**📋DRUG RECOMMENDATION SYSTEM STEPS TO ACHIEVEMENT**

* **Step 1: Data Acquisition = ✅.**  
  Acquired drug patient interaction dataset (includes patient medical history, symptoms, conditions, and prescribed drugs).
* **Step 2: Data Cleaning & Preprocessing = ✅.**
  + Removed duplicates and irrelevant entries.
  + Handled missing values (imputation where possible).
  + Normalized categorical values (gender, condition, drug type).
* **Step 3: Data Transformation = ✅.**
  + Encoded categorical variables using One-Hot/Label encoding.
  + Scaled numerical features like Age, Dosage, and Lab Results.
* **Step 4: Dataset Loading = ✅.**  
  Loaded cleaned dataset into Pandas/SQL environment for exploration and modeling.
* **Step 5: Exploratory Data Analysis (EDA) = ✅.**
  + Distribution plots of drug prescriptions across conditions.
  + Correlation analysis between patient features and drug recommendation.
* **Step 6: Data Modeling = ✅.**
  + Built machine learning models (Logistic Regression, Random Forest, XGBoost) to predict the most suitable drug.
  + Compared accuracy, precision, recall, and F1-score.
* **Step 7: Data Visualization & Communication = ✅.**
  + Power BI dashboards: drug–condition heatmaps, patient profiles, model prediction trends.
* **Step 8: Project Review = ✅.**
  + Validated model outputs with dataset consistency.
* **Step 9: GitHub Upload = ✅.**
  + Uploaded cleaned dataset, code, model, and notebooks.
* **Step 10: Task Report Submission = ✅.**
  + Submitted final documentation & visuals.

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**🔗 GitHub:** ***Completed*  💯**