Use Case 1 - Conduct Health Measurement

Primary Actor(s): User, RaDoTech device
Stakeholders: User, RaDoTech Company
Pre-conditions: User has a charged RaDoTech device and the app installed.
Post-conditions: The user completed the body analysis with the RaDoTech device and the logs and user profiles are updated.
Main-success scenario:

1. User launches app
2. User selects their profile from a displayed list
3. User creates a new measurement/body analysis
4. App ensures device is connected
5. App requests user touches device to a meridian point
6. User touches device to specified point
7. Device closes electrical connection at point and sends reading to app
8. App stores reading to the current measurement
9. User removes device from skin
10. Repeat steps 5-9 for the other 23 points
11. App saves measurement as a record on the user's profile
12. App redirects user to the page regarding the newly created record
13. On this page, app renders bar graph of data
14. On this page, app displays text summary and recommendation of future action
15. User turns off the app.

Extensions:

2a. User does not currently have a profile
    2a1. User selects to create a new profile
    2a2. User inputs personal information such as name, age
    2a3. App saves profile to device
    2a4. Scenario resumes at step 2
4a. Device failed to connect
    4a1. User is notified that the connection failed.
    4a2. User tries to connect the device again.
4b. Device has no battery left.
    4b1. User has to charge the device to continue.
6a. The device is not attached to skin
    6a1. User is prompted to attach the device to the skin.
11a. User wants to view history
    11a1. User can view the history of data collected in the history tab.
13a. User wants additional health insights
    13a1. User can view additional health insights for the latest body scan.

Use Case 2 - View History

Primary Actor(s): User, RaDoTech App
Stakeholders: User, RadoTech
Pre-conditions:

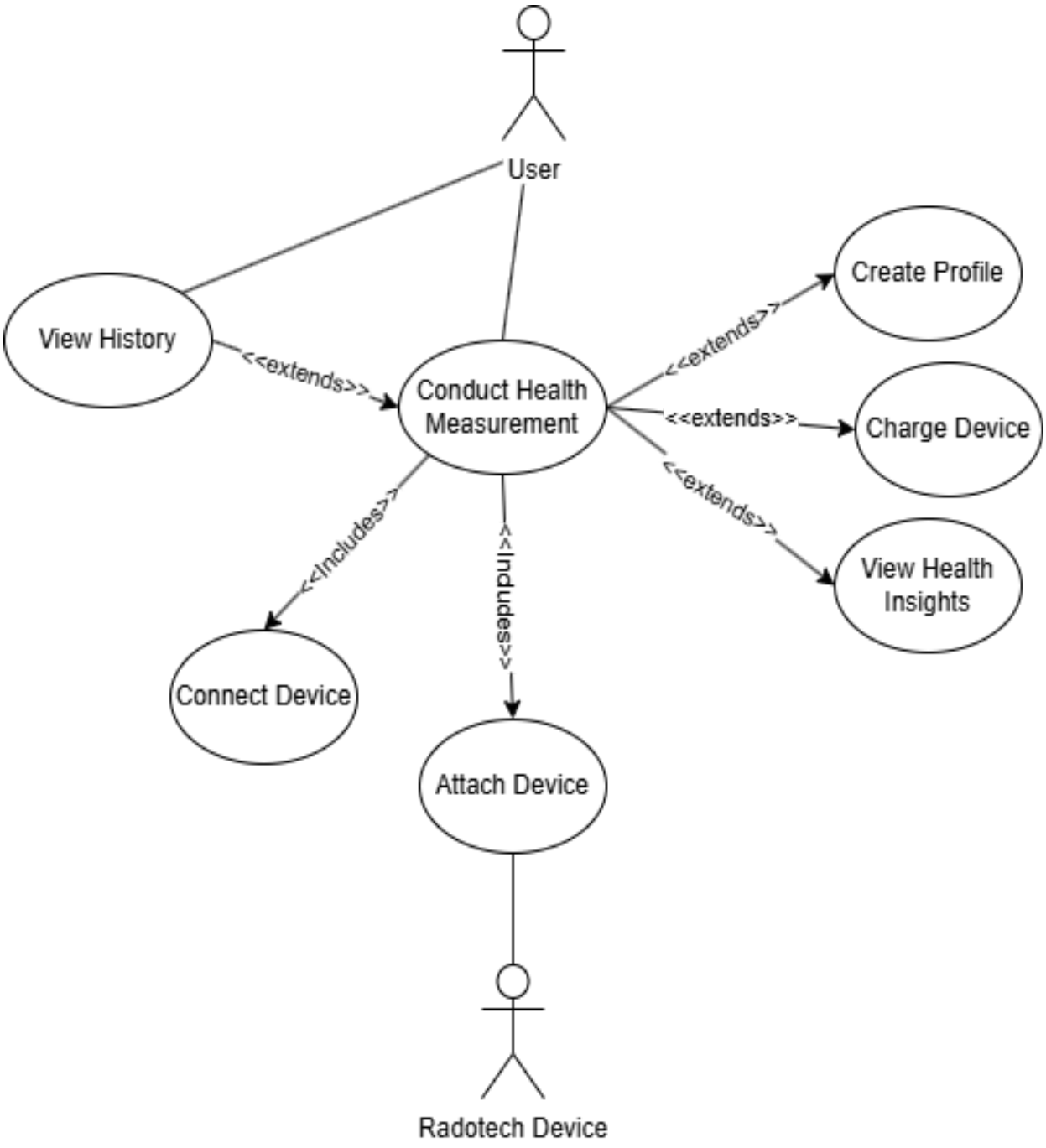
- User has a RaDoTech device
- User has RaDoTech app installed on their phone
- User has at least one profile created in the app
- User has conducted previous health scan(s)

