



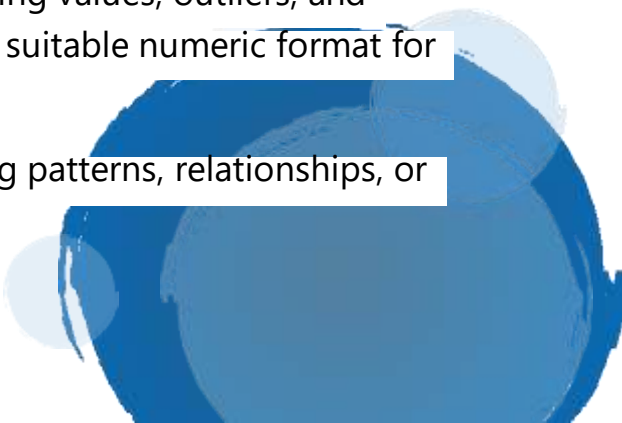
Graduation Project:

Health Insurance Cost Prediction

Objective:

The goal of this project is to create a predictive model that estimates health insurance costs based on various factors such as age, gender, BMI, number of children, smoker status, and region.

Tasks:

- 1. Data Collection:** Utilize a suitable dataset that includes relevant features for predicting individual medical costs billed by health insurance. An example of such a dataset is the "Medical Cost Personal Datasets" available on Kaggle.
 - 2. Data Preprocessing:** Clean the data by handling missing values, outliers, and categorical variables. Convert non-numeric data into a suitable numeric format for analysis.
 - 3. Feature Engineering:** Understand your data by finding patterns, relationships, or anomalies to direct your subsequent analysis.
- 



Graduation Project:

Health Insurance Cost Prediction

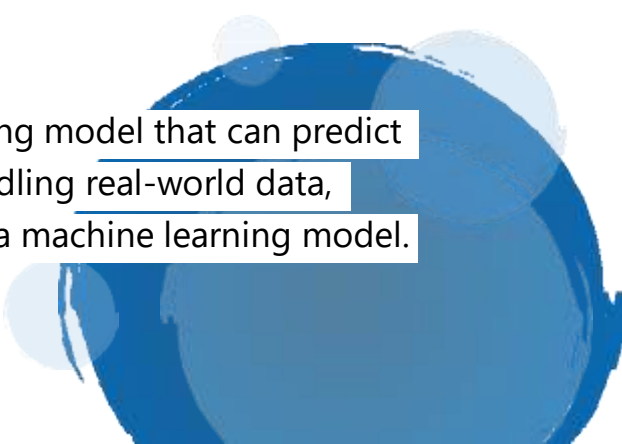
4. Model Building: Develop a regression model using appropriate machine learning algorithms (such as linear regression, decision trees, or ensemble methods) that predicts the health insurance cost for individuals based on their personal information.

5. Model Evaluation: Evaluate your model's performance using appropriate metrics such as Mean Squared Error (MSE), Root Mean Squared Error (RMSE), or R-squared.

6. Deployment : Implement your model in a simulated production environment where it can predict health insurance costs based on input data.

Outcome:

By the end of this project, you should have a functioning model that can predict health insurance costs. You will gain experience in handling real-world data, applying machine learning algorithms, and deploying a machine learning model.





Graduation Project:

Health Insurance Cost Prediction

Datasets:

You can start with the "Medical Cost Personal Datasets" on Kaggle, or you can find a similar dataset that's suitable for this project. Remember to ensure any data used complies with privacy and usage policies.

Deadline:

This project should be completed and submitted by [15/07/2025].

Best of luck! Excited to see your predictive models and how they can potentially impact the health insurance industry.

