

Capstone Project

Members:

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Data Science for the SchWIN

- **Project Submission -**

- GitHub Submission Date/Time:
 - 06/24/20 11:30 PM
- GitHub Repository:
 - https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN
- Presentation URL:
 - https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN/tree/master/documentation
- Online Classroom Submission Date/Time:
 - 06/24/19 11:30 PM
- Evidence of Version Control (git log --oneline):

```
bd97dfb (HEAD -> master, origin/master) Merge branch 'master' of https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN
a339e8e adding presentation
07829b5 Merge branch 'master' of https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN
2aca313 covid19 analysis
94bbad9 updating gitignore for word documents
25badbf final adjustments to operational and revenue graphs
9118ac8 Uploaded files including updated visualization for leaflet
9860b08 uploading weather vs fleet size analysis and operation analysis
5c16c2c Merge branch 'master' of https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN
866be1b Committing changes (including rebalancing visualizations)
0c1f01a adding temperature related scripts. Take in NOAA data and plot fluctuations from 2013-2020
118f2fc Finished NYC SF DC comparative analysis and am pushing changes/notebooks up
7ea9c80 updated random sampling and started to assess differences between San Francisco and NYC bike programs
4a6799e Working with 5% sample for DA
6181ff4 created random sampling method and performed graphical assesment of quality of sampled data
2d79313 Merge branch 'master' of https://github.com/Data-Science-Link/Data_Science_for_the_SchWIN
a70f884 adding .DS_Store to gitignore
d3638fe adding most recent workbooks
57c26c8 Fri Jun 12 commit
f45ba95 created notebook to show various methods of downloading data
d493116 updating gitignore to ignore zip files
122bbd9 adding additional folders
d891524 adding workspace folders
44f0806 first commit
```

- **Purpose -**

- Problem Statement:
 - *Bike share programs and their associated datasets are plentiful in modern times. How can a budding bike share business learn from other program's successes and failures?*
- Target Audience:
 - *Bike share program creators and investors who are interested in starting a business in another major business hub*
- Objective:
 - *Extract insight from Citi Bike business operations by leveraging publicly available data to inform the creation of a successful bike share program in another city*
- Business Value of Objective:
 - *By learning from the successes and failures of the U.S. gold-standard bike-share program, other budding bike share businesses can save money through targeted marketing and efficient operations*

- **Tools and Methods -**

- Tools and Methods Employed:
 - *Jupyter Notebook, Python, Matplotlib, Machine Learning, SQLite, R, RShiny App Development*
- User Experience Considerations:
 - *Shiny App Ease of Use, Consistent colors in visualizations, presentation practice*

- **Outcome -**

- Problem Statement and Objective:
 - *TBD by Audience/Grader*
- Satisfaction of Objective:
 - *TBD by Audience/Grader*
- Value to Target Audience:
 - *TBD by Audience/Grader*

- **Presentation -**

- Presentation Elements:
 - *TBD by Audience/Grader*
- Presentation Location:
 - *TBD by Audience/Grader*