Week 6: Detailed SRS

SRS Requirements

SYS: Health Protect

REQ-HP01
This application shall provide users with the ability to view the results of their DNA analysis and report and contact their doctor.

REQ-HP02
This application shall allow for a user to create an account if there is not already an account existing with the entered social security number.

- **REQ-HP11**
  This application shall allow for a user to delete their account.

REQ-HP03
This application shall require users to create an account with their first and last name, email address, password, date of birth, and a unique social security number.

- **REQ-HP12**
  This application shall require the user to input their email address and their password to log into their account.
- **REQ-HP13**
  This application shall provide the user with the ability to change their password if they have forgotten it.
- **REQ-HP14**
  This application shall send the user with a temporary password if the user has forgotten the password.
- **REQ-HP15**
  This application shall require the user to create a new password after they have logged in with their temporary password.

REQ-HP04
This application shall add the user's account information to the database within 5 seconds of the user successfully creating their account.

REQ-HP05
This application shall allow for a user's DNA analysis and report to be updated on the user's account within 1 day of its completion by a healthcare professional.

REQ-HP06

This application shall provide a homepage for the user which displays three different buttons: View Results, View Recommendations, and Contact Doctor.

- **REQ-HP16**
  This application shall allow the user to view their DNA analysis and results under the "View Results" page within 500ms.
- **REQ-HP17**
  This application shall allow the user to view their doctor's recommendations for them under the "View Recommendations" page within 500ms.

REQ-HP07

This application shall log a user out of their account if they have been inactive for 10 minutes.

REQ-HP08

This application shall display the user's doctor's name, phone number, and address of their practice under the "Contact Doctor" page.

REQ-HP09

When users are in the "Contact Doctor" page, this application shall provide a button labeled "Call Doctor" for the user to call their doctor.

REQ-HP10

This application shall allow for the user's phone application to open with the doctor's telephone number entered if a user clicks the "Call Doctor" button.

SUBSYS: Data Layer

REQ-DL01 *(Trace Link REQ-HP03)*

The Data Layer shall use 128-bit encryption to protect user data, social security numbers, account information, confidential information, and patient information.

REQ-DL02 *(Trace Link REQ-HP04)*

The Data Layer shall update user account information, password, and email address in the database.

REQ-DL03

The Data Layer shall store the user's DNA analysis results and doctor recommendations in the database.

REQ-DL04

The Data Layer shall log all user interactions within the application every 30 seconds.

REQ-DL05 *(Trace Link REQ-HP11)*

The Data Layer shall allow for the user to delete their account and all associated data from the database.

REQ-DL06 *(Trace Link REQ-HP01)*

The Data Layer shall allow for healthcare professionals to update the patient's DNA analysis results and doctor recommendations in the database.

SUBSYS: Laboratory Component

REQ-LC01

The Laboratory Component shall receive the live swab of the patient for DNA analysis and genomic sequencing.

REQ-LC02 *(Trace Link REQ-HP05)*

The Laboratory Component shall send the results of the DNA analysis to the Data Layer for storage, aggregation, and clean presentation.