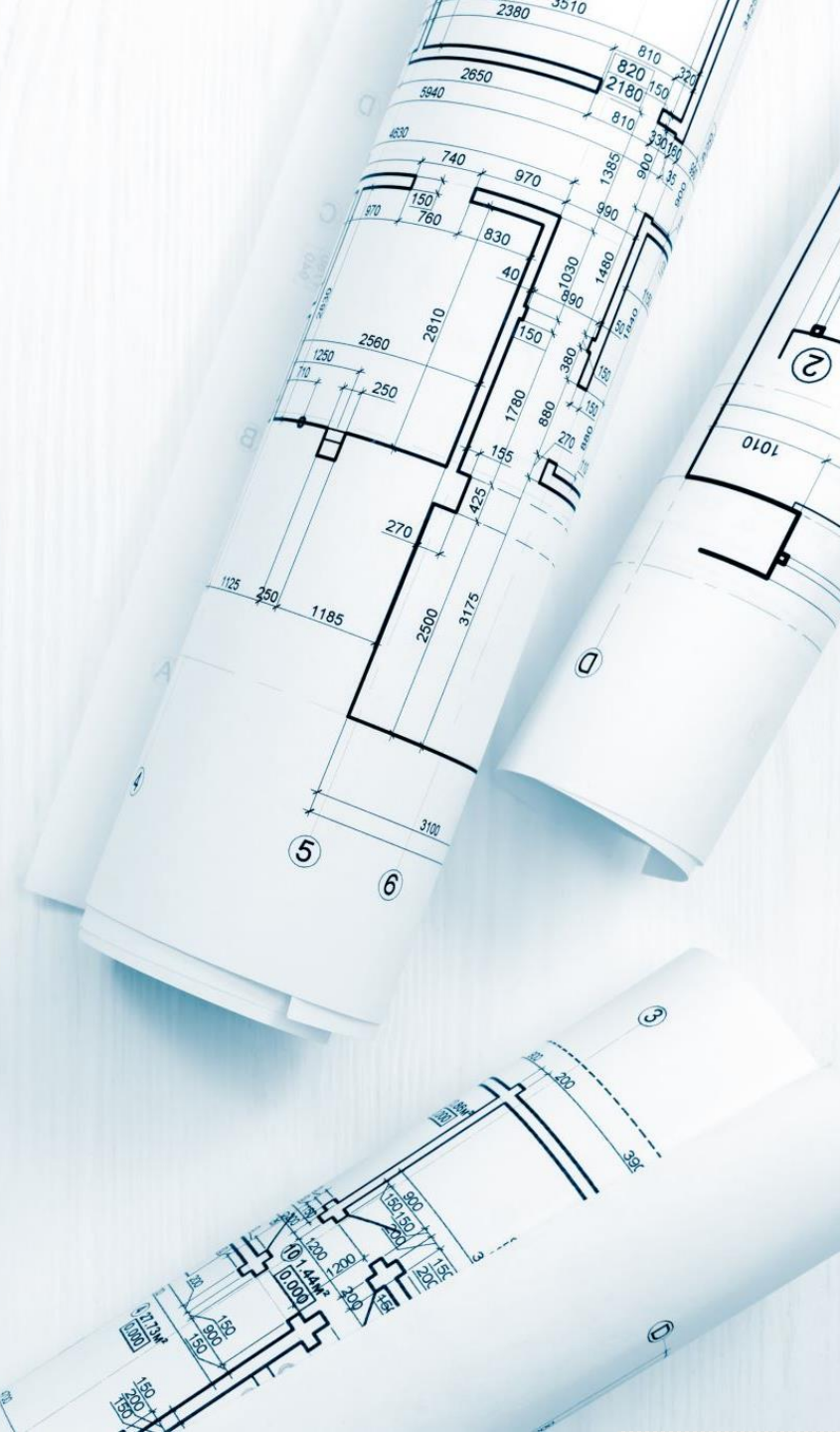# CPSC 2350 Project

Feb 19, 2022

Instructor: Parsa, Rajabi

Group 4: Joon, Hahn. Christopher, Tan. Hector, Onato

Overview

- A web application that tells a city's weather in 3 ways: Minute, hourly and daily. It will also include a media section that shows weather related news and a map displaying the city and its surrounding weather information that is color coded for air temperature.

SDLC

Model: Prototyping

We chose to use the prototyping model because our research deemed it very beginner friendly. We prefer having a clear representation of our project before starting the development so that we can discuss any features we may want to add/remove prior.

User stories

1) Weather API

-As Max, I want to play outdoor basketball, so we don't have to reserve an indoor court.

-As Julia, I want to invite my friends, so we can enjoy brunch in our backyard.

2) News API

User stories

-As kevin, I want to know the most interesting news in the town, so I have something to say at dinner table.

-As Fred, I want to know more about the city, so I can write more in my travel diary.

