Project Design Phase
Solution Architecture

Date	27 June 2025
Team ID	LTVIP2025TMID58662
Project Name	Learnhub: Your Centre for Skill Enhancement
Maximum Marks	4 Marks

Solution Architecture:

- *The business problem addressed is the lack of a personalized and accessible digital platform that helps students and individuals improve their skills efficiently and according to industry demand.*
- *The project uses user data (interests, goals, and skill level) and applies supervised machine learning algorithms such as Decision Trees or Collaborative Filtering to recommend suitable courses and resources.*
- *The system allows input of user details such as learning interests, availability, prior knowledge, and goals.*
- *The model processes this data and predicts/recommends the most relevant skill courses, certifications, or practice exercises based on individual profiles.*
- *The architecture includes:*
    - *Data Collection: User registration and input forms.*
    - *Data Preprocessing: Cleaning and structuring user input for analysis.*
    - *Model Training: Using ML algorithms to generate recommendations.*
    - *Evaluation: Testing accuracy and relevance of recommendations.*
    - *User Interface: A clean, responsive front-end dashboard for course access, feedback, and progress tracking.*
- *Deployment is planned via a web-based solution, hosted using Flask/Streamlit on Google Colab or other cloud platforms (e.g., Heroku, AWS).*

Example - Solution Architecture Diagram:

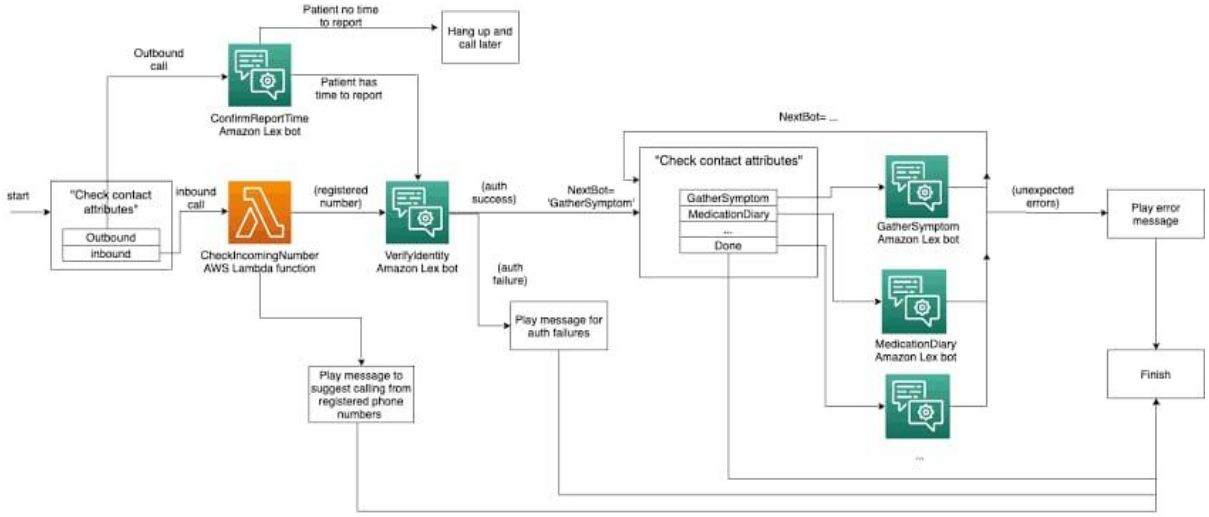

Figure 1: Architecture and data flow of the voice patient diary sample application