Team :  team-jk\_analytics

Project description (WRC)

Challenge1 ( Machine learning and Data Science)

1. Hopythesis

**“We would like to know the percentage of the households that are likely to use portable water in South Africa based on different factors”**

1. Inspiration/Story and the impact that your project would have.

As we are in the times of covid-19 we are locked Inside doors with the fear of contracting the disease, as of that fact we are working on the system to find out what are the factors that unable the have not and also the with supply of the water where the factors ranges from communication, Cost of data, Language issue, Digital literacy, Availability of appropriate devices and platforms for information display, sharing and consumption. And we are aware that some factors also affect other factors to make the access to water even extremely difficult, we coming with solutions that can be used to solve the problems around the scarcity of water among south Africans.

**solution**

Creation of a system that the municipality can monitor & regulate water in rural areas and pre-urban .The system will also promote social distancing and more information about corona in their area.

How will it work?

Its divided in two forms

The management System

During the early stages of lockdown the government distributed water tanks to rural areas where there is no water access so the municipality can monitor the water usage with the system.They can be able to check how many households haven’t received water and can also check the amount of water that is in demand at that area/village.

The user system

The users will be able to see when the water is available in their area and when will it be available.They can be able to report if there are glitches or fault on the water delivered.

Main target : anyone with smartphones so they will be able to assist their close families & Neigbours.

1. The solution workflow goes through seven stages described in the Data Science.
   * Question or problem definition. 1
   * Acquire training and testing data. 2
   * Wrangle, prepare, and cleanse the data. 3
   * Analyze, identify patterns, and explore the data. 4
   * Model, predict and solve the problem. 5
   * Visualize, report, and present the problem solving steps and final solution. 6
   * Supply or submit the results. 7
   * The workflow indicates general sequence of how each stage may follow the other. However there are use cases with exceptions.

We may combine multiple workflow stages. We may analyze by visualizing data.

* + Perform a stage earlier than indicated. We may analyze data before and after wrangling.
  + Perform a stage multiple times in our workflow. Visualize stage may be used multiple times.
  + Drop a stage altogether. We may not need supply stage for some problems