MICHIGAN STATE
U N I V E R S I T Y

Project Plan Presentation
AI for Med Students Learning About Basket Management

The Capstone Experience

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Spring 2025

From Students…
        …to Professionals

Project Sponsor Overview

- Created by a merge of Spectrum & Beaumont Hospitals
- 22 Hospitals with over 65,000 Employees
- Working with Dr. Holman and MSU Medical Students

Southeast Michigan
Formerly Beaumont Health

Southwest Michigan
Formerly Spectrum Health Lakeland

West Michigan
Formerly Spectrum Health

Project Functional Specifications

- Patients can communicate with doctors directly

- Students have a lack of education in basket management

- Train students to use EHRs and efficiently respond to patient messages

- Use AI to generate questions based on patient data and give feedback to responses

Project Design Specifications

- Simulated EHR Interface: An interactive interface resembling real-world EHR systems
- Task-Based Training: Students will manage test results, prescriptions, and patient messages
- AI-Powered Responses: Utilizing OpenAI's LLM API to craft an optimized response for reference
- Secure Authentication: Ensures role based access for students and instructors

Screen Mockup: Lab View

Screen Mockup: Student Dashboard
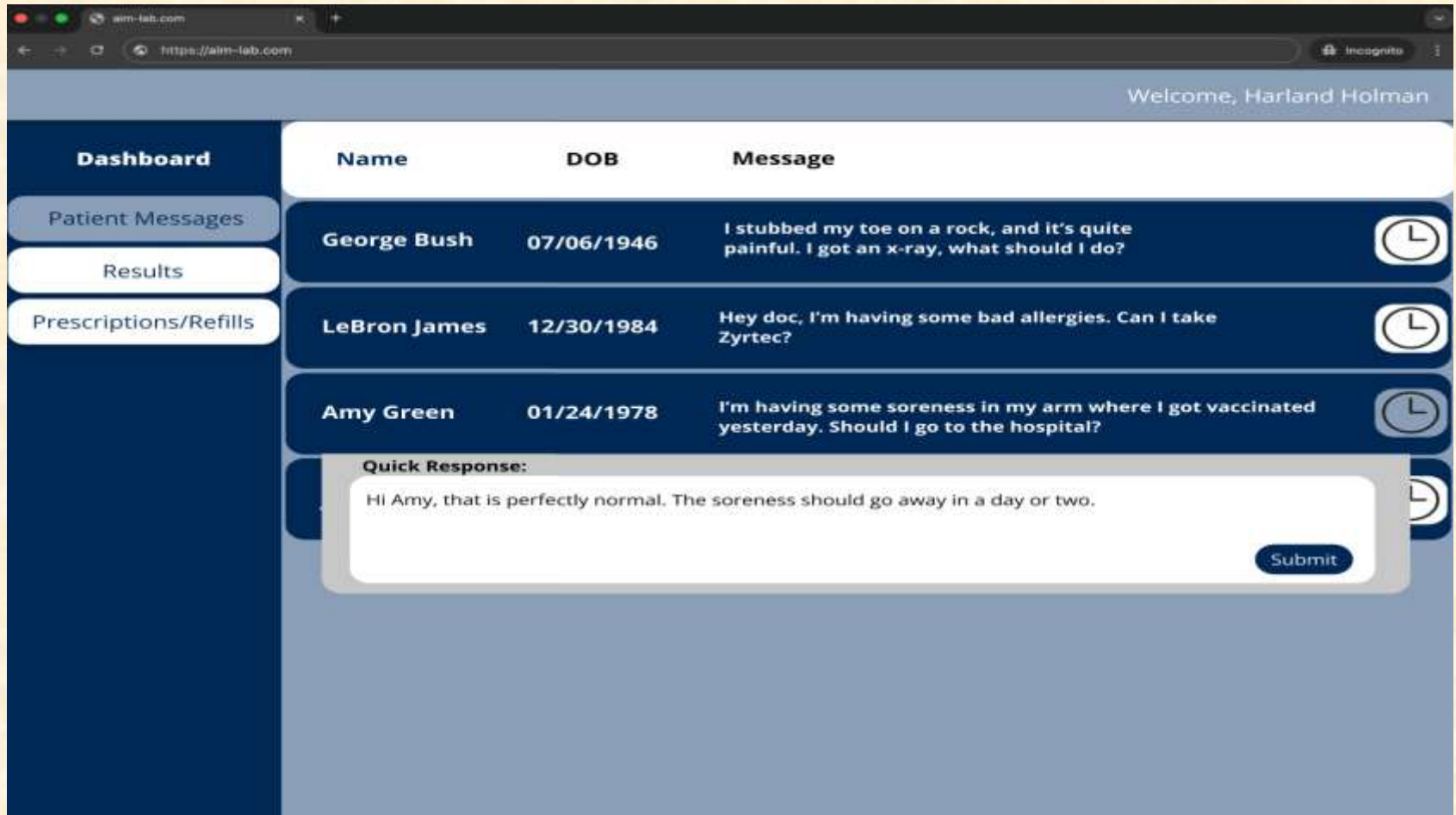
Screen Mockup: Prescription View
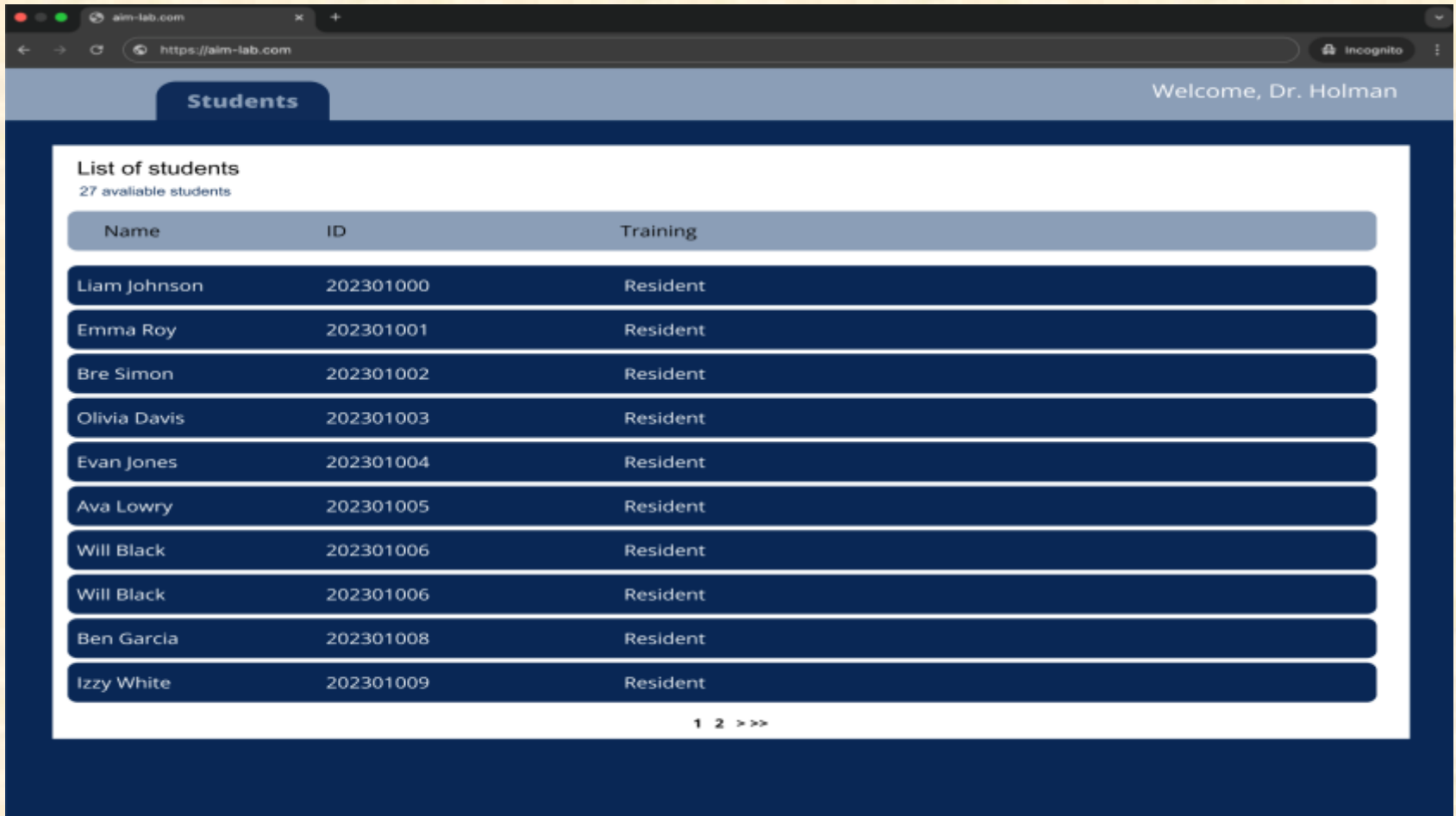
Screen Mockup: Lab Detail View
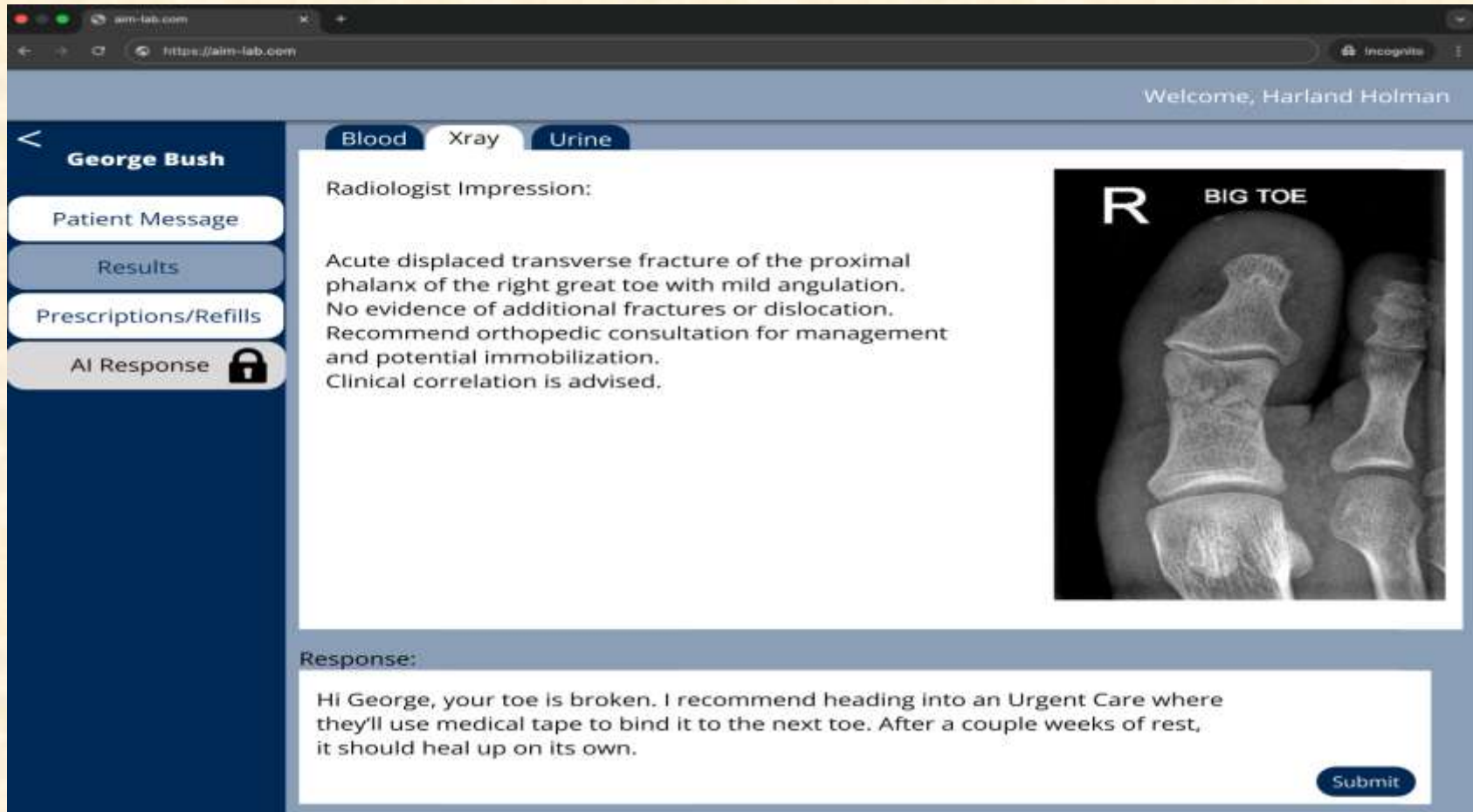
Screen Mockup: AI Response
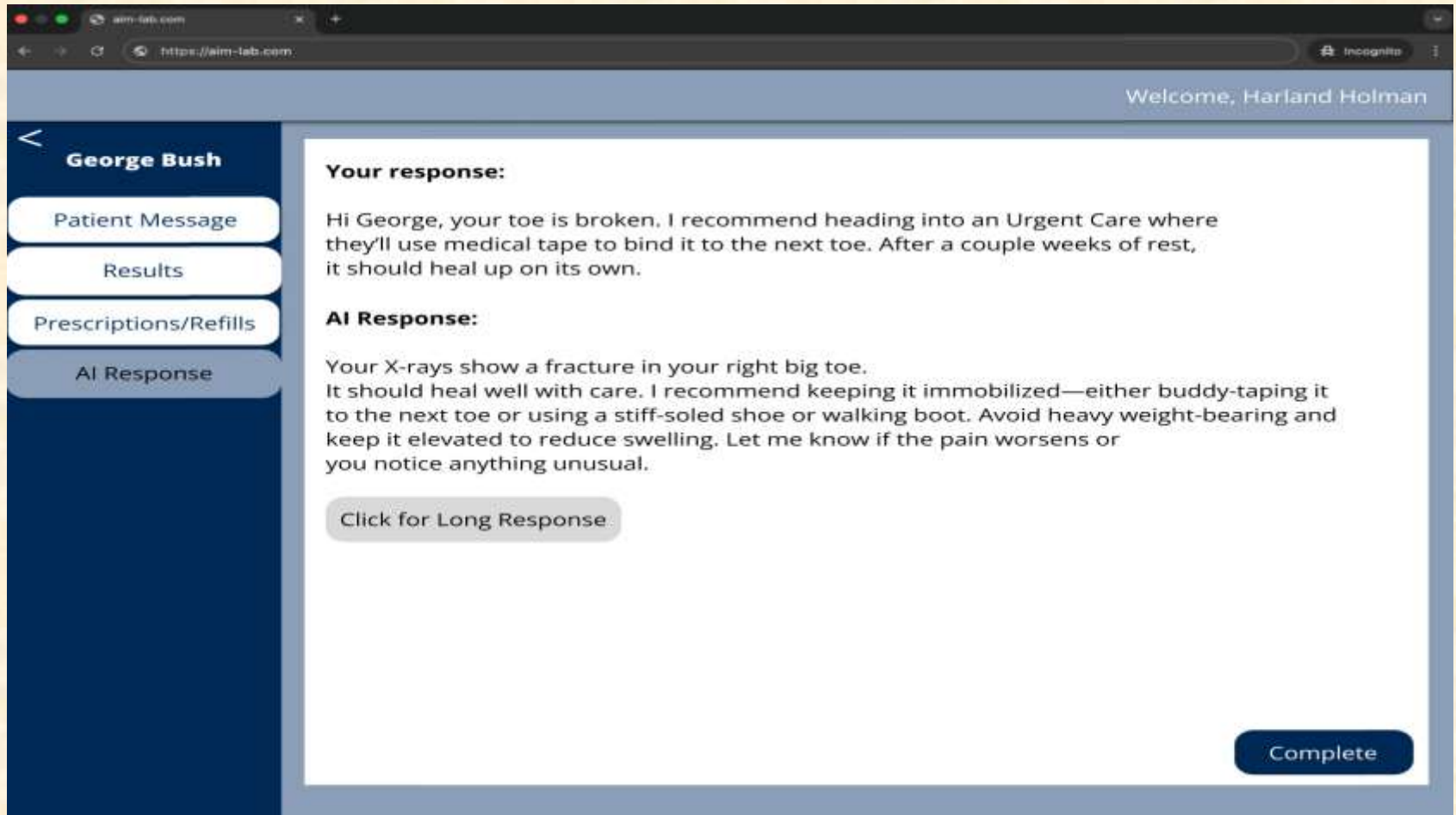
Screen Mockup: Instructor Dashboard

