

Data Science Projects: Predictive Modeling

Welcome to the Data Science projects for your internship phase! These projects focus on predictive modeling using different datasets. Below are the details to guide you through both projects:

Project 1: Stock Market Prediction

- Level: Easy

-Dataset

<https://www.kaggle.com/datasets/luisandresgarcia/stock-market-prediction>

Project Requirements:

1. Exploratory Data Analysis (EDA):

- Perform EDA on the stock market dataset to understand its structure and characteristics.
- Visualize key statistics and trends in stock prices.

2. Predictive Modeling:

- Utilize machine learning techniques to predict stock prices.
- Implement regression models to forecast future stock values.

3. Documentation:

- Document your approach, methodologies, and insights gained from the stock market dataset.
- Provide clear explanations for the chosen predictive models.

Project 2: Breast Cancer Prediction

- Level: Medium

- Dataset: Attached with the email

Project Requirements:

1. Data Preprocessing:

- Clean and preprocess the Breast Cancer Wisconsin (Diagnostic) dataset.
- Handle missing values, outliers, and any other inconsistencies in the data.

2. Feature Selection and Engineering:

- Identify relevant features for breast cancer prediction.
- Create new features or transformations that might enhance the predictive model's performance.

3. Machine Learning Model (SVM):

- Implement a Support Vector Machine (SVM) model for classifying tumors into malignant or benign.
- Train and evaluate the model on the Breast Cancer dataset.

4. Documentation:

- Document your data preprocessing, feature selection, and machine learning model implementation.
- Explain the model's performance metrics and any challenges faced during the analysis.

Submission Instructions:

1. Follow all the instructions mentioned in the attached Instruction PDF.
2. Upload the project files to GitHub with the repository named "Data-Science-Project-Series."
3. Submit the GitHub repo link at the end of the project review session.

Important Notes:

- Certificates will be provided based on successful completion and submission.

We encourage you to approach these data science projects with enthusiasm and creativity. If you have any questions or need assistance, feel free to reach out during the project review session.