BDA Spring 2022 Project Proposal

Title:

Flights Delay Prediction

Group members:

Ali Khalid	MSDS21001
Maisam Abbas	MSDS21003
Naila Iqbal	MSDS21015
Momina Jamil	MSDS21016
Tajallah Shafqat	MSDS21024
M. Tayyab	MSDS21032

Description:

In this project, we aim to build a cloud-based dashboard to show the possibility of the cancelation/delay of the selected flight by the user. A machine learning model will be trained, and real time predictions will be shown to the user on the dashboard. The dashboard will also have the access management system, allowing different functionality to different users.

Tools to be used:

- 1- Cloud platform (AWS/Azure/GCP)
- 2- SQL (PostgreSQL)
- 3- Spark

The listed tools are tentative and might change with the course of the project.

Tasks to be done:

- 1- Dataset search
- 2- Data preprocessing
- 3- Selection of cloud platform
- 4- Migrating data to cloud
- 5- Dimensional modeling (Data warehouse/ Data marts)
- 6- ETL operations
- 7- Machine learning model selection and training
- 8- Development of dashboard
- 9- Analysis and visualization based on business objective using OLAP
- 10- Adding access management system to dashboard

Deliverables:

- 1- Cloud based dashboard with access management system
- 2- Presentation
- 3- Report (if required)