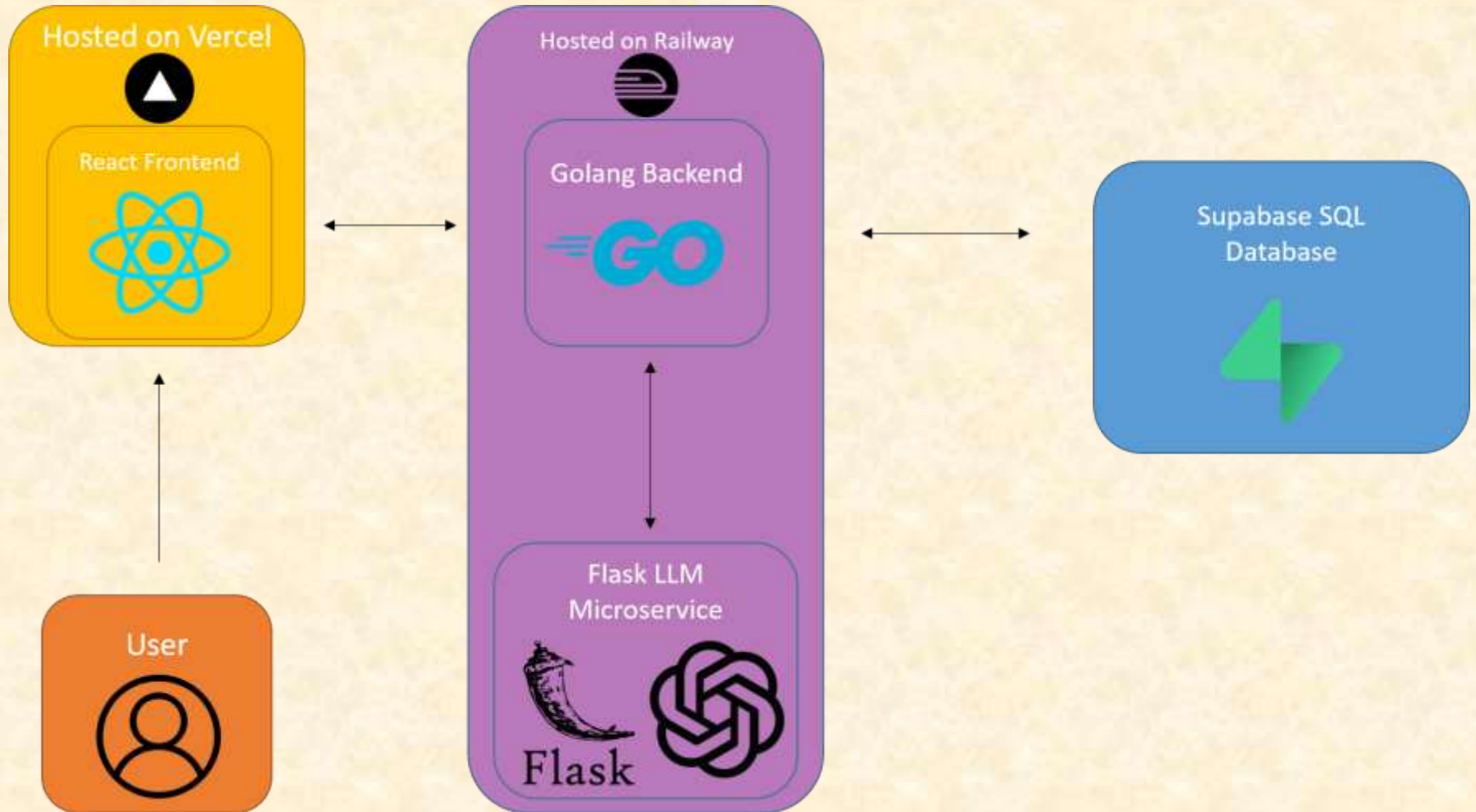# Screen Mockup: Student Detail View

Project Technical Specifications

- Create a basket management system within an EHR application

- AI Element to give students reference on plan & assessments

- Create student & instructor views for task & grade analysis

- Order system for prescriptions & other medical needs

Project System Architecture

Project System Components

- Hardware Platforms
  - Not Applicable
- Software Platforms
  - Frontend: React.js
  - Backend: Golang & Flask
  - LLM: OpenAI
  - Database: Supabase

Project Risks

- Risk 1
  - Restricted access to MIMIC-III Database
  - Wait for access or use AI generated patient data
- Risk 2
  - Restricted access to Med-PaLM LLM
  - Use OpenAI LLM if no access
- Risk 3
  - Accurate LLM feedback for medical information
  - Retrain the LLM on approved feedback from sponsor
- Risk 4
  - Hosting on JIT Medicine website
  - Offer other hosting options & cost breakdowns

Questions?

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