

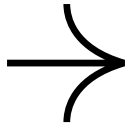
Project Roles and Responsibilities



Overview

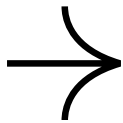
Project Title	Healthcare Predictive Analytics Project
Deliverables	<div>Cleaned and processed healthcare dataset</div> <div>Exploratory Data Analysis (EDA) report with visualizations</div> <div>Trained and optimized predictive model</div> <div>Deployed model as a GUI</div> <div>Model monitoring setup and performance reports</div> <div>Final project report and presentation</div>

Project Roles



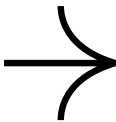
Data Collection & Preprocessing

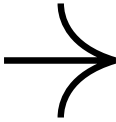
Project Role Description	Collects and cleans healthcare data, ensuring it is suitable for predictive modeling. Performs exploratory data analysis (EDA).
Primary Responsibilities	<ul style="list-style-type: none">• Gathers healthcare datasets with relevant features (age, medical history, test results, treatments, etc.)• Handles missing values, normalizes data, and encodes categorical variables• Conducts initial EDA and generates visualizations
Deliverables	<ul style="list-style-type: none">• Cleaned dataset• EDA report• Visualizations



Data Analysis & Feature Engineering

Project Role Description	Performs statistical analysis, feature selection, and feature engineering to improve predictive performance.
Primary Responsibilities	<ul style="list-style-type: none">• Analyzes relationships between health metrics and outcomes• Conducts statistical tests and correlation analysis• Engineers new features to improve model accuracy• Generates advanced visualizations
Deliverables	<ul style="list-style-type: none">• Feature engineering documentation• Advanced visualizations (risk segmentation, trend analysis)• Statistical analysis report

	<h1>Machine Learning Model Development</h1>	
Project Role Description	Builds, trains, and optimizes predictive models for healthcare risk assessment.	
Primary Responsibilities	<ul style="list-style-type: none">• Selects appropriate machine learning algorithms• Splits data into training and test sets, applies cross-validation• Evaluates models using performance metrics (accuracy, precision, recall, F1-score, ROC-AUC)• Tunes hyperparameters for optimization	
Deliverables	<ul style="list-style-type: none">• Model evaluation report• Trained and optimized model• Model performance comparison	

	<h1>Presentation</h1>	
Project Role Description	Prepares the final presentation and ensures the project's findings are communicated effectively.	
Primary Responsibilities	<ul style="list-style-type: none">• Designs and organizes presentation slides• Summarizes key insights and project impact• Includes visualizations and live model demonstrations• Prepares responses for potential stakeholder questions	
Deliverables	<ul style="list-style-type: none">• Final project presentation• Live demo of the deployed model	