**WQD7001 GROUP PROJECT**

**Initial / ~~Final~~**

You are representing which group? Survivor

State the Number of your group as registered on Google doc: Group 5

State the leader name: Baharul Hisyam bin Baharudin

1. What is the domain of interest you are working on?

Government Sector: Telecommunication.

1. Why are you personally interested in this domain of your project?

We are interested to explore mobile network penetration in Malaysia, since internet connectivity is one of the key aspects that will drive Malaysia IR4.0.

1. What question(s) are you asking?

a. What is the quarterly trend of mobile network internet speeds in Malaysia?

b. Ranking of states and counties according to mobile network download and upload speed in Malaysia.

c. Given a map, show what is the average internet connectivity speed in your place.

1. For whom are you answering the question being asked? Name the beneficiary of the product.

Mobile internet users, telecommunication company, telecommunication authorities.

1. Do you refer to the data science process to carry out this project? Yes/No If yes, which one?

Yes. We are currently in the ‘Preparation’ phase of the data science process. Subtasks of this process includes ‘Set Goals’, ‘Explore’, ‘Wrangle’ and ‘Access’.

1. What data are you using? State the source.

OOKLA Open Dataset for mobile network performance Shapefile:

<https://ookla-open-data.s3.amazonaws.com/shapefiles/performance/type=mobile/year=2020/quarter=1/2020-01-01_performance_mobile_tiles.zip>

<https://ookla-open-data.s3.amazonaws.com/shapefiles/performance/type=mobile/year=2020/quarter=2/2020-04-01_performance_mobile_tiles.zip>

<https://ookla-open-data.s3.amazonaws.com/shapefiles/performance/type=mobile/year=2020/quarter=3/2020-07-01_performance_mobile_tiles.zip>

[https://ookla-open-data.s3.amazonaws.com/shapefiles/performance/type=mobile/year=2020/quarter=4/2020-10-01\_performance\_mobile\_tiles.zip](https://ookla-open-data.s3.amazonaws.com/shapefiles/performance/type=mobile/year=2020/quarter=4/2020-10-01_performance_mobile_tiles.zip%20)

Malaysia District Shapefile:

<https://earthworks.stanford.edu/catalog/stanford-zd362bc5680>

1. What kind of analysis are you doing?

Descriptive and Exploratory Analysis.

1. Do you consider your results significant? Briefly explain.

The results will enable people on the streets to compare mobile network performance in different tiles and regions.

The results will enable telecommunication companies to have informed data to plan and execute network upgrade to specified tiles and region.

The results will enable telecommunication authorities to have informed data to plan and propose new policies in driving IR4.0.

1. What is your data product?

Mobile Network Performance Speed Coverage Map.

1. (Final submission only) Did you consider “reproducibility” in your work? Show evidence.

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