**PROJECT PROPOSAL**

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| **PROJECT TOPIC** | NYC Subway System | | |
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| 1. **Introduction** |
| New York City (NYC) subway established around 1904 and been work ever since. One might think that it has gone through many changes to cope with the rapid life change that the world moving with, yes the subway of NYC has change from when it was constructed but not that much. For example, the current map of it has not change since 1979 which show how slow the changes happen. In the twentieth century the world moves so fast that if someone went back ten years back the world will not be familiar for them, whether the unfamiliarity due to new technology or the rapid growth of population. |
| 1. **Motivation & Benefits** |
| For what have been mentions above, it was propose to NYC Transit Authority to reducing the load on specific turnstile (ex. reduce the time of each pass or add more of them on specific stations ), and to be prepared for the next ten year of increasing population.  Part of the solution is to do exploratory data analysis on Metropolitan Transportation Authority (MTA) and other data, which can help the city as hole and residents or visitor of the city. Where this can save a lot of money if was planned early and add this extra layer of comfort which can have unseen effect on the city. |
| 1. **Datasets**  **& Tools** |
| The use of the following datasets:  - Metropolitan Transportation Authority of the State of New York  - Projected Population 2010-2040 - Summary  Some of the features that gone be use but not limited to it:   * + For MTA : **STATION, DATE, TIME, ENTRIES, EXITS**   + For PP: **borough, 2010, 2020, Change in Number - 2010-2020**   The modeling target of this could be the number of entire and the population distribution of next years. This work will be done using python and SQL and might involve others. |