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Design Document

Patient Monitoring System and Heart Attack Prediction

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0.1 Problematic

Timely detection of health issues, especially related to cardiovascular health, is critical for improving patient outcomes and reducing the incidence of heart attacks and other related conditions. This project addresses the growing need for remote health monitoring and early intervention. This project addresses the growing need for remote health monitoring and early intervention.

0.2 Context of the project

- Patient-Centered Healthcare: In an era of patient-centered healthcare, individuals are seeking ways to monitor their health proactively and take preventive measures.
- Advancements in IoT and Wearable Technology: The project leverages the advancements in IoT and wearable sensors, enabling patients to have real-time access to their health data.
- Integration of Machine Learning: Machine learning plays a pivotal role in the project by not only monitoring patient health but also predicting the risk of heart attacks, allowing for timely intervention and lifestyle adjustments.

0.3 Architecture

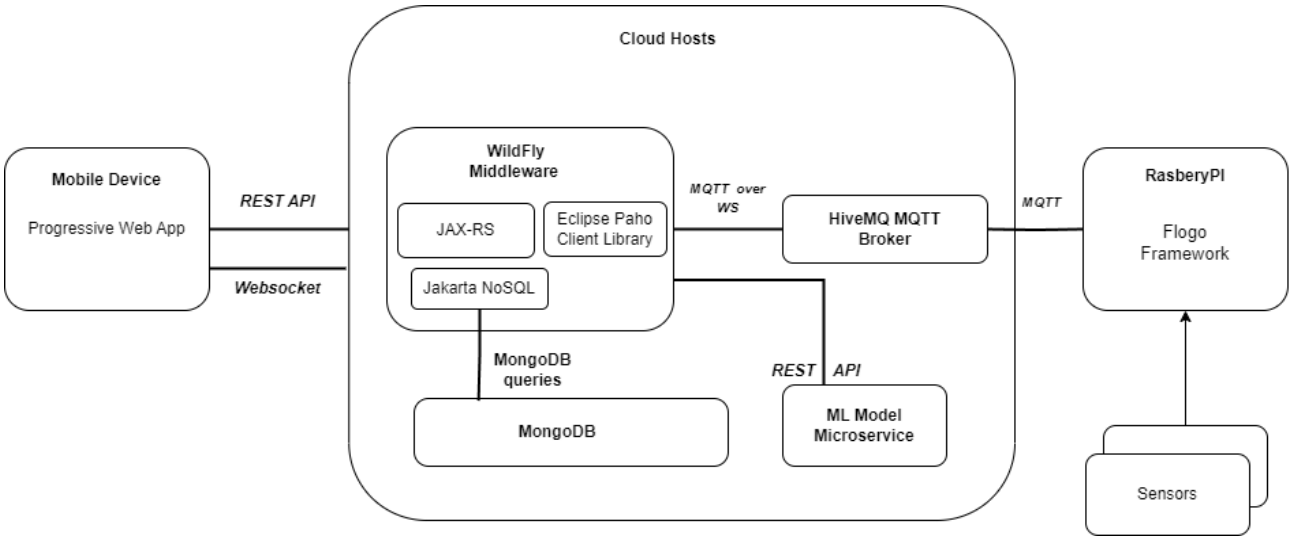

Figure 1: Application Architecture

1 UML Diagrams

1.1 Usecase Diagram

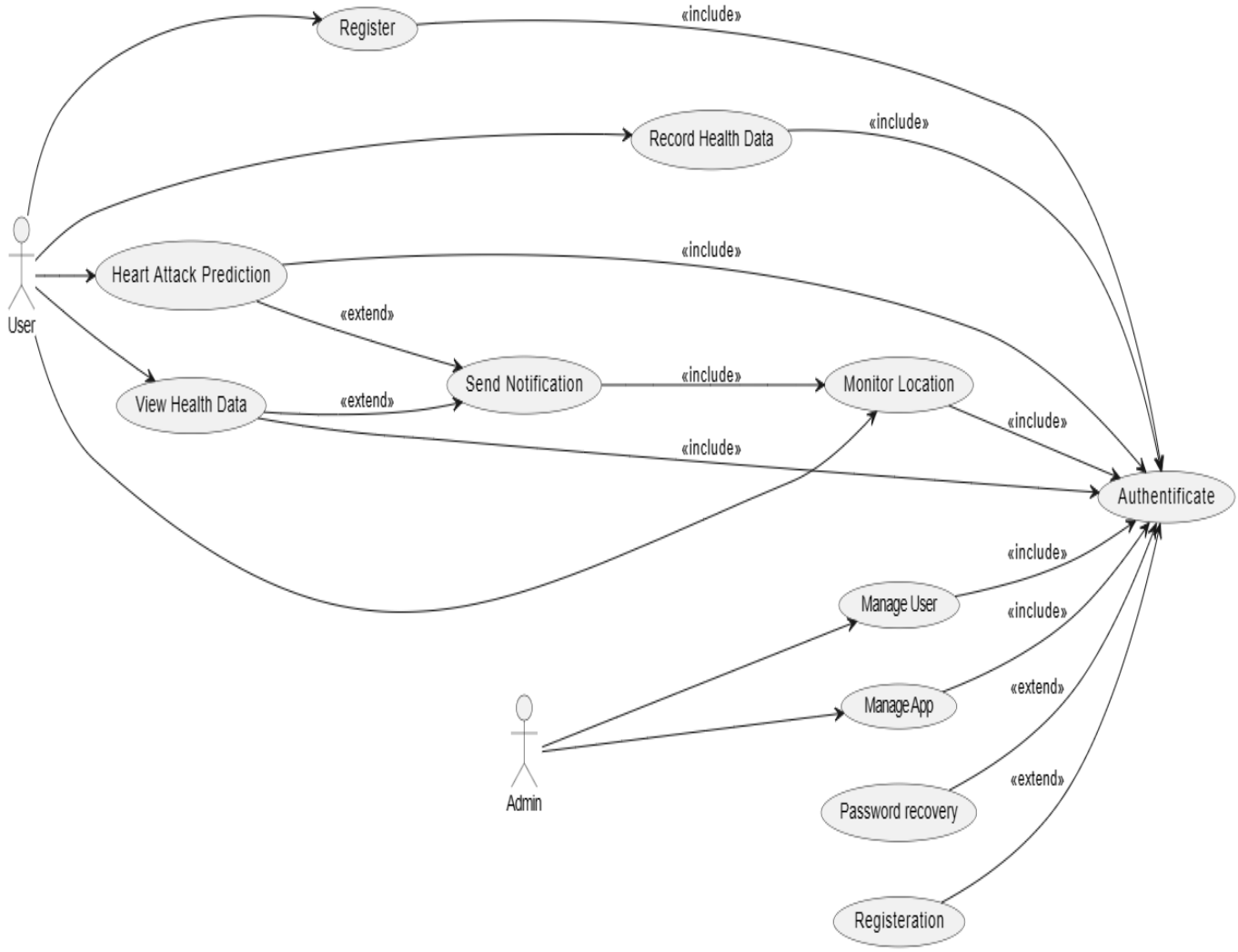

Figure 2: Usecase Diagram

1.2 Class Diagram

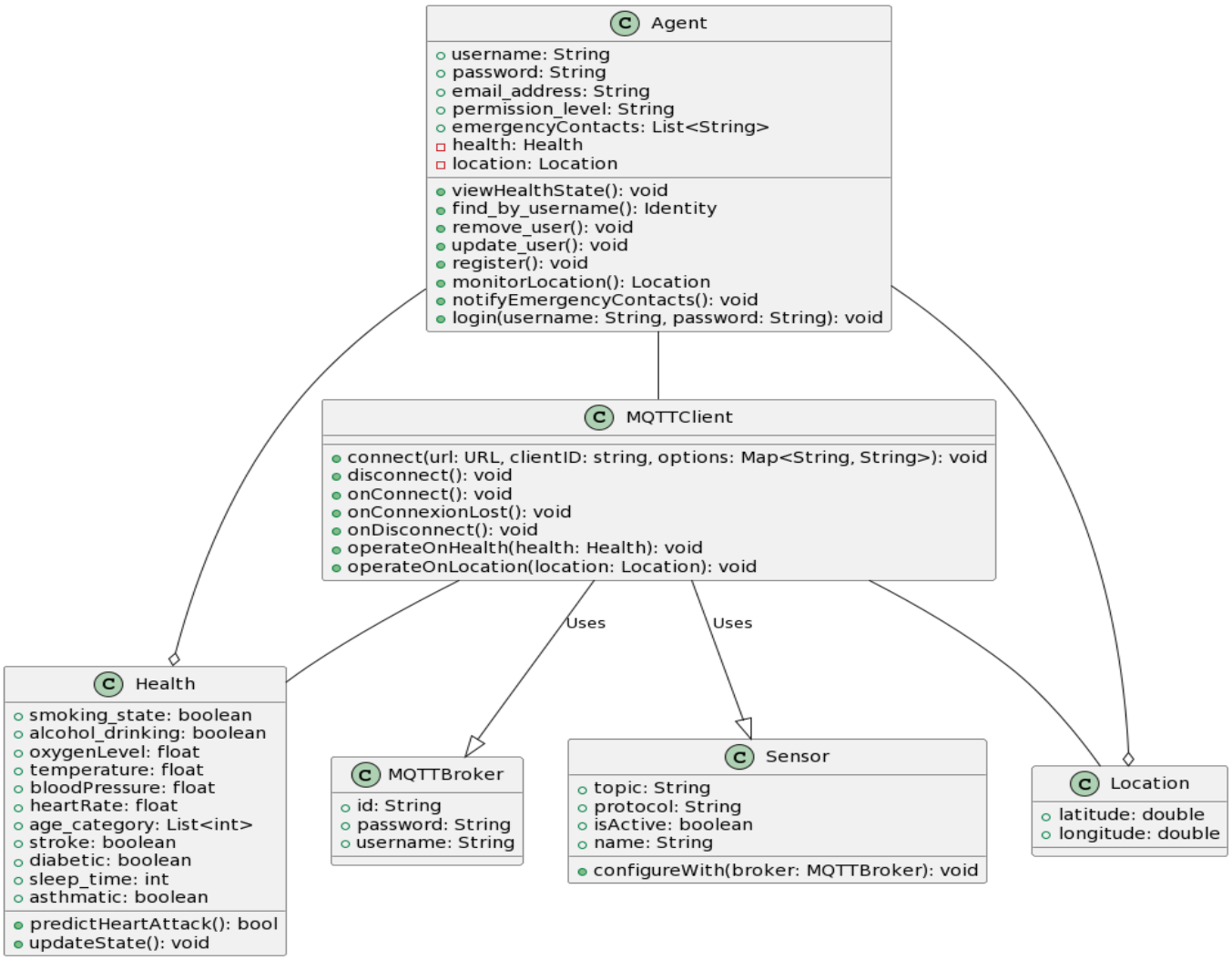

Figure 3: Class Diagram

1.3 Deployment Diagram

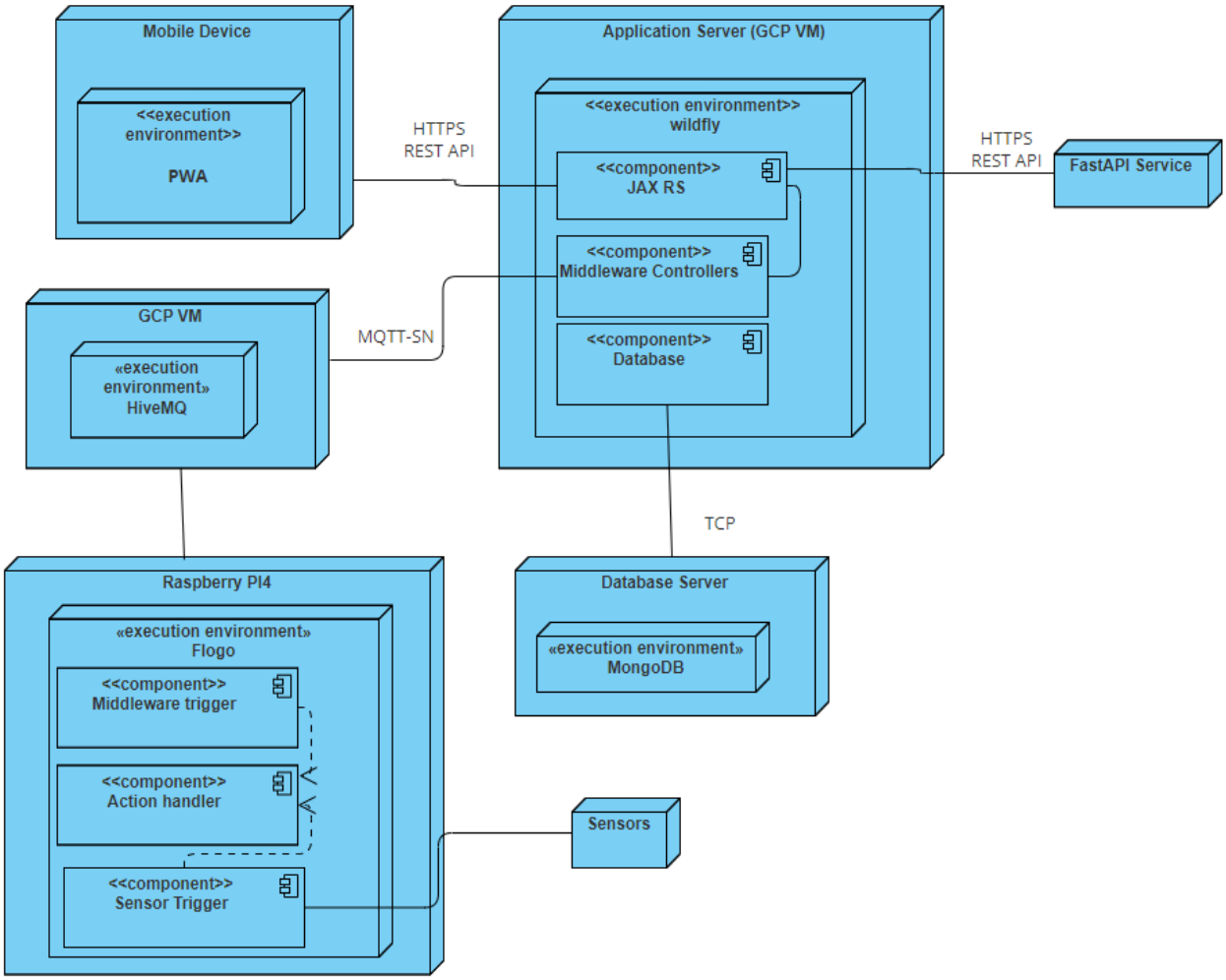

Figure 4: Deployment Diagram