MICHIGAN STATE
UNIVERSITY

Beta Presentation
Electronic Laboratory User's Guide (eLUG) Modernization

The Capstone Experience

Team Henry Ford Innovations eLUG

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From Students…
…to Professionals

Project Overview

- Henry Ford Innovations- Detroit, MI
- One of the nation's leading healthcare systems recognized for its dedication to medical innovation, research, and patient care
- Project focuses on modernizing the Center for Precision Medicine (CPM)- within eLUG, ensuring that clinicians can easily access and interpret specialized genetic, molecular, and precision diagnostic tests that play a crucial role in personalized medicine
- Project will be baseline for the modern age eLUG, will provide clinicians a user-friendly interface that will save clinicians' time

Team Member's Technical Tasks
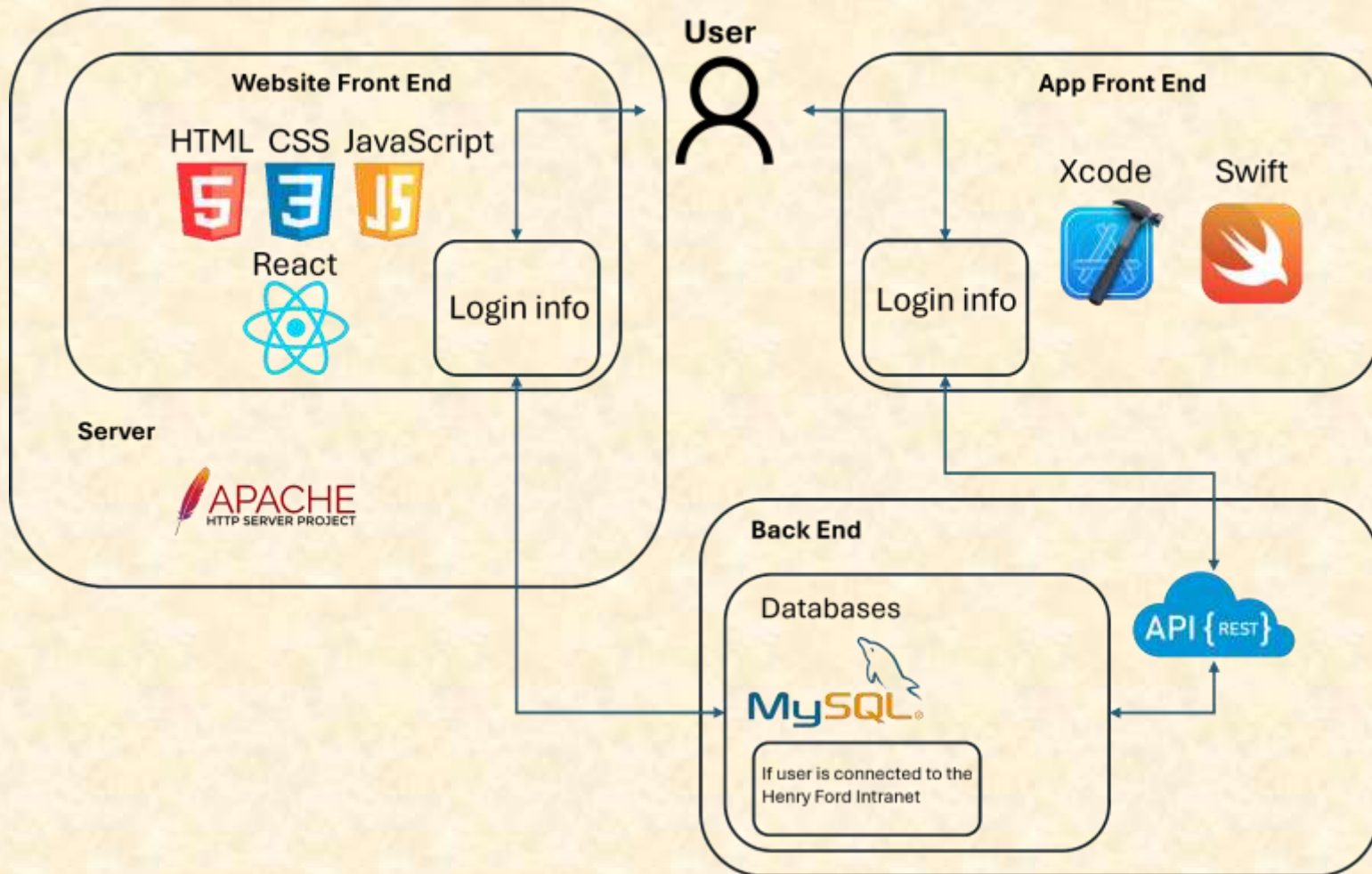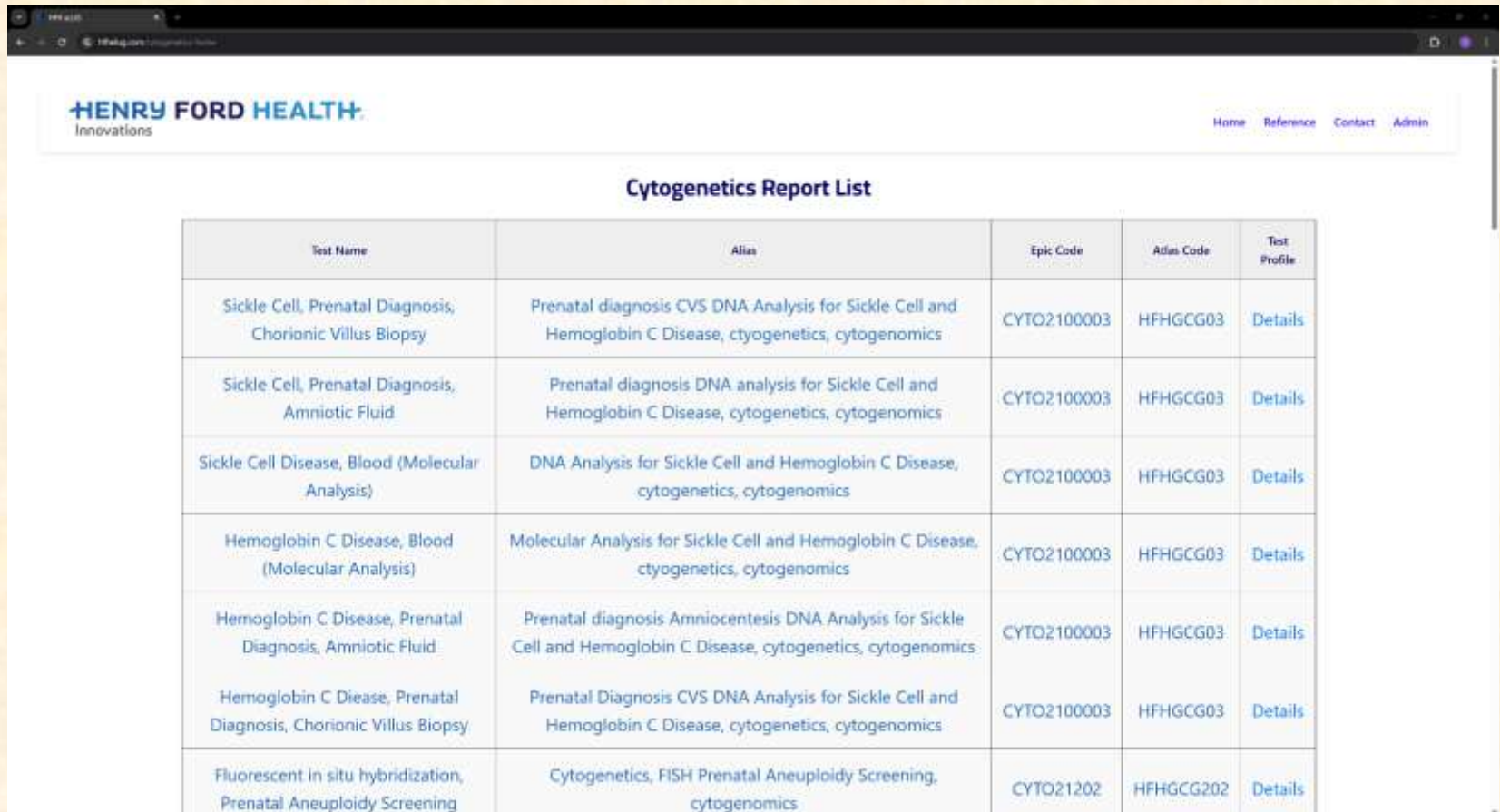
Technical Tasks Assigned

