

## T5 project proposal

# **Bike station System**

By Bayan Ali Alshehri

8 November 2021





Table of	Contents			
Introduct	ion	•••••	•••••	•••••
Data des	cription		•••••	
Q&A				•••••
Tools		•••••	•••••	•••••

#### Introduction:

Bike sharing systems have become popular means of travel in recent years, providing a green and flexible transportation scheme to citizens in metropolitan areas. Many governments in the world have seen this as an innovative strategy that could potentially bring a number of societal benefits. For instance, it could reduce the use of automobiles and hence reduce greenhouse gas emission and alleviate traffic congestion in city centers.

#### **Data description:**

- station id: station ID number
- name: name of station
- lat: station latitude
- long: station longitude
- install\_date: date that station was placed in service
- install\_dockcount: number of docks at each station on the installation date
- modification\_date: date that station was modified, resulting in a change in location or dock count
- current\_dockcount: number of docks at each station on 8/31/2016
- decommission date: date that station was placed out of service

#### **Question and answer:**

What is the framing question of your analysis, or the purpose of the model/system you plan to build?

**Ans**: The main purpose of the model is to optimize the placement of street teams in which that we predict the most crowded time and place.

Who benefits from exploring this question or building this model/system?

Ans: The proposed model can have multiple benefits such as

Gazal App to manage or create stations in many location

What dataset(s) do you plan to use, and how will you obtain the data?

**Ans**: Cycle Share Dataset Bicycle Trip Data from Seattle's Cycle Share System , and since it' publicly available we can obtain it easily.

### **Tools:**

The tools that I used for the project are:

- Python programming language
- Jupyter lab as programming environment
- Numpy and Pandas for data manipulation
- scipy and math for mathematical operations
- PowerPoint for presentation