Post-conditions: User can view past health scans for their specific user profile
Main-success scenario:

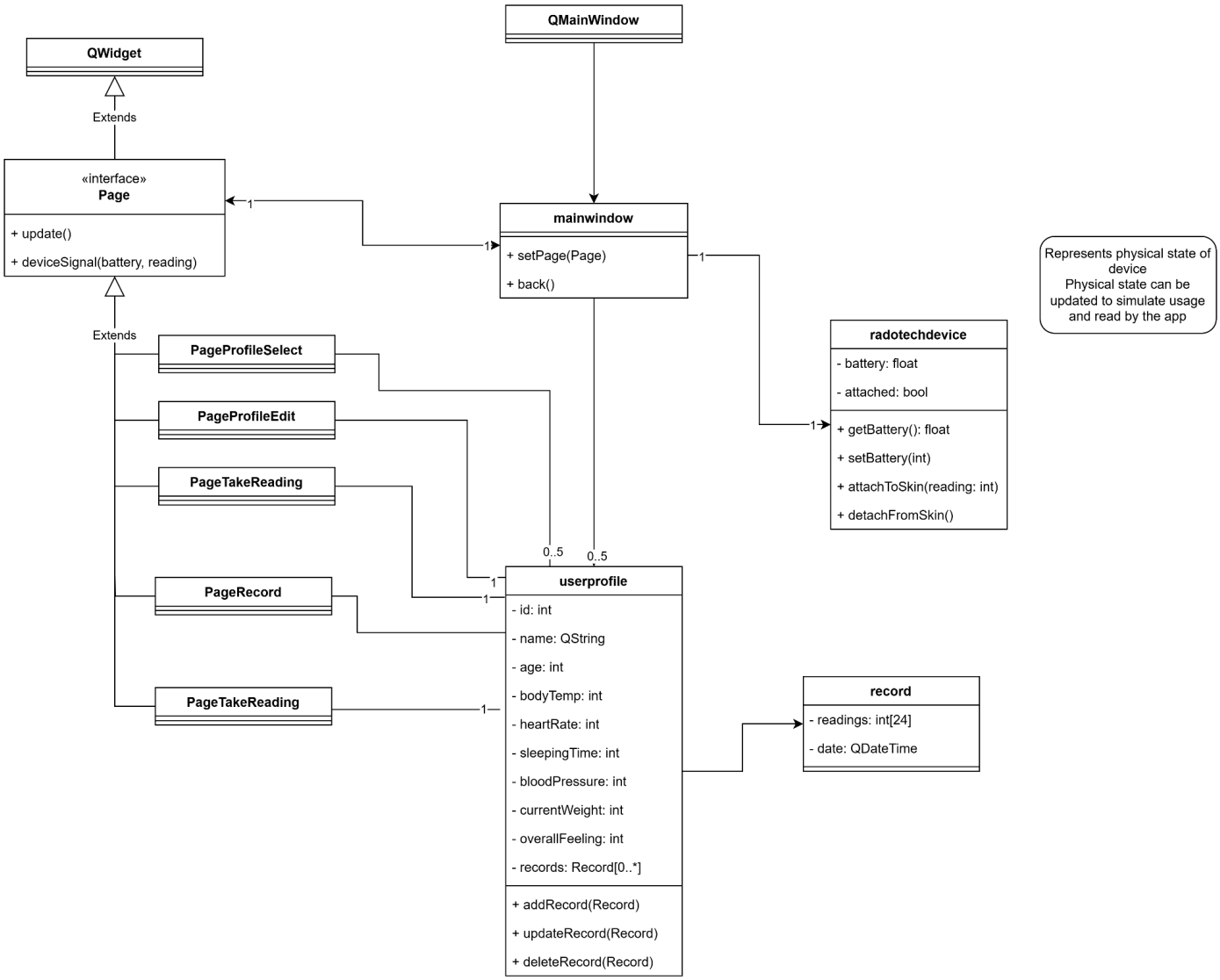
1. User selects a profile
2. Health scan history is selected by the user
3. App displays history of health scans taken
4. User selects a health scan record
5. App displays information relating to data patterns from health scan
6. App displays recommendations from healthcare provider based on latest record
7. After analysis of health scan, app will suggest specific RaDoTech supplements that the user is lacking (e.g. CardioTune if blood pressure is low)