Technology stack

HTML: to create web page

CSS: to beautify the web page

JAVASCRIPT: To interact between client-side and server side

REACTJS: to make the web page fast and simple.

APIs

- **1_ One call api:**
  - A)Minute forecast
  - B)Hourly forecast
  - C)Daily forecast
- **2_News api:**
  - A)Displays the name of the city from the weather api
  - B)Displays recent news from the city
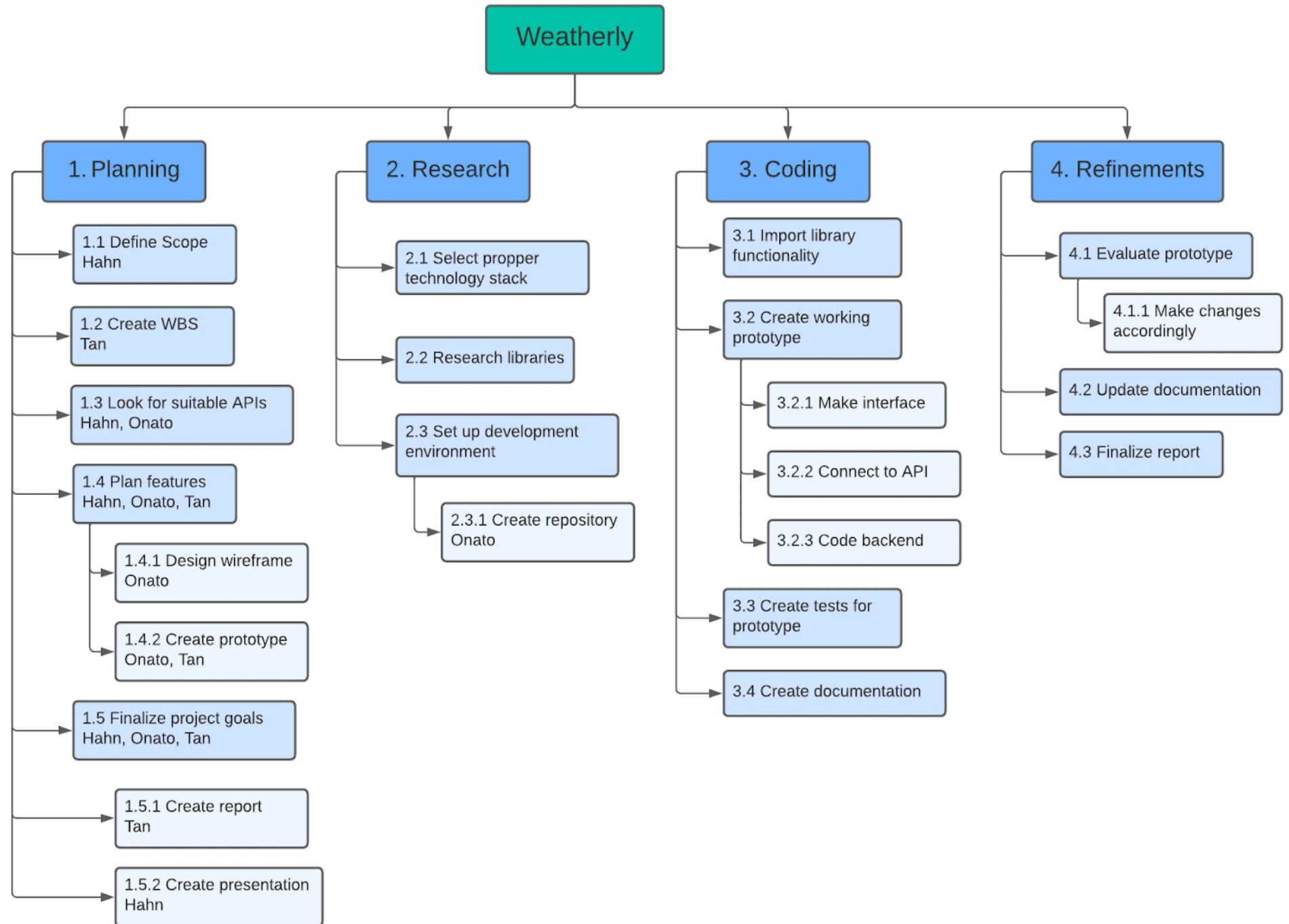 - C)Displays news from the past 7 days
- **3_Weather map api:**
  - A) Displays the current weather map
  - B) Forecast weather maps for 4 days (96 measurements)
  - C) Historical weather map archive since 14 September, 2020
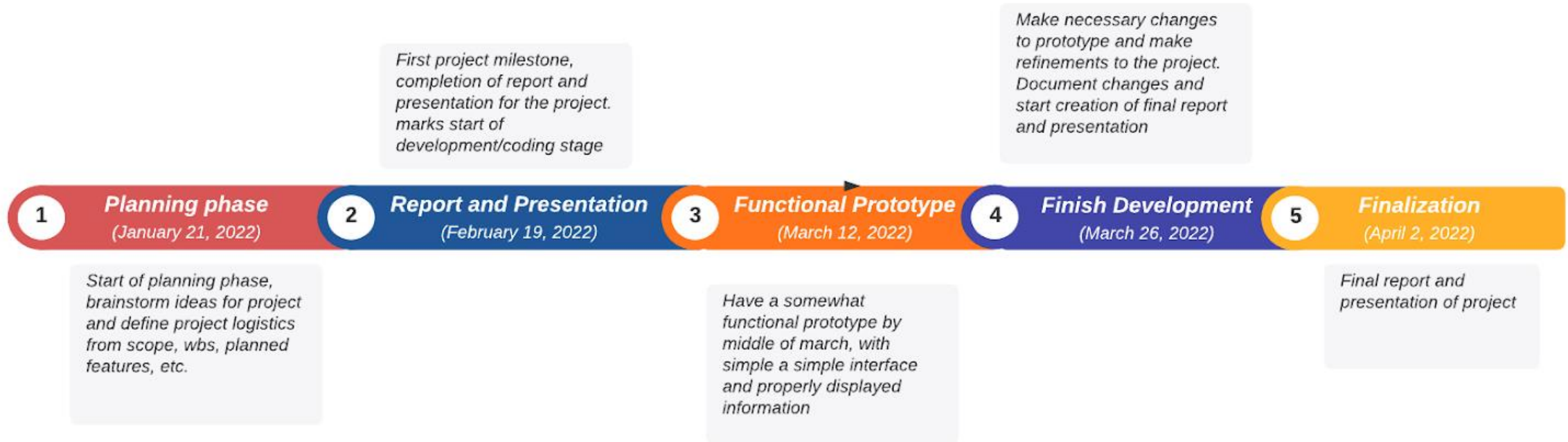- **4_Weather Statistic api:**
  - Displays the statistical data for:
  - A) Temperature and Pressure
  - B) Humidity and Wind
  - C) Precipitation and Clouds

