

Hajj Care

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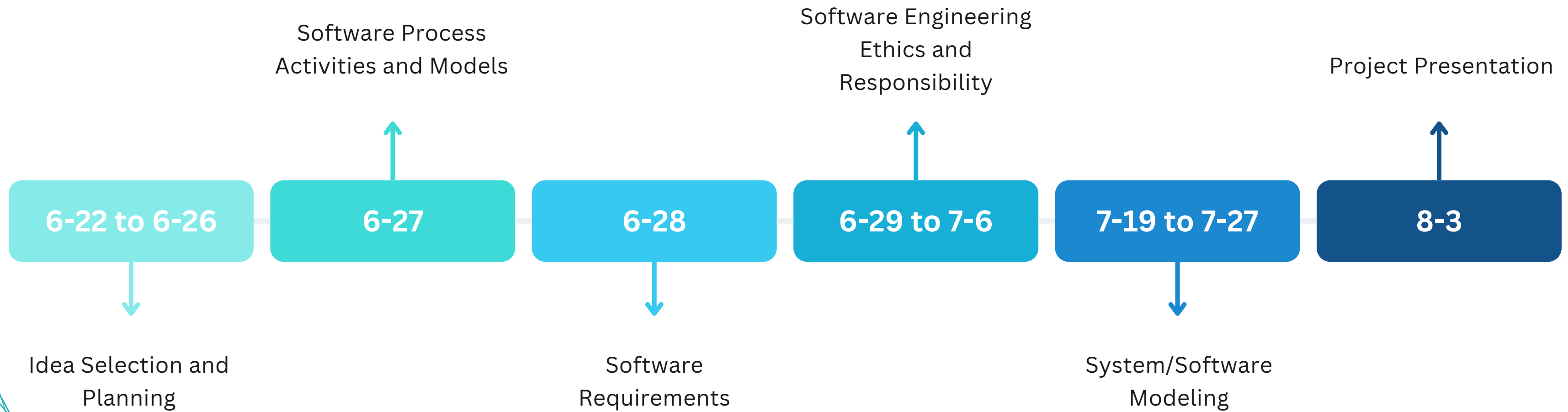
Introduction

- During Hajj , some pilgrims face sudden health issues but can't ask for help quickly, especially in crowded areas. This delay can be dangerous.
- The idea of this project is a smart wearable bracelet.
- The bracelet checks important health signs like heart rate and temperature.
- If there is a problem, it sends an alert to the nearest medical team.
- The goal is to help pilgrims stay safe and get fast medical help.

Task Managment

Member	Ebtihal	Rafa	Shahad	Norah	Maryam	Maysan	Tala	Shatha
Contribution	-Addressing functional& non-functional requirements -Project leadership	-UML diagrams (Activity, Sequence, State)	-DFD level 0 -DFD level 1 -Class diagram	- Requirements Engineering and system overview - use case diagram	-Addressing ethics and responsibilities	-Process model	-Addressing external interface requirements	-Architecture design

Time Allocation





Stakeholders and System Environment

- Pilgrims
- Medical Emergency Teams
- Admins



System Features

- Real-time Monitoring of Vital Signs
- Automatic Emergency Detection and Alert System
- GPS - Based Location Tracking
- Role - Based User Interface
- Admin Screen for Monitoring and Reporting



System Limitations

- Battery Limitations of Wearable Devices
- Dependence on Stable Wireless Connectivity
- Data Privacy and Security Requirements



Requirements Engineering

- Requirements Gathering Methods
- Requirements Analysis Methods
- Requirements Validation Methods



Functional Requirements

- User Registration
- Smart Band Connectivity
- Real-Time Health Monitoring
- Emergency Detection
- Emergency Alert Notifications
- Medical Team Interface Features
- Medical Team Availability Management
- Administrative Controls
- Pilgrim Interface Features
- Reporting and Analytics



Non-functional Requirements

- Performance
- Reliability
- Security
- Usability
- Scalability
- Availability
- Maintainability and Updateability



External Interface Requirements

- Mobile Application Interface
- Medical Emergency System Communication
- GPS System Interface
- Cloud Storage Interface
- Health Sensor Interface



Software process model

We chose Agile Scrum as the best fit for our project because:

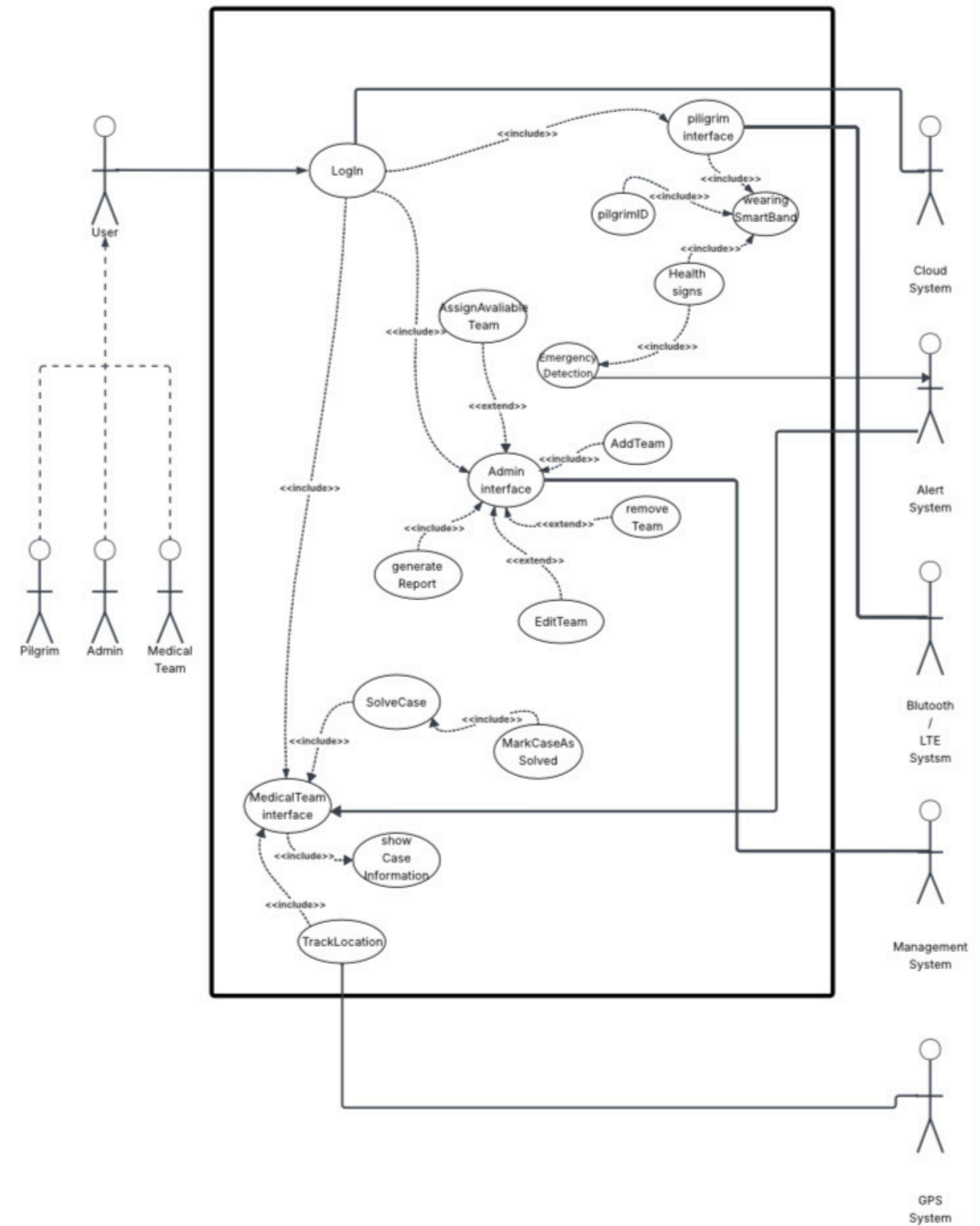
- Supports iterative development and flexibility.
- Allows testing each feature independently.
- Easy to adapt if system requirements change.

