Team Name

- Fellas

Team Project

- Topic: IoT Sensor Monitoring System
- Project: BC Weather & Wildfire Services Application

Team Lab

- L03

Team Members

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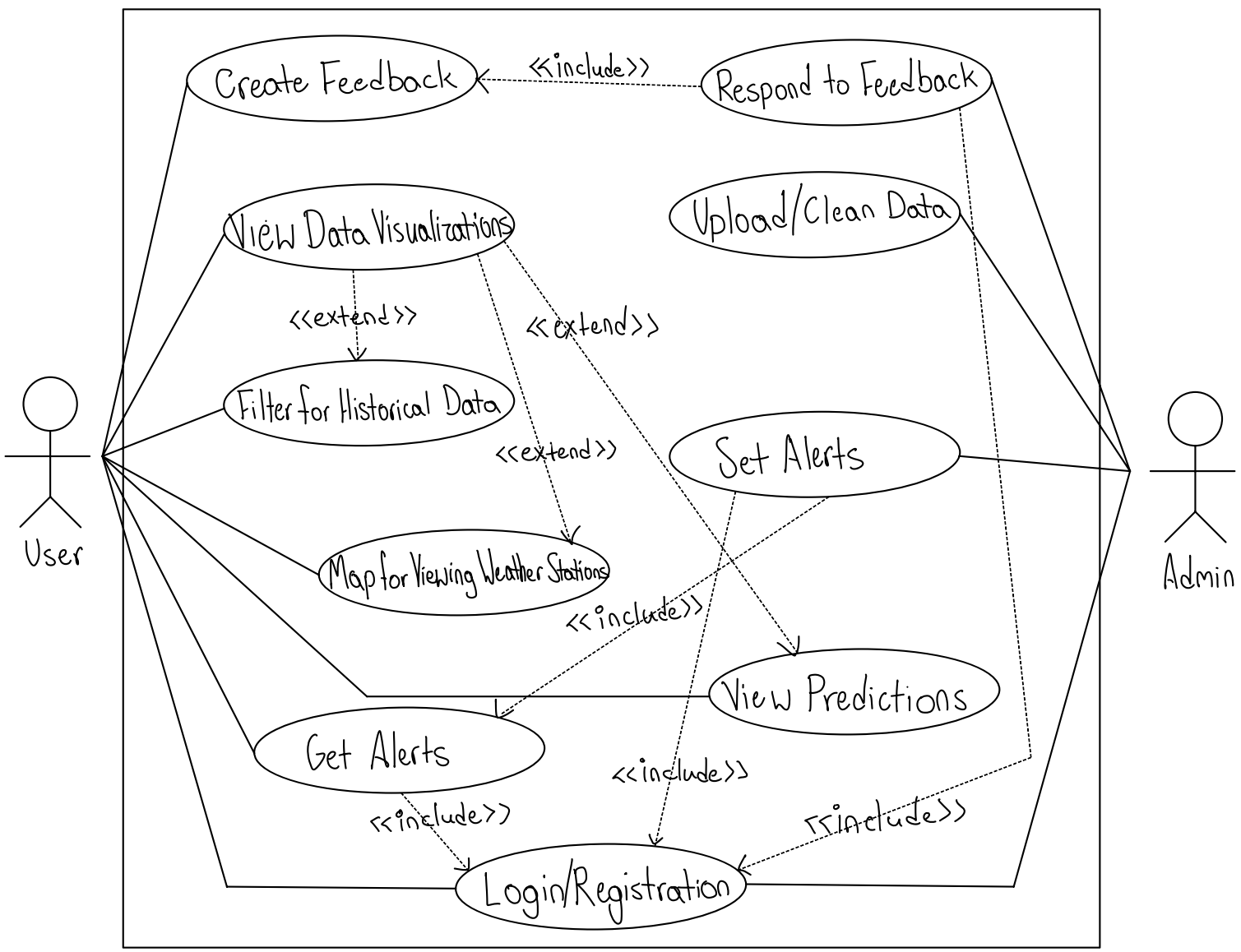
Use Case Diagram



Use Cases

- **Actor:** User

  - **Primary actor:** User
  - **Description:** The user should be able to provide feedback to the developers if they have any requested features or questions.
  - **Precondition:** The user needs an email as a method of contact.
  - **Postcondition:** If successful and the developers receive feedback then they will be able to follow up with the user.

  - **Primary actor:** User
  - **Description:** The user should be able to view the data visualizations on the dashboard.
  - **Precondition:** -
  - **Postcondition:** The user will be able to view data in the form of visualizations
    - View Data Visualizations
      - Temperature
      - Relative Humidity
      - Precipitation
      - Wind speed
      - Wind direction
      - Wind Gust

  - **Primary actor:** User
  - **Description:** The process of filtering Historical (Daily, Weekly, Monthly, Annually)
  - **Precondition:** The user should be able to view the visualizations.
  - **Postcondition:** The user will be able to filter the data.

- **Primary actor:** User
- **Description:** The process of viewing weather stations (Map): There will be a map.
- **Precondition:** -
- **Postcondition:** The user will be able to see where the BC wildfire weather stations are located and will be able to select them to get more details about that particular station.

- **Primary actor:** User
- **Description:** Get alerts: Users should be notified in extreme cases of weather. If the temperature is too high or with high wind speed, the dashboard would indicate a warning.
- **Precondition:** -
- **Postcondition:** The user will be able to receive a global notification that provides an alert on the dashboard for any potential extreme weather.

- **Primary actor:** User
- **Description:** The user should be able to view a prediction of a proprietary fire index.
- **Precondition:** -
- **Postcondition:** The user will be able to view a section on the dashboard that will provide a prediction of the proprietary fire index.

- **Primary actor:** User
- **Description:** Users should be able to register and login to the dashboard.
- **Precondition:** -
- **Postcondition:** The registered user is able to get alerts sent to their account if they are registered.

- **Actor**: Admin

  - **Secondary actor:** Admin
  - **Description:** Receive feedback: The admin should be able to receive the feedback that users have created.
  - **Precondition:** -
  - **Postcondition:** Admin will be able to follow up with any requests and solve any issues brought up by users.

  - **Secondary actor:** Admin
  - **Description:** Upload/Clean Data: Administrators/Developers can perform bulk data uploads from weather station sensors.
  - **Precondition:** -
  - **Postcondition:** Data will be updated.

  - **Primary actor:** Admin
  - **Description:** The admin should be able to register and login to the dashboard
  - **Precondition:** -
  - **Postcondition:** The registered admin will be able to set alerts and receive/respond to feedback.

  - **Secondary actor:** Admin
  - **Description:** Set alerts: The admin should be able to set alerts based on certain weather conditions.
  - **Precondition:** -
  - **Postcondition:** The alerts will show globally on the dashboard alerting users of extreme weather.