Group2 Product Backlog

Application Discussion: [User Story Definition]

- **As a:** [Developer]
- **I want to:** [define our user stories clearly]
- **So that I can:** [build the best application meet our expectation]

Priority: [High]
Estimated Points: [8]
Acceptance Criteria:

- [Well define user stories]
- [User stories should align with project timeline and goals]

User Story: [Google MAP Interface]

- **As a:** [User]
- **I want to:** [see google map interface on the web]
- **So that I can:** [interact with]

Priority: [High]
Estimated Points: [5]
Acceptance Criteria:

- [A web page with the Google Map feature]
- [When the user navigates to the page, a functional and interactive Google Map should be displayed]

User Story: [Bike Occupancy data]

- **As a:** [User]
- **I want to:** [access the latest bike occupancy data]

- **So that I can:** [decide which bike to choose]

Priority: [High]
Estimated Points: [8]
Acceptance Criteria:

- [When the user access the web, the bikes' location should be displayed on the map]
- [bikes' location should be accurate and up-to-date]
- [Collects info every 5 mins]
- [Aim to have several weeks of continuous data]

User Story: [Weather Information]

- **As a:** [User]
- **I want to:** [see weather information on the map]
- **So that I can:** [better choose trip options]

Priority: [Medium]
Estimated Points: [8]
Acceptance Criteria:

- [When the user access the web, weather information should be displayed on the map in suitable place]
- [weather information should contain relevant details such as temperature, humidity, and wind speed]
- [weather information should be up-to-date]
- [collect data about weather from OpenWeather every hour]

User Story: [Bikes number in a Station]

- **As a:** [User]
- **I want to:** [get the number of bikes in a station]
- **So that I can:** [better choose whether to go]

Priority: [Medium]
Estimated Points: [13]
Acceptance Criteria:

* [When user click a station on map, the number of bikes in that station should be displayed in suitable place]
* [the number should be up-to-date]

User Story: [Different Color For Different Conditions of Bikes]

* **As a:** [User]
* **I want to:** [see different conditions of bikes with different colors]
* **So that I can:** [easily choose the bike with better condition]

Priority: [Low]
Estimated Points: [21]
Acceptance Criteria:

* [When displaying the bikes on the map, each bike should have a color representing its condition]
* [A color legend is displayed on the page]
* [When users view the bikes with different colors, they can easily understand the meaning of each color and the corresponding bike condition]

Software Necessity: [Software Necessities Installation]

* **As a:** [Developer]
* **I want to:** [have all necessary software installed]
* **So that I can:** [develop efficiently]

Priority: [High]
Estimated Points: [8]
Acceptance Criteria:

* [All softwares are correctly installed]
* [Have front-end development tools installed]
* [Have back-end development tools installed]

Software Necessity: [ML model]

- **As a:** [Developer]
- **I want to:** [develop a ML model]
- **So that I can:** [predict occupancy based on collected data]

Priority: [High]
Estimated Points: [8]
Acceptance Criteria:

- [predictions are regularly updated as new occupancy data is collected]
- [predictions are reliable and provide actionable information]

Software Necessity: [Preliminary data scraping]

- **As a:** [Developer]
- **I want to:** [scrape data from websites or APIs efficiently]
- **So that I can:** [extract and use the data for application development]

Priority: [High]
Estimated Points: [8]
Acceptance Criteria:

- [The scraper should be able to retrieve data from a specified website or API]
- [The scraper should be fully automatic and easy to run]
- [Extracted data should be stored in database automatically]

Notes

- [User Stories could be added, modified or frozen based on future development progress]