Hadoop Team Project Proposal

1. **Lime Scooters** 
   1. **Resource overallocation/waste,**
   2. **Damage and maintenance,**
   3. **User safety and regulation compliance,**
   4. **Usage optimization (where to allocate scooters based on usage mapping)**

Our group members include Colin Dong, Zack He, Jenny Zhao and Mengying Zhao.

**Business Problem/Opportunity**

For the group project, we decided to go with Lime, the sharable scooter company. In the current stage, we find some potential areas of improvement that can be made for the company as well as threats. For example, how to better ensure user safety and comply with regulations, how to deal with damage and maintenance, usage optimization, and the list goes on. But for the purpose of this project, we chose to focus on how to prevent resource overallocation and waste for a better and more efficient business operation process. Currently we can see idle scooters parked randomly on the street, which is a waste of resources.

**Data Set**

To solve this problem and exploit this opportunity, our first phase of plan is to gather user demographics data, such as user age group, usage rate in terms of locations to achieve our goals to improve the business process. We will start searching for related news and data to strengthen our understanding of this matter. In addition, we would like to monitor public views of Lime on Twitter, a social media platform which allows third-party users to gather data from it. We will then develop recommendations based on the data we retrieved. Below are some information we found useful and can be explored more as we progress. For the data mining methods, we will analyze the retrieved data by the big data technologies for which we will learn from the course. We will probably use some other analyzing tools, such as R-studio, for which we learned from previous courses.

**Data** **Resource**

<https://data.world/datasets/lime>

<https://data.greensboro-nc.gov/Business-and-Financial/Lime-Total-Trips-bicycle-and-scooter-/dr28-x7i9>