Extensions:
2a. User has not conducted any previous health scans
    2a1. User conducts a health scan

Use case diagram:

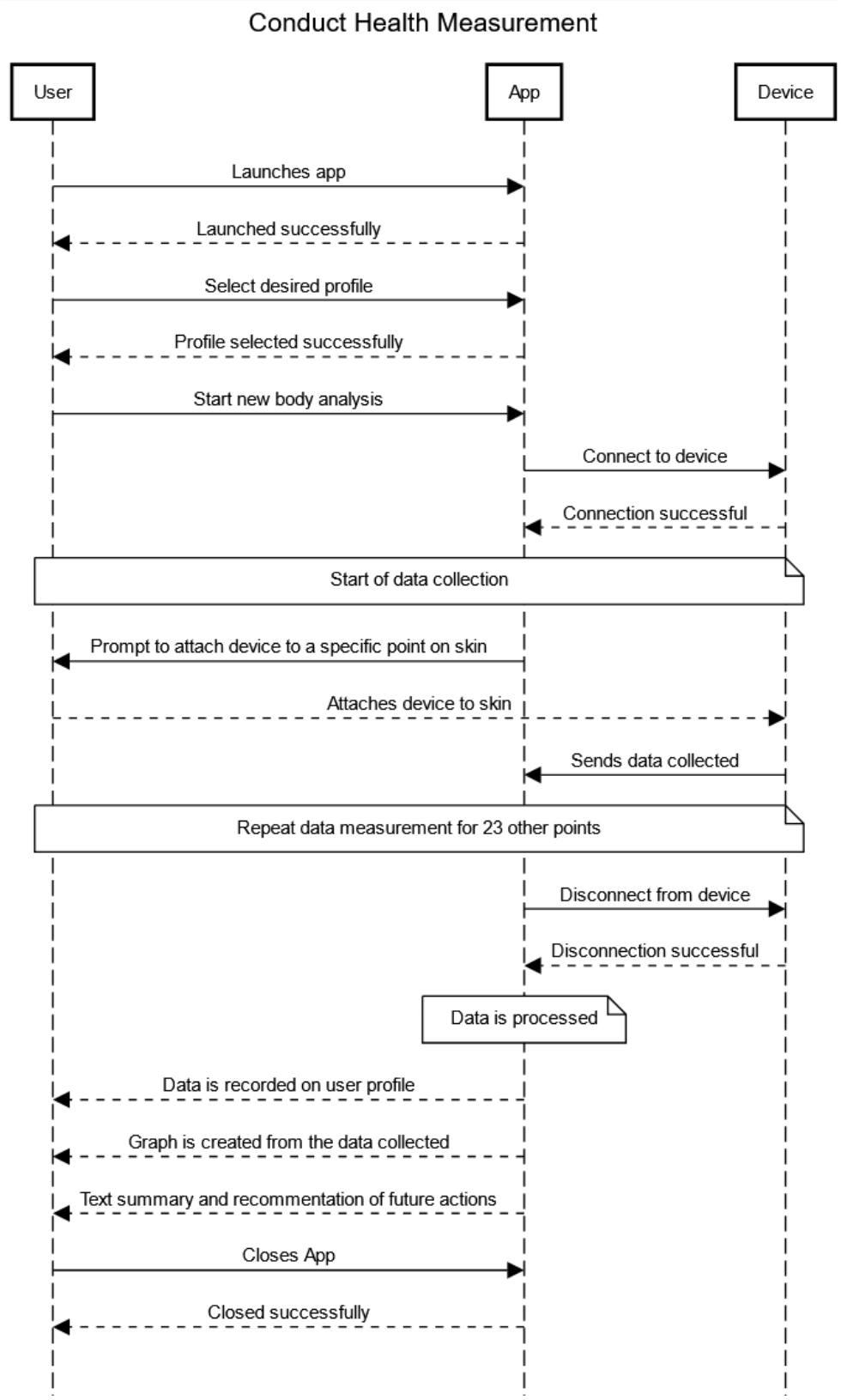


UML Class Diagram:

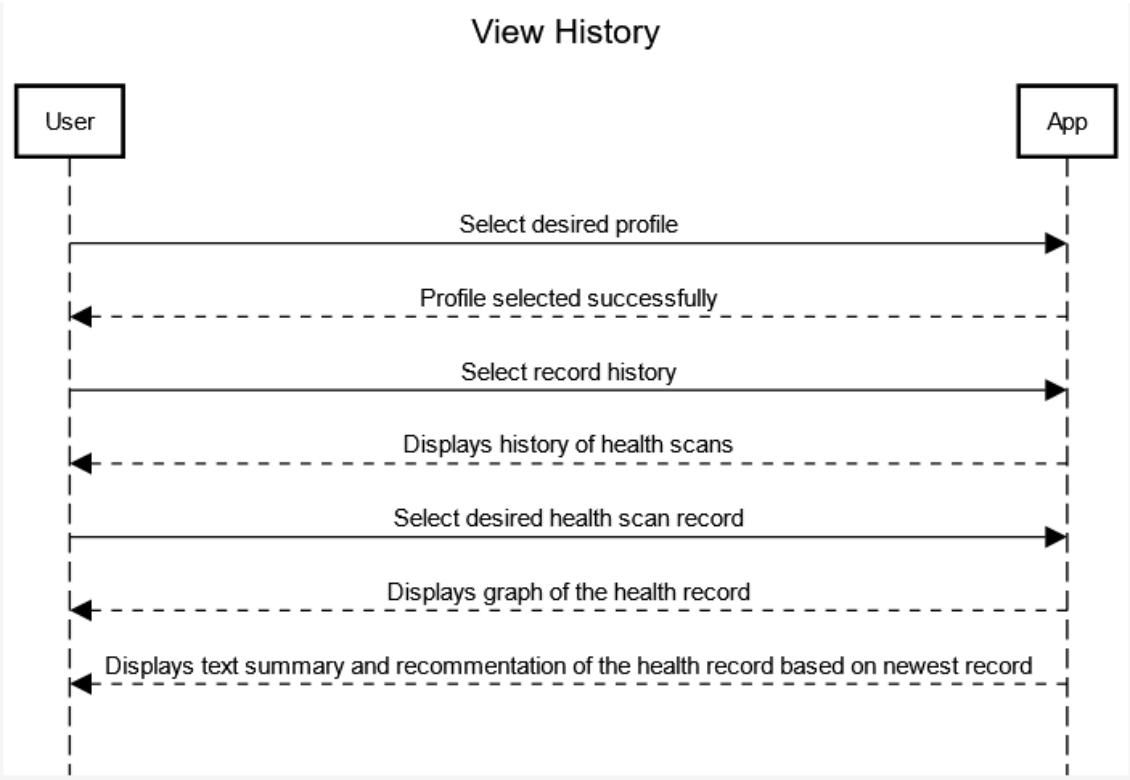
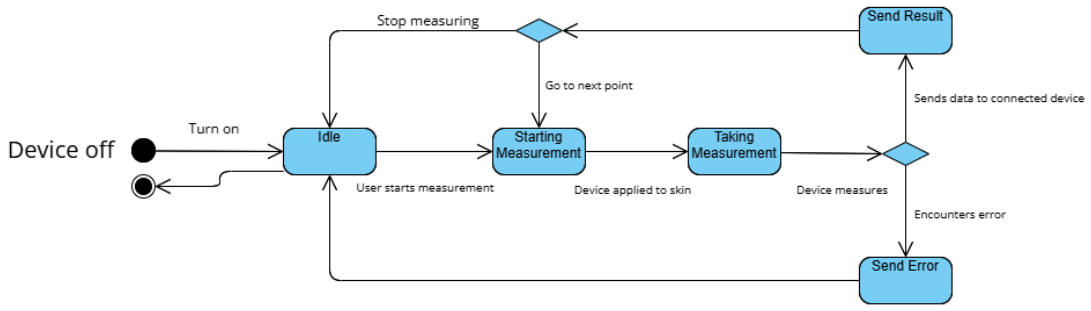


Sequence Diagrams:

Use Case 1:



Use Case 2:



State Machine Diagram: