Smart Health Consultation System

A Python-based automated health consultation system that uses **SQLite database**, **CSV data storage**, and logical analysis to provide health recommendations based on symptoms, vitals, and consultation records.

📌Project Overview

The **Smart Health Consultation System** is designed to store and analyze patient consultation data efficiently. It supports automated report creation and makes it easy for healthcare centers to maintain a structured record of assessments.

This project uses: - **Python** (Core Logic) - **SQLite (health.db)** for long-term storage - **CSV file export** for analysis - CLI-based **menu-driven interface**

Key Features

- Add patient details
- Record symptoms and vitals
- Automatically generate a consultation assessment
- Save data to SQLite database
- Export all consultations into CSV format
- View previous consultation history
- Well-structured and scalable code

🗂️Project Structure

```
SmartHealthConsultationSystem/
│
├── main.py                # Main application logic
├── health.db              # SQLite database file
├── consultations.csv      # Exported consultation data
├── requirements.txt       # Dependencies
└── README.md              # Project documentation
```

📩How to Run the Project

1. Install dependencies

```
pip install -r requirements.txt
```

2. Run the application

```
python main.py
```

📋 Menu Options

The program includes the following menu:

1. **Add New Consultation**
2. **View All Consultations**
3. **Export Consultations to CSV**
4. **Exit Program**

🧰 Technologies Used

- **Python 3**
- **SQLite3** (Built-in Python module)
- **CSV module**
- **OS module**

💣 Future Enhancements

- Add GUI using Tkinter / PyQt
- Integrate machine learning for advanced consultation prediction
- Add user authentication
- Cloud-based database integration

💻 About the Developer

Developed by **Ankur Kaushik** as part of an academic & professional development project. Aimed to demonstrate real-world use of Python, databases, and data management.

📄 License

This project is open-source and available under the MIT License.