Software process model

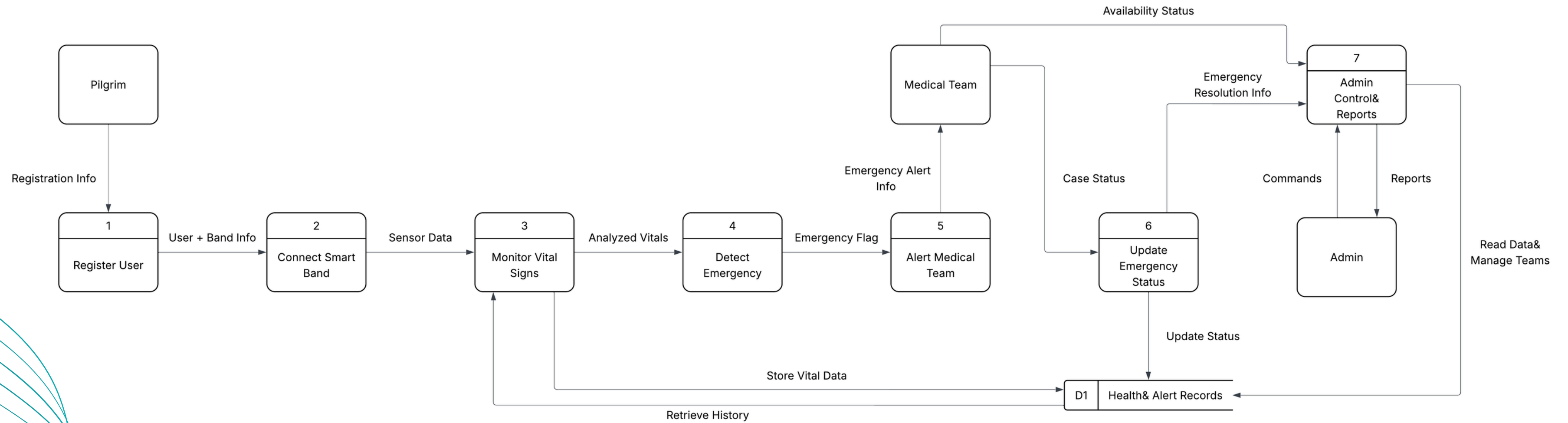
Sprint Plan for the Hajj Care Project:

Sprint	Feature
1	Vital signs monitoring
2	Emergency alert system
3	GPS location & tracking
4	Mobile app integration
5	Testing & final refinements