- Anushka Basani
  - Contact Page Layout, Report Detail Page Layout, Nav Bar Functionality
  - Clickable Phone and email links for users
  - Sidebar Links for web
  - Basic Search Filtering for iOS and Android App
- Trevor Jacobs
  - Connecting the front-end and back-end of the react app
  - Login functionality using database
  - Letter navigation system
  - Navbar creation
  - Upload and organize data within MySQL database
  - Upload all tube reference images
  - Help with in-house notes visibility
  - Creation of Reference pages and navigation system for the three reference pages
- Abhi Rao
  - Setting up MySQL Database, master table for iOS
  - Set up REST API for communication with iOS app and MySQL Database
  - Report List page, displays all the labs in the database in a scrollable list and shows relevant search text
  - Quickview feature, when a user holds and presses on a given lab, it pulls up key details for that lab, and can swipe down to return to the list
  - Advanced search feature, when a user has a typo on English or non-English words, it will still pull up the closest matches
- Shreya Rudagi

Technical Tasks Completed

- Anushka Basani
  - Contact Page Layout, Report Detail Page Layout, Nav Bar Functionality
  - Clickable Phone and email links for users
  - Sidebar Links for web
  - Basic Search Filtering for iOS and Android App
- Trevor Jacobs
  - Successfully connected the front-end and back-end of the react app
  - Login functionality using database and role-based system
  - Letter navigation system works for each performing laboratory
  - Upload and organize data within MySQL database
  - Uploaded all tube reference images
  - Help with in-house notes visibility
  - Created of Reference pages and navigation system for the three reference pages
  - Helped create navbar
- Abhi Rao
  - MySQL Database has been created and is running, master table for iOS is completed
  - REST API is completed, iOS app is able to communicate with MySQL Database
  - Report List page is completed, displays all the labs in the database in a scrollable list, there is text at the top showing input and number of tests found
  - Quickview feature is completed, when a user holds and presses on a given lab, it pulls up key details for that lab, and can swipe down to return to the list

System Architecture

Report List Page – Web App

Test Description Page – Web App

Report List Page – Mobile App
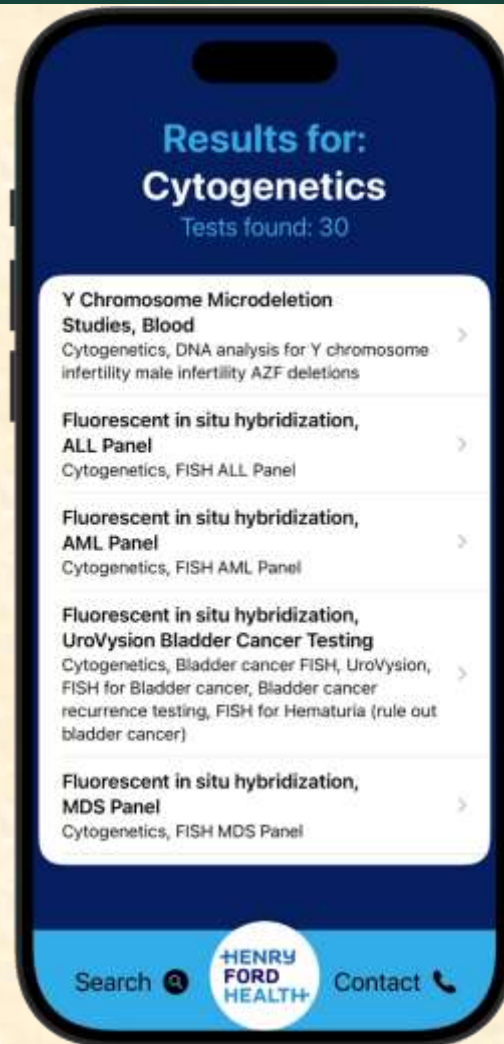
Test Description Page – Mobile App

What's left to do?

- Stretch Goals
  - Android version of app
  - Incorporating tests from other performing labs
  - Mobile app sidebar links
- Other Tasks
  - UI changes
  - Demo to pathology department

Questions?