WBS

Weatherly

1. Planning
- 1.1 Define Scope
  Hahn
- 1.2 Create WBS
  Tan
- 1.3 Look for suitable APIs
  Hahn, Onato
- 1.4 Plan features
  Hahn, Onato, Tan
  - 1.4.1 Design wireframe
    Onato
  - 1.4.2 Create prototype
    Onato, Tan
- 1.5 Finalize project goals
  Hahn, Onato, Tan
  - 1.5.1 Create report
    Tan
  - 1.5.2 Create presentation
    Hahn

2. Research
- 2.1 Select propper technology stack
- 2.2 Research libraries
- 2.3 Set up development environment
  - 2.3.1 Create repository
    Onato

3. Coding
- 3.1 Import library functionality
- 3.2 Create working prototype
  - 3.2.1 Make interface
  - 3.2.2 Connect to API
  - 3.2.3 Code backend
- 3.3 Create tests for prototype
- 3.4 Create documentation

4. Refinements
- 4.1 Evaluate prototype
  - 4.1.1 Make changes accordingly
- 4.2 Update documentation
- 4.3 Finalize report

Project schedule

First project milestone, completion of report and presentation for the project. marks start of development/coding stage

Make necessary changes to prototype and make refinements to the project. Document changes and start creation of final report and presentation

| 1 | Planning phase (January 21, 2022) | 2 | Report and Presentation (February 19, 2022) | 3 | Functional Prototype (March 12, 2022) | 4 | Finish Development (March 26, 2022) | 5 | Finalization (April 2, 2022) |

Start of planning phase, brainstorm ideas for project and define project logistics from scope, wbs, planned features, etc.

Have a somewhat functional prototype by middle of march, with simple a simple interface and properly displayed information

Final report and presentation of project

Wireframe

Prototype

WEATHERLY

Vancouver, BC

February 19, 2022

3°C

Rainy

High	3°	**Low**	0°
POP	5%	**Humidity**	5%
Wind	5 km/h SW	**UV**	Low
Visibility	15.05km	**Pressire**	103.0 kPa
Sunrise	8:00am	**Sunset**	5:38

HOURLY WEATHER   DAILY WEATHER   WEEKLY WEATHER

SUN	MON	TUE	WED	THU	FRI	SAT
5°	8°	2°	6°	5°	2°	6°

Weatherly

Vancouver, BC ⌄

8
Feels like 8°C

☁
Cloudy

High	9°
Low	6°
Wind	2 km/h SSW
Visibility	16.09 km
Humidity	83%

🔍

3 pm

8°
5%

4 pm

8°
5%

5 pm

8°
5%

Friday
February 18 — High 9° / Low 4°

Saturday
February 19 — High 8° / Low 2°

Sunday
February 20 — High 6° / Low 1°

Data Flow Diagram