Agaahi

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PROBLEM STATEMENT

Modern databases store vast amounts of critical information, but querying these databases typically requires technical expertise in SQL. This creates a barrier for non-technical users, limiting their ability to access, explore, and make decisions based on data. There is a need for an intelligent system that enables natural language interaction with databases while maintaining security, accuracy, and scalability.

OBJECTIVES

- Simplify database querying through natural language.
- Customizable Dashboard for visual insights.
- Generate actionable reports for users.
- Implement secure role-based table access.
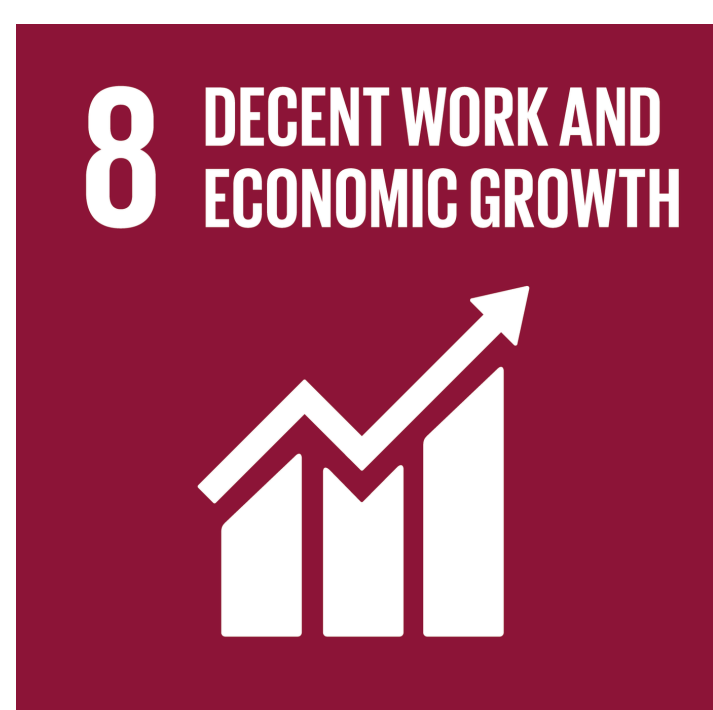- Translate database outputs into human insights.

PROBLEM SOLUTION

Agaahi is an AI-powered data querying web-application designed for businesses. It allows users to interact with a single relational database (like MySQL) through natural language queries, eliminating the need to write SQL manually. Built with LLM and LangChain, Agaahi dynamically generates, validates, and executes SQL queries while enforcing role-based access control (RBAC) to secure sensitive data. It focuses on simple, scalable deployments for teams and institutions, with a modular design that can be extended for additional features like data visualization. An organization begins by configuring its workspace — creating its company, defining roles, and assigning permissions. This setup is managed through a dedicated organization-level admin panel. Once configured, the admin within the company manages internal users like data analysts or engineers. Separately, a global admin panel oversees onboarding and registration of multiple organizations on the platform.
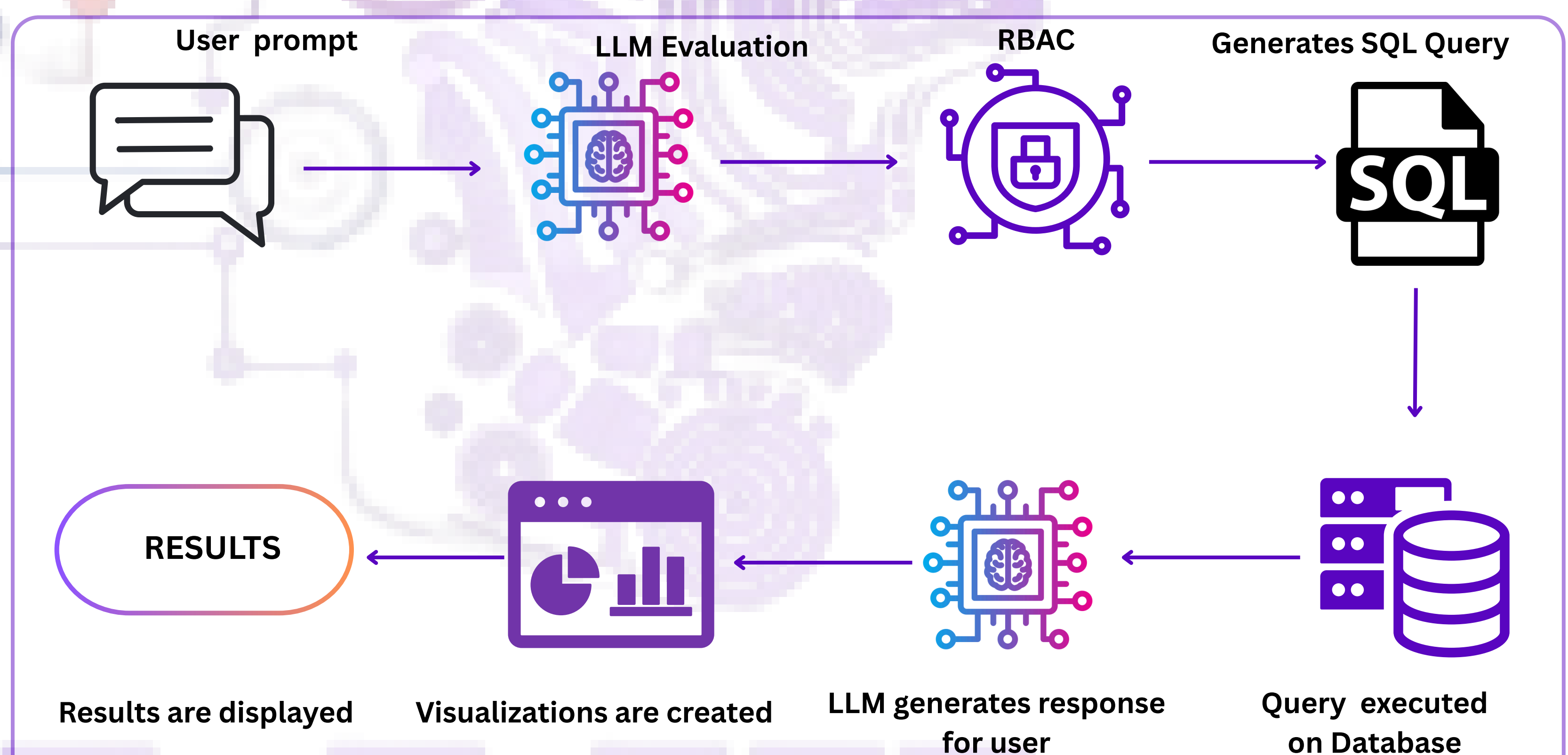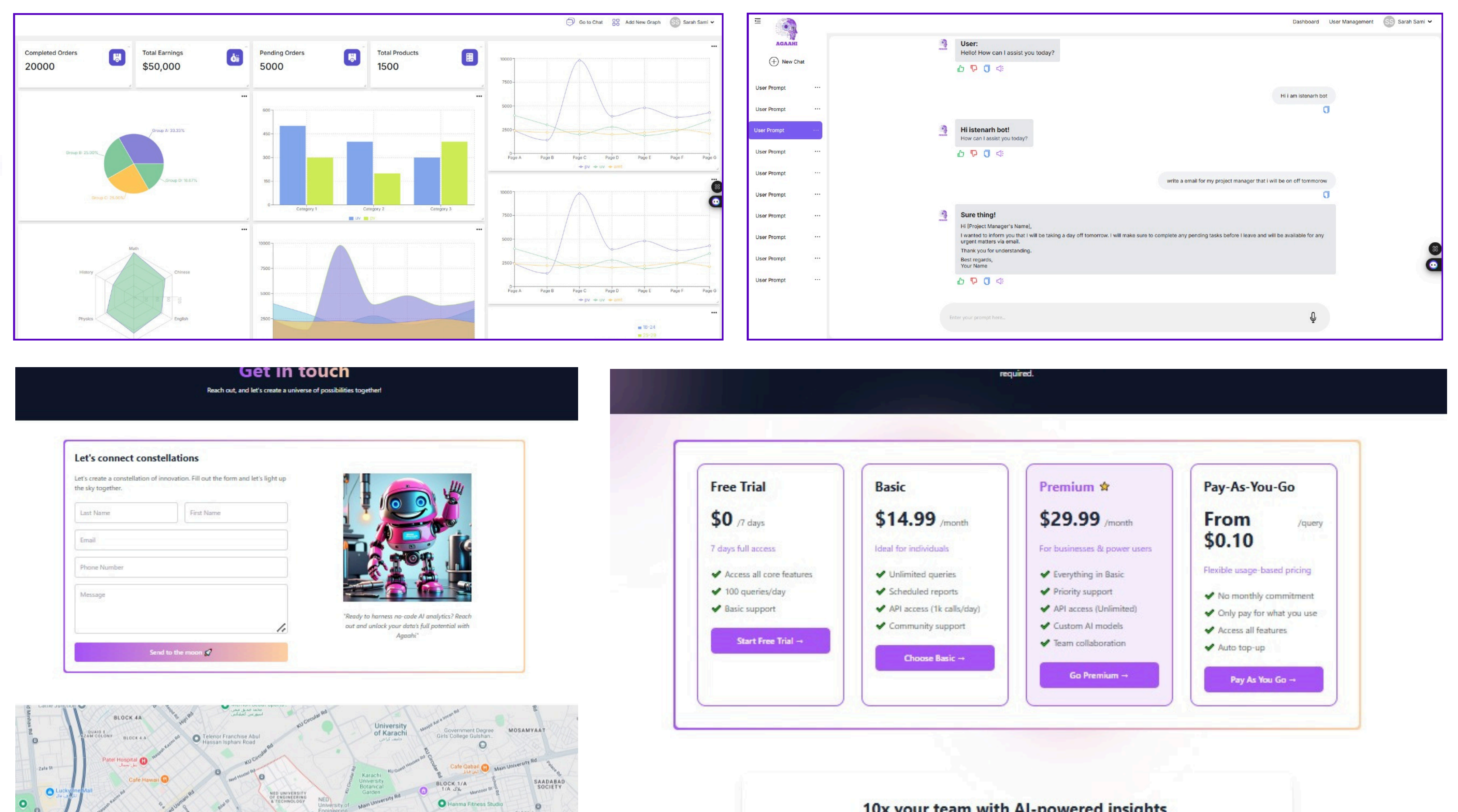
TECHNOLOGIES

WORK FLOW

User prompt → LLM Evaluation → RBAC → Generates SQL Query

RESULTS ← Results are displayed ← Visualizations are created ← LLM generates response for user ← Query executed on Database

SOFTWARE DEVELOPMENT GOALS

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

17 PARTNERSHIPS FOR THE GOALS

USER INTERFACE

TARGET AUDIENCE

Small and Medium Businesses

Research Organizations

Non technical Decision Makers