# 📌 ReadMe SheCare - README

## 📖 Project Overview

\*\*ReadMe SheCare\*\* is an AI-powered women's health and wellness platform designed to provide personalized insights into menstrual health, fertility tracking, emergency AI SOS, and digital well-being. Utilizing advanced AI algorithms, the system analyzes biometric data and medical history to offer accurate health predictions and lifestyle recommendations.

## ⚙️ Prerequisites

Before setting up the project, ensure that you have the following installed:

* - \*\*Python\*\* (3.8+)
* - \*\*MySQL Server\*\*
* - \*\*Flask\*\* (Backend Framework)
* - \*\*Python Libraries:\*\* `numpy`, `pandas`, `scikit-learn`, `pytorch`, `flask`, `mysql-connector-python`

## 🛠️ Configuration Guide

### 🔹 1. MySQL Database Setup:

1. Create a MySQL database named \*\*`realme\_shecare`\*\*.

2. Ensure the database user credentials align with those in your configuration.

3. Execute the SQL script to initialize required tables and relationships.

### 🔹 2. API Setup:

1. Install \*\*Flask\*\* and set up the backend server.

2. Configure API endpoints for AI-driven health analytics.

### 🔹 3. AI Model Configuration:

1. Train machine learning models for:

* - Menstrual cycle prediction
* - Fertility analysis
* - Health risk assessment

2. Ensure that \*\*PyTorch\*\* and \*\*Scikit-learn\*\* are properly configured.

## 🚀 Running the Application

Follow these steps to launch the project:

```bash  
# Step 1: Install all dependencies  
pip install -r requirements.txt  
  
# Step 2: Start MySQL service  
sudo service mysql start # (Linux/Mac)  
net start mysql # (Windows)  
  
# Step 3: Run the Flask backend  
python app.py  
```

You can interact with the system via a web frontend or an API testing tool (e.g., \*\*Postman\*\*).

## 🔍 Understanding the Code Flow

1. \*\*User Input:\*\* Health-related data is sent via API requests.

2. \*\*AI Processing:\*\* Machine learning models analyze biometric data and provide health insights.

3. \*\*Data Storage:\*\* Information is securely stored in the MySQL database.

4. \*\*Emergency AI SOS:\*\* Alerts are triggered based on detected health risks.

5. \*\*Results Delivery:\*\* Users receive personalized insights and recommendations through API responses.

## 🌟 Features & Alerts

✅ \*\*AI-powered menstrual and fertility tracking\*\*

✅ \*\*Personalized health risk predictions\*\*

✅ \*\*Emergency AI SOS for real-time health monitoring\*\*

✅ \*\*AI-driven lifestyle and nutrition recommendations\*\*

✅ \*\*Secure data storage and access\*\*

## 🛠️ Troubleshooting & FAQs

🔹 \*\*API not starting?\*\* Check that Flask is installed and properly configured.

🔹 \*\*Database connection issues?\*\* Ensure MySQL credentials and database existence.

🔹 \*\*AI models not functioning?\*\* Verify that PyTorch and Scikit-learn are installed correctly.

🔹 \*\*Missing Python modules?\*\* Reinstall dependencies using: `pip install -r requirements.txt`

## 📝 Notes:

This README provides a structured overview of \*\*ReadMe SheCare\*\*, its setup, and functionality. Feel free to modify it based on additional features and implementation changes.

\*\*🚀 Empowering Women's Health Through AI!\*\*