

The objective of this first assignment is to develop a simple Internet Application which demonstrates the following:

- A reactive client running in an Internet Browser using Vue.js – demonstrating some simple knowledge of the V- directives and mustache syntax and interacting with a Server-Side application using at least one Web API primitive. Do not use Vue-CLI or any other 'scaffolding' system.
- A Server-side application which exposes at least one API primitive and consumes the services of a 3rd party Web API – you won't be able to do this from the client side due to 'same-origin' restrictions

You are asked to produce an application that inputs the city that someone is planning to go to. Your server-side should use the openweathermap API to get the weather forecast for that city for the next 5 days. You should then display for the user some summary information including:

- Packing: if there is rain anytime over the next 5-days indicate that the user should bring an umbrella
- Indicate whether the user should pack for Cold (temp range -10..+10), Warm (+10..+20) or Hot (20+)
- Give a summary table for the next 5 days showing: Temperature, Wind Speed and Rainfall level

The openweathermap API is documented here: <https://openweathermap.org/api>

When you request the weather data for a city, it will return you the Longitude and Latitude of the city. You can then use these in the AIR Pollution API to get the PM2_5 forecast for the next 5 days. If this exceeds 10, then you should advise the user to wear a mask.

Notes:

- You are asked to submit one single file of server code – Ideally this should be no more than 3-4 pages long and one Client-Side HTML file containing the Vue.js code – again this should be no more than 3-4 pages long
- We will ignore the visual appearance of the application. Feel free to develop a nice looking version for your own use, but the submitted version should not be cluttered with styling
- You can use my access token (given in lecture notes) to invoke primitives on openweathermap.org

Deadline: You should submit a single HTML client file and a single Node.js server file using Blackboard by Tuesday November 2nd (week 8) @ 10pm.

Before you submit them, please PRINT-TO-PDF them and submit the resulting PDF files. VS-Code “printcode” extension lets you do this. This will make it easy for me to correct them online.