# COURSERA
# IBM SPECIALIZATION IN DATA SCIENCE

## CAPSTONE

### Report
This report establishes city locations to avoid while driving during unfavourable weather conditions like rain, ice etc., based on historical accident severity in these locations.

The supporting materials for this Report are the code presented as a Jupyter Notebook and a PowerPoint presentation.

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# Coursera IBM Data Science Capstone

## Contents

## Introduction & Problem

This project establishes city locations to avoid while driving during unfavourable weather conditions like rain, ice etc., based on historical accident severity in these locations. The target audience are city planners and road infrastructure planners, policemen and traffic wardens, as well as emergency medical personnel. The project details can be found at the following GitHub location: https://github.com/VMHunstock/coursera-capstone-project.git We will choose a boxplot to show accident severity in different spots of the city at different road conditions (snow, rain, ice etc.).

## Data

The data used to solve the problem was traffic data in a csv-format, available from https://s3.us.cloud-object-storage.appdomain.cloud/cf-courses-data/CognitiveClass/DP0701EN/version-2/Data-Collisions.csv and the metadata at https://s3.us.cloud-object-storage.appdomain.cloud/cf-courses-data/CognitiveClass/DP0701EN/version-2/Metadata.pdf.

## Methodology & Analysis

This section represents the main component of the report and discusses and describes any exploratory data analysis which was done, any inferential statistical testing performed, if any, and what machine learnings were used and why.

## Results & Discussion

This section discusses the results. The results provide a direction in terms of which city locations to avoid while driving during unfavourable weather conditions like rain, ice etc., based on historical accident severity in these locations. The results might be useful for city planners and road infrastructure planners, policemen and traffic wardens, as well as emergency medical personnel. In regards to the discussion, it can be seen that the dataset has some advantages, while some shortcomings. These may need further investigation.

## Conclusion

This section concludes the report. Summarizing, the report established city locations to avoid while driving during unfavourable weather conditions like rain, ice etc., based on historical accident severity in these locations.

For the presentation, please see GitHub.