

STATEMENT OF WORK

PERSONALIZED HEALTH MONITORING APP



February 6, 2025

SAINT CHARLES COMMUNITY COLLEGE

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## **INTRODUCTION/BACKGROUND**

The **HealthPal** application is a health monitoring tool designed to assist users in tracking their essential health metrics, setting wellness goals, and receiving personalized AI-driven health recommendations. In today’s fast-paced environment, maintaining a healthy lifestyle is increasingly challenging, and **HealthPal** aims to bridge this gap by leveraging technology to promote health awareness and proactive informed decision-making. The app will be developed as a user-friendly platform thatprovides users with the tools they need to take control of their health in a simple, user-friendly manner.

## **SCOPE OF WORK**

The scope of this project includes the development, testing, and deployment of the application for personalized health monitoring.

1. Features
   1. Log and track metrics such as temperature, weight, blood pressure, heart rate, calorie intake, sleep hours, and daily steps.
   2. Set and monitor health-related goals with progress visualization using charts and graphs.
   3. Receive AI-driven health recommendations based on logged data.
   4. Generate health reports and export data for sharing with healthcare professionals.
   5. Use secure login functionality through Google Authentication API.
   6. Integrate APIs for calorie tracking, text generation and meal logging.
2. Technology Stack
   1. Frontend: Simple mobile interface with Python frameworks
   2. Backend:
      1. Python
      2. SQL Database
   3. API Integration:
      1. Google Authentication API for login/logout
      2. Meal fetched from Open Food Facts API
      3. OpenAI API for tips and suggestions
   4. AI Implementation:
      1. Scikit-learn for basic health predictions or rule-based insights
      2. OpenAI for text generation
   5. Data Visualizations**:** Matplotlib or Plotly fir trend charts and progress tracking

## **PERIOD OF PERFORMANCE**

Start Date: February 10, 2025

End Date: April 30, 2025

## **PLACE OF PERFORMANCE**

Developers will be writing code and testing in their local environment using Visual Studio Code as the integrated development environment. Version control and source code storage will be on GitHub. Work will be performed at an individual’s remote workplace on a secured network.

## **WORK REQUIREMENTS**

* Human Resources: Work required 1 project manager/developer and 5 developers
* Physical Resources

1. Computers or laptops
2. Microphone
3. Webcam
4. Secured internet connection

* Software/Licenses

1. GitHub
2. Android Studio

c. Microsoft Office 365

1. SQL Server

* Communication Tools

1. Email
2. Zoom
3. Discord

## **SCHEDULES/MILESTONES**

**Weeks 1-2:** Requirements gathering, design, and project planning.

**Weeks 3-6:** Backend and database development

**Weeks 7-10:** Frontend development and API integration

**Weeks 11-13:** Comprehensive testing and user acceptance testing

**Week 14:** Deployment and project handoff

## **ACCEPTANCE CRITERIA**

The project will be considered complete when the following criteria are met:

1. All outlined features are fully implemented and functional.
2. The app is tested and free of major bugs.
3. User authentication is secure and functional.
4. Health metrics are logged, stored, and displayed accurately.
5. AI recommendations provide relevant and actionable insights.
6. The app is deployed and accessible to users.

## **OTHER REQUIREMENTS**

1. Documentation: Provide comprehensive documentation, including user guides, technical documentation, and maintenance instructions.
2. Maintenance**:** Offer post-deployment support for a period of two months, including bug fixes and minor updates.

**ACCEPTANCE**

Approved by:

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<Faculty Name>

<Faculty Title>