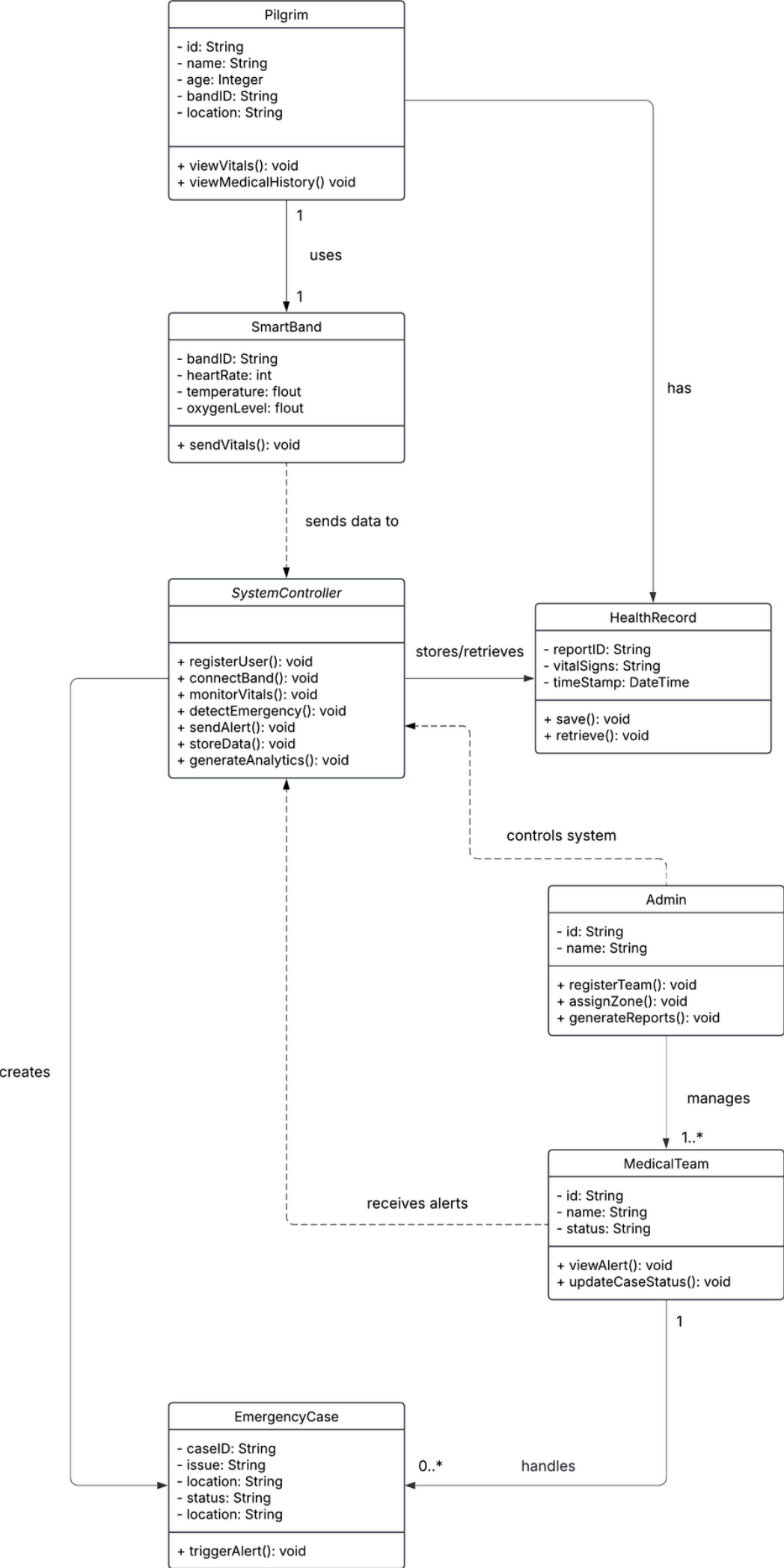
Use Case Diagram



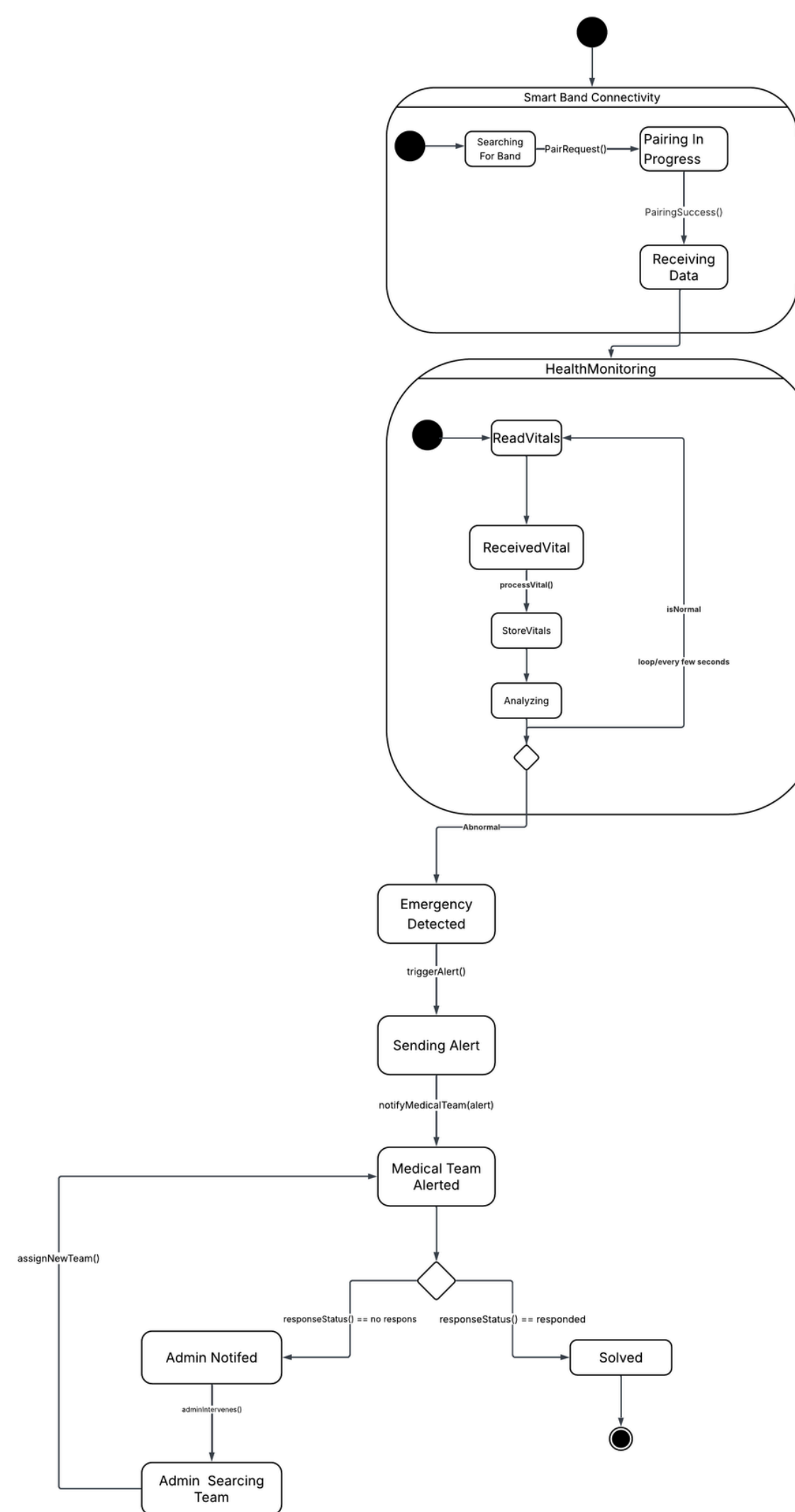
Data Flow Diagram - Level 1



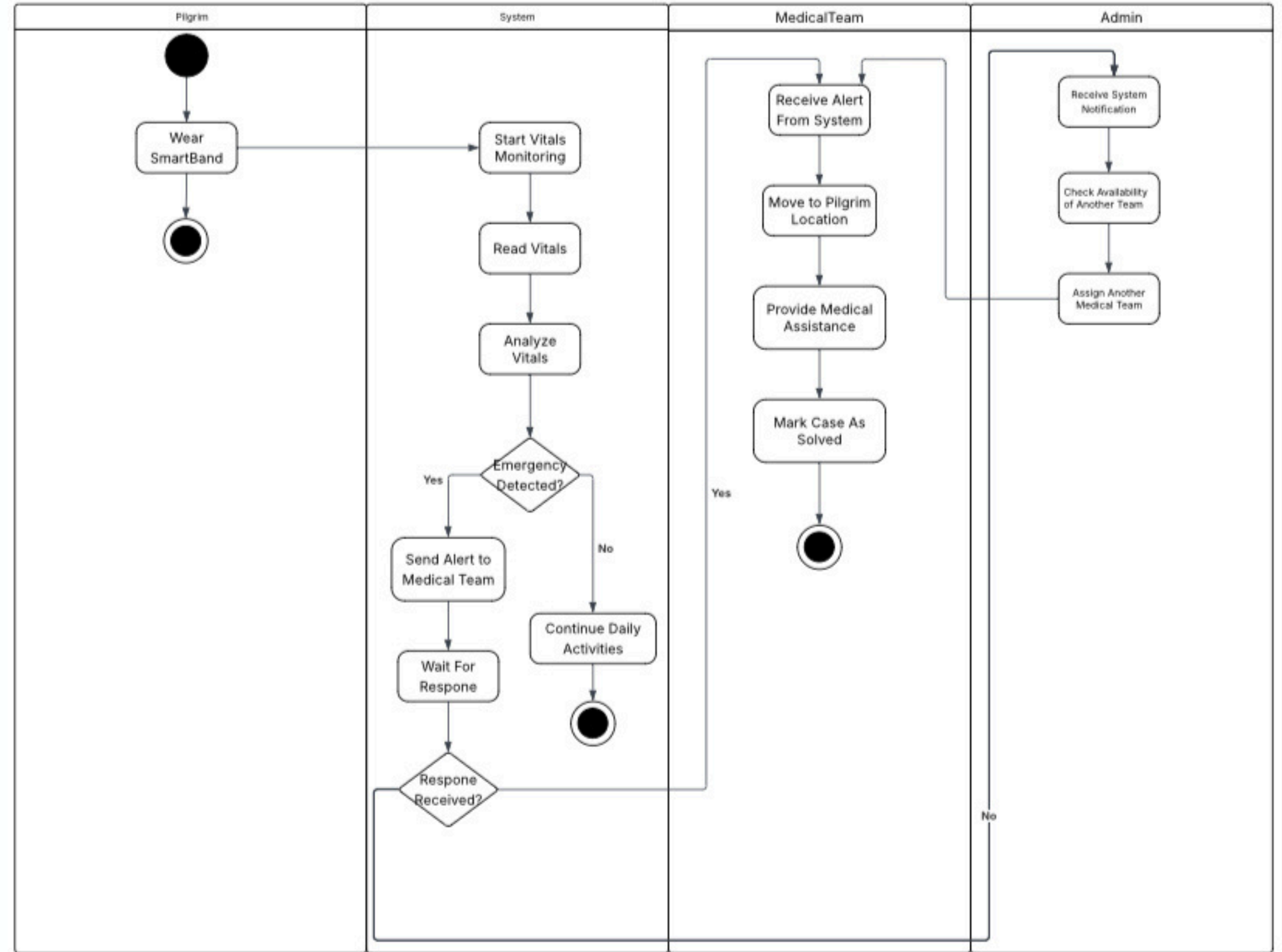
Class Diagram



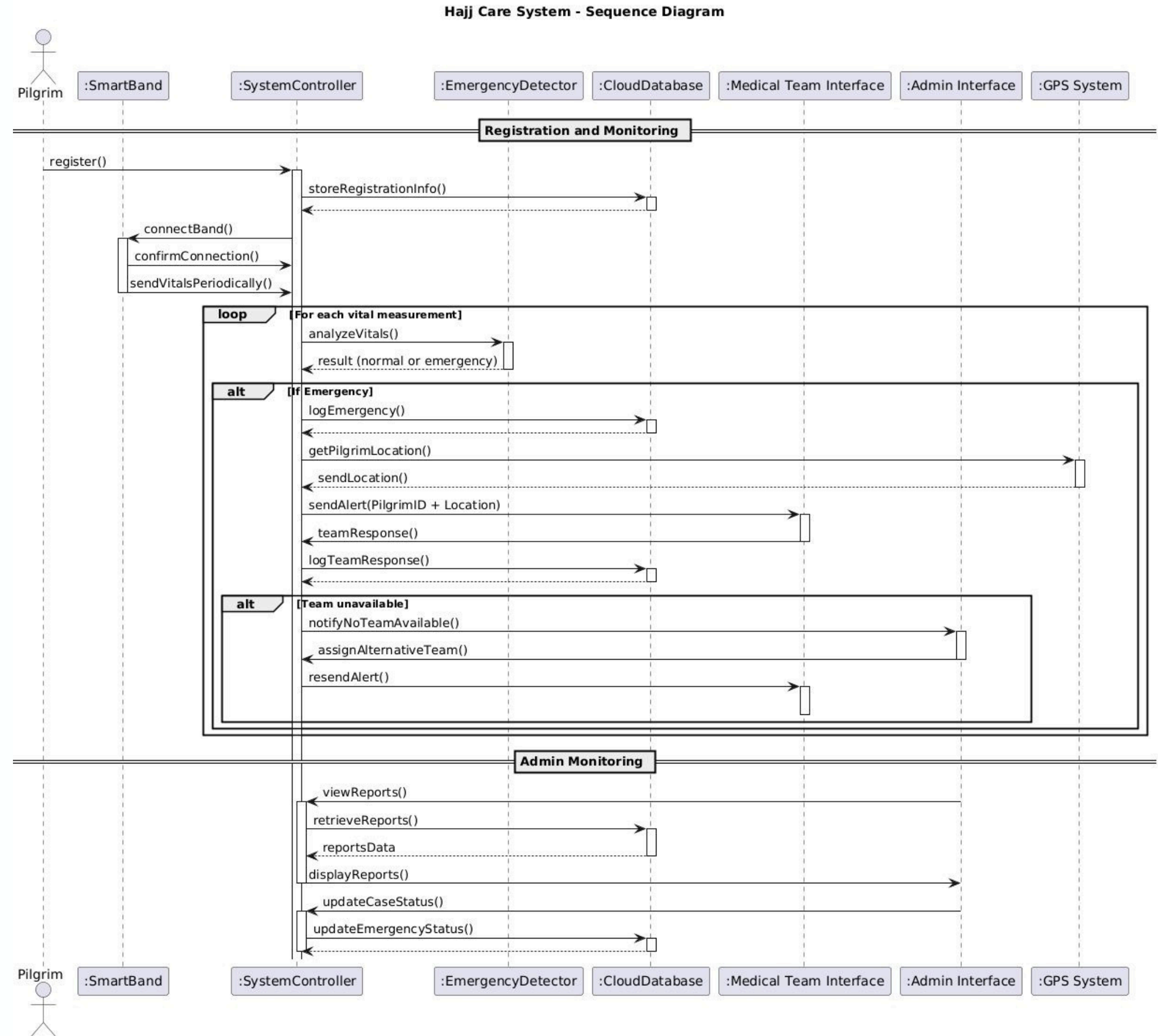
State Diagram



Activity Diagram



Sequence Diagram





Ethics and Responsibilities

- Public Safety
- Product Quality
- Honesty and Clarity
- Professional Judgment



Conclusion

Hajj Care is a simple and smart solution that helps keep pilgrims safe during Hajj.

Through this project, we learned how to turn real-life problems into useful ideas, work as a team, and use technology to make a positive impact.



Thank you for your attention
We are happy to answer any questions you may have.