
Design document: Health monitoring system

Authors:

- BEN SALEM Ahmed
- LABIDI Aymen

Faculty Adviser:

- MOHAMED BECHA Kaaniche

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1 Problematic

Detecting health issues promptly, particularly those concerning heart rhythm and rate, is crucial for enhancing patient outcomes and minimizing the occurrence of heart attacks and related conditions. This initiative aims to meet the increasing demand for remote heart monitoring and timely intervention, addressing the imperative for proactive healthcare measures.

2 Context of the project

Afib (Atrial Fibrillation) and related heart diseases have emerged as the leading cause of global mortality in both developed and developing nations over the past few decades. Early identification of heart attack-related diseases and ongoing monitoring by healthcare professionals can significantly decrease mortality rates. Unfortunately, achieving precise detection of heart diseases in every instance and providing round-the-clock consultation by a physician is challenging due to the need for extensive knowledge, time, and expertise.

3 Architecture

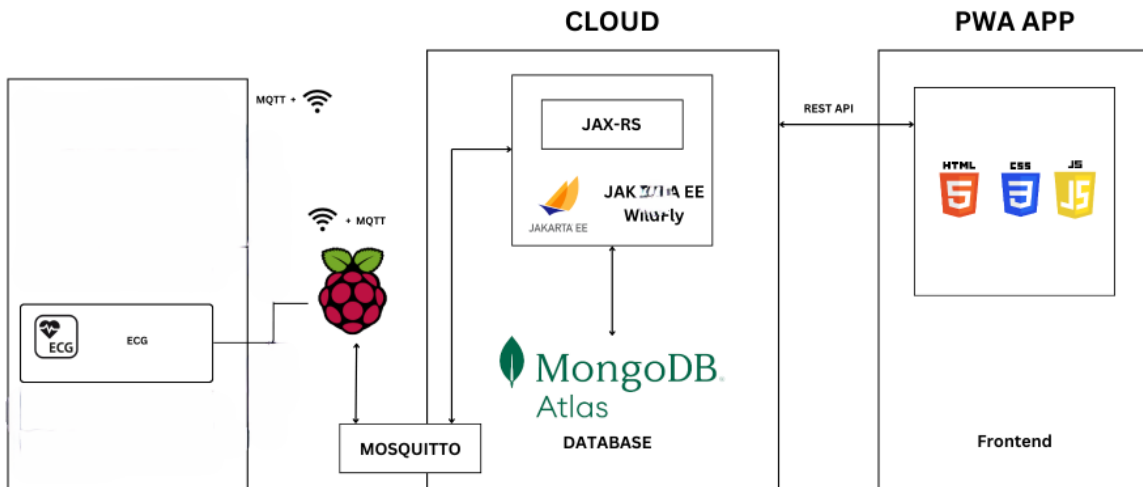


Figure 1: System architecture

4 UML Diagrams

4.1 Use-case diagram

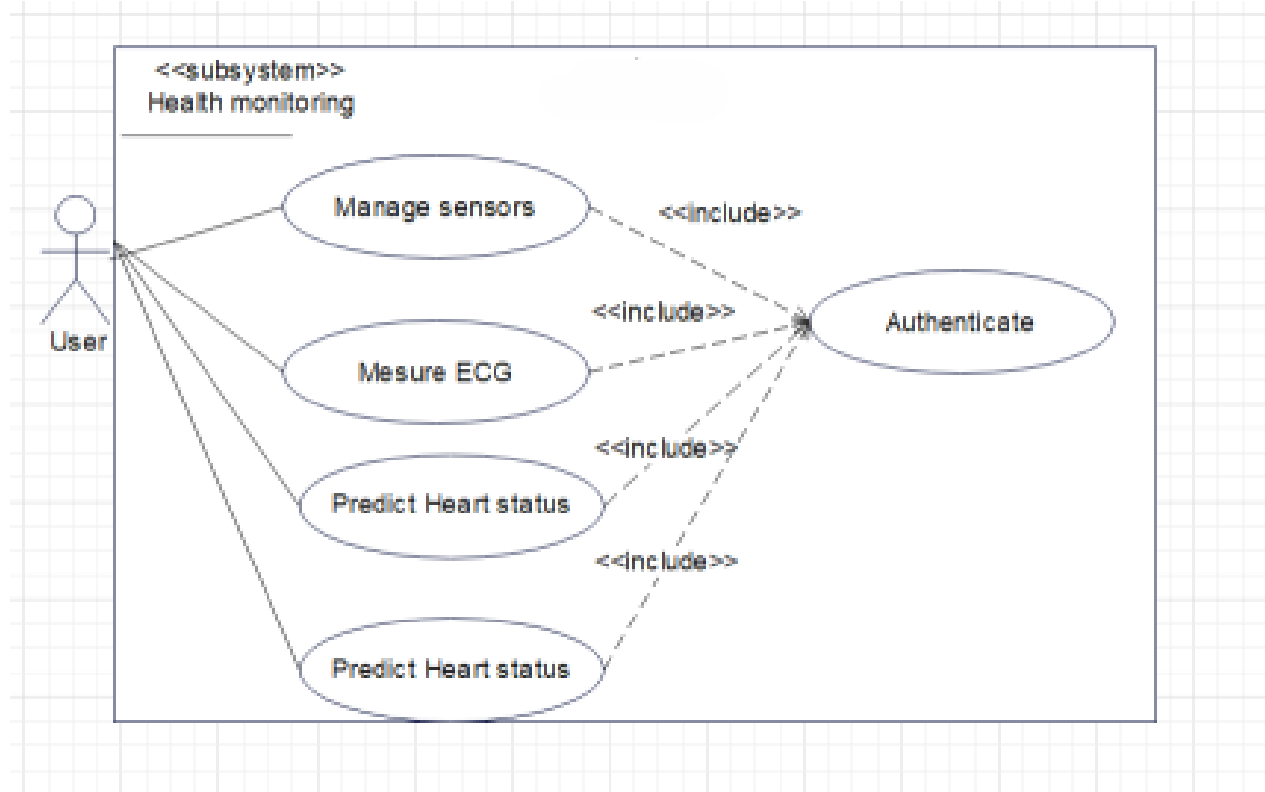


Figure 2: Use-case diagram

4.2 Class Diagram

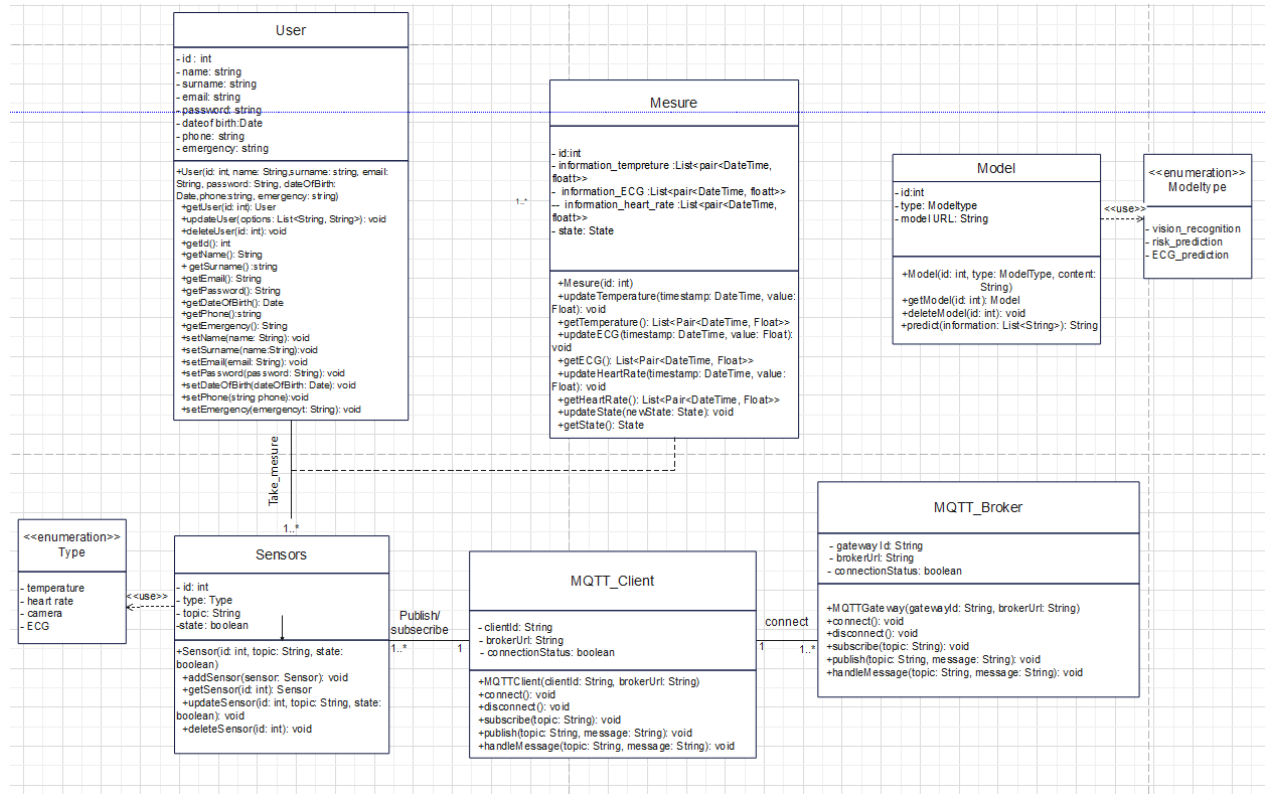


Figure 3: Class diagram

4.3 Deployment diagram

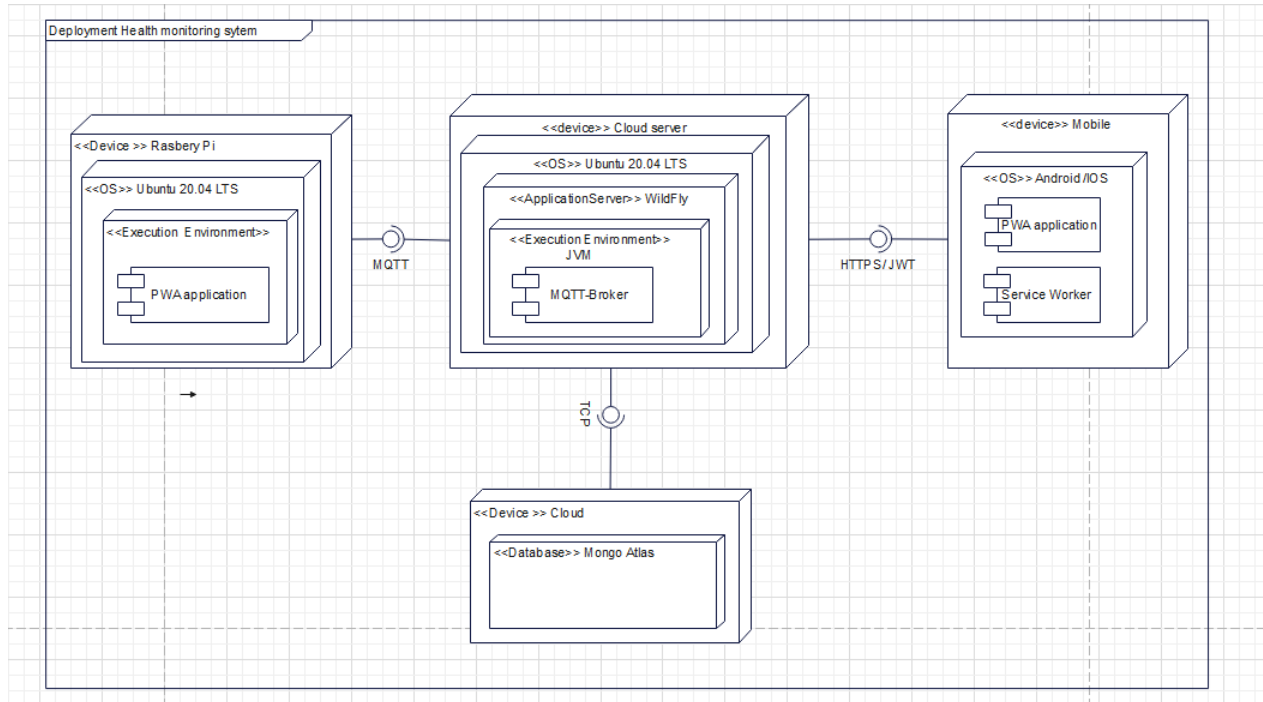


Figure 4: Deployment diagram