Project Design Phase-II

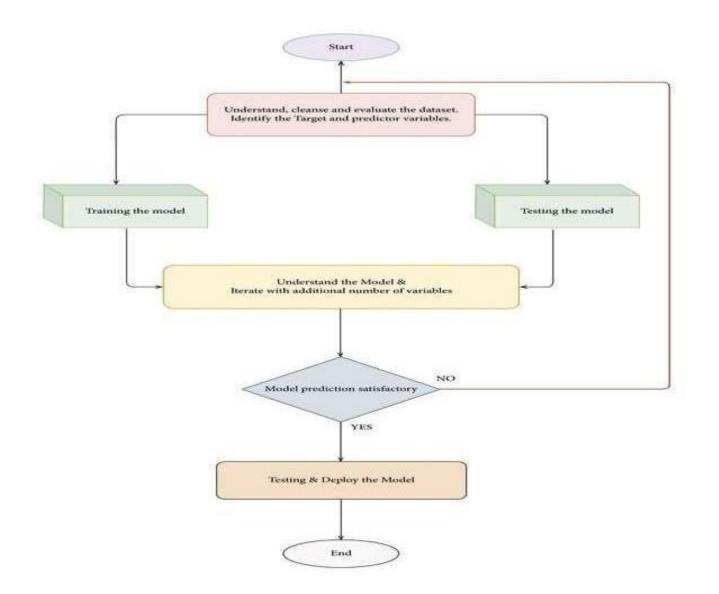
Data Flow Diagram & User Stories

| Date | 01 November 2023 |
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| Team ID | NM2023TMID00335 |
| Project Name | Empowering The Future: A Literacy Rate Analysis For A Better Future |

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

This diagram shows the flow of data between the different components of the solution. The Healthcare Provider and Insurance Company provide patient and healthcare data to the Cost Estimation and Prediction Service. The service then uses this data, along with machine learning algorithms, to estimate and predict the cost of hospitalization and medical care. The resulting cost estimates are then provided to the Healthcare Provider and Insurance Company. The Data Store stores and manages the healthcare data, and the Data Science team is responsible for developing and improving the machine learning algorithms used by the service.



User Stories

Use the below template to list all the user stories for the product.

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Team Member |
|------------------------------|--|----------------------|--|--|----------|-------------------------------|
| Healthcar e provider | Cost estimation and prediction | 1 | Use cost estimation and prediction service to provide the patient with the best possible care while minimizing costs | Cost estimates are accurate within +/-10% of actual costs | High | Medical Advisor |
| Insuranc e company | Cost estimation and prediction | 2 | Use cost estimation and prediction service to estimate the potential cost of covering a patient and offer competitive pricing and sustainable policies | Cost estimates are within +/-5% of actual cost | High | Insuranc e analyst |
| Patient | Cost estimation and prediction | 3 | Use cost estimation and prediction service to make informed decisions about healthcare and financial situation | Cost estimates are easy to understand and presented in a clear and concise manner | High | UX Designer |
| Data scientist | Model development and improvement | 4 | Use the solution to train and test machine learning models on healthcare data to improve accuracy of cost estimation and prediction algorithms | Models are able to accurately predict costs for a variety of medical procedures and patient demographics | Medium | Data Scientist |
| Hospital Administrator | Cost forecasting and resource allocation | 5 | Use cost estimation and prediction service to forecast expected healthcare costs, manage budgets, and allocate resource effectively | Forecasts are accurate within +/-10% of actual costs and resource allocation leads to improved patient outcomes and cost savings | High | Hospital administrato r |
| Healthcar e researcher | Cost analysis and trend identification | 6 | Use cost estimation and prediction service to analyze healthcare cost trends, identify opportunities for cost savings, and contribute | Trend analysis accurately identifies areas of high cost and potential areas for cost savings | Medium | Healthcar e analyst |

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|-----------|-------------------------------------|----------------------|---|---------------------|----------|----------------|
| | | | to the development of more efficient and effective healthcare systems | | | |