Command Line (CLI). The implementation was based on Tampere University of Applied Science (TAMK) Weather Application Programming Interface (API) created in a Data Repositories and API (5100CV66-3001) course. This report is aimed at providing the list of required functionalities and other additional functionalities/features incorporated into the created Web application UI. The publication link for viewing and exploring this application via the internet is provided in addition to relevant screenshot as well.

The build and Implementation

Figure 1 indicates the implementation of angular CLI.

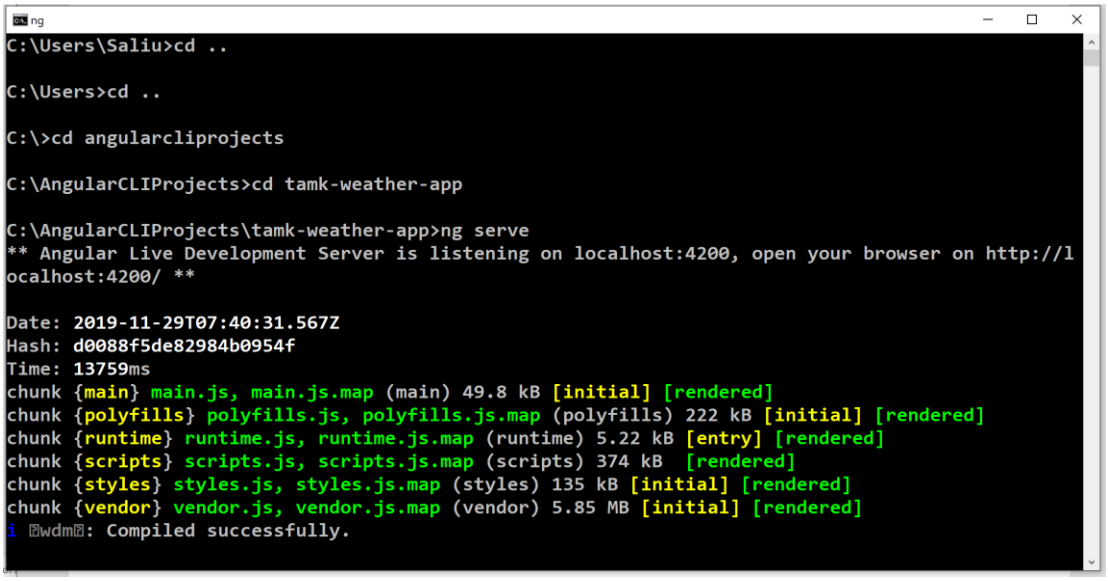

Figure 1. showing Angular CLI issuance and output

The resulting output in figure 1 when viewed via a browser is indicated as seen in figure 2.

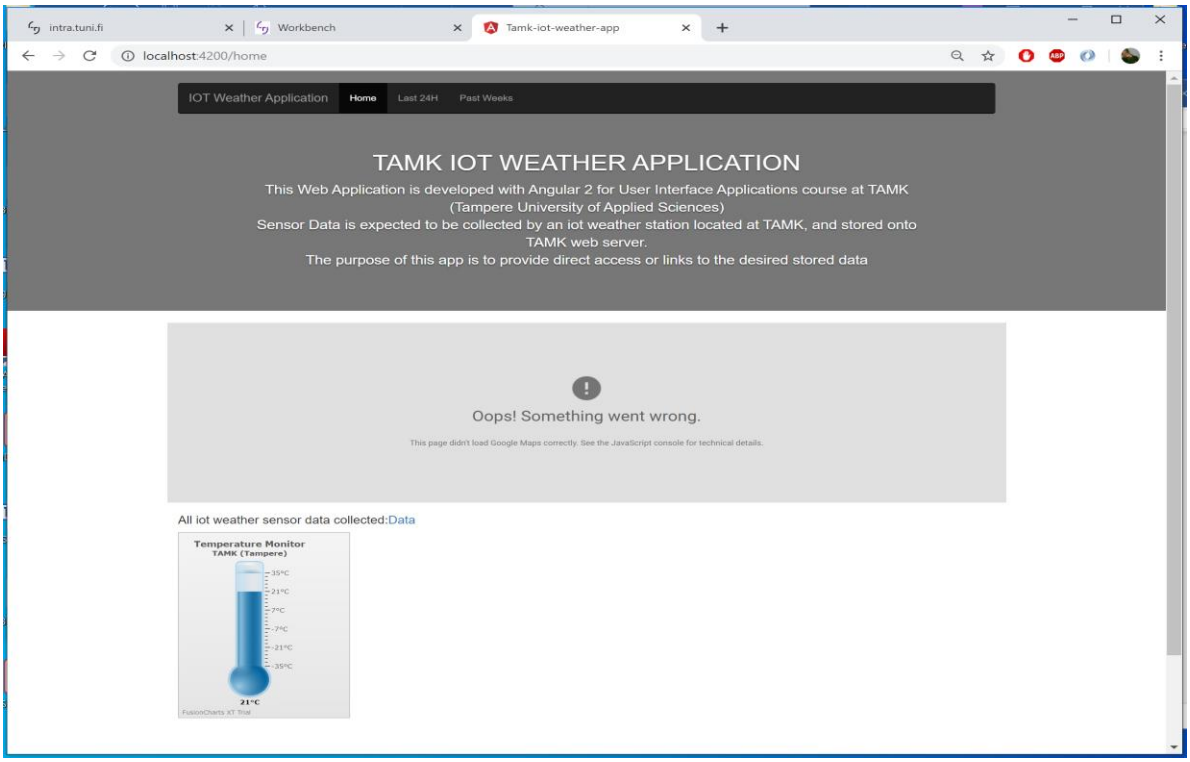

Figure 2. weather web application showing various UIs

The implemented UIs and their functions/features when utilized are as followed:

- **The menus bar and its icons:** This help navigate from one page to another page
    - **Past weeks icon/menu:** This help provide the links to temperature and wind speed sensor data
    - **Last 24H:** This provides the link to inside humidity data derived from sensor
- **TAMK link:** This provides the direct link to Tampere University of Applied Science
- **The home link:** This leads back to the home page of the web application
- **The Data link:** This provides the required link to all the weather sensor data at a glance
- **The Temperature Monitor Icon/Menus:** This help visualized the level at the sensor location
- **Location Map:** This help identify the location and the surrounding region of the sensor

All UI, menus and links initially worked as expected during the initially built, implementation and testing. However, UI such as location map may have developed some issue due to API key problem. Likewise, the publication fails to load all expected menus, links, icons and UIs.

Summary

In summary:

- Users could gain access to the relevant weather sensor values in whole and/or in part using the data link
- Users could view the last 24 hour humidity_in values using the 24H icon/menu
- Users could view past weeks last 20 temperature and wind speed values using the past week icon/menu
- Users could use the application's automatic layout adjustment for menus and size reduction
- Users could gain direct access to TAMK website using the TAMK link
- Users could get right back to the home page from any part of the application using the home link
- Users access to the publication link is. http://home.tamk.fi/~e6ishehu/test/

Conclusion

In conclusion, I have been able to development a web weather application station capable of providing access to different weather element values as captured by the weather sensor located at the premises of TAMK.