Week 7 Deliverable: Healthcare Project
Group Name: The Data Doctors

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Problem Description:
One challenge for all Pharmaceutical companies is to understand the persistence of a drug as per the physician's prescription. To solve this problem ABC Pharma company approached an analytics company to automate this process of identification.

Business Understanding:
- If a patient is not persistent in given drugs, then a possible suggestion would be a different method of drug intake or a change in the medications.
- Understanding the effectiveness of the drug
- Change in the course of medication (increase or decrease)

After the development of a machine learning model, we can study what factors make a patient non-compliant in adherence to their prescribed treatment. After this, we can suggest solutions to ABC Pharma as to how persistency can improve based on the factors our ML model shows.

Project Lifecycle:
- Week 7-8: Research/Study – Understand problem statement, Researching different classification models – *12th Nov – 26th Nov*
- Week 7-8: Preprocessing/ cleaning dataset - Converting raw data into an understandable format, cleaning data, dealing with missing values, outliers, etc. – *12th Nov – 26th Nov*
- Week 9: EDA – Understanding the data, extracting patterns, understanding distribution, identifying important features – *27th Nov – 2nd Dec*
- Week 10: Identifying the ML model – Identifying the model for training. Training on the data – *3rd Dec– 13th Dec*
- Week 10: Validation/Testing – *3rd Dec – 13th Dec*
- Week 10: ML model selection – *3rd Dec – 13th Dec*
- Week 11: UI development – *14th Dec – 23th Dec (EDA Presentation 16th Dec)*
- Week 11: Testing – *14th Dec – 23th Dec*
- Week 11: Maintenance – *14th Dec – 23th Dec*
- Week 12: Project Report – *24th Dec – 30th Dec*