

RaDoTech Health Monitoring Device

Part 1: Use Cases

Use Case 1:

Name: RaDoTech Health Monitoring Device

Primary Actor(s):

- User
- RaDoTech device
- RaDoTech application
- Spray bottle with water

Stakeholders:

- RaDoTech
- Doctors

Pre-condition(s):

- There is a user
- The user has a RaDoTech device
- The RaDoTech device is charged
- The user has downloaded the RaDoTech app on their phone
- The user has created a profile on the RaDoTech app
- The user is not wearing any metal items or jewelry

Success guarantee(s) (equivalently Post-conditions):

- The user completes a scan with the RaDoTech device
- The user reviews the data from the scan on the RaDoTech app

Main success scenario:

1. The user clicks the 'Start Scan' button in the app.

2. The patient/user uses the Spray bottle to moisten the body parts used in the scan with water (wrists, ankles, top of feet).
3. The user powers on the RaDoTech device and connects it via Bluetooth.
4. The user selects their profile.
5. The user completes a scan by gently placing the RaDoTech device on the required points on their wrists, ankles and feet.
6. The user saves the results of the scan.

Extensions:

1. History
 - a. RaDoTech app shows all previously completed scans
2. Diagram
 - a. Body
 - i. RaDoTech app shows results of scan visually using body parts/organs
 - b. Chart
 - i. RaDoTech app shows results of scan using a chart of results for each organ
3. Recommendations
 - a. RaDoTech app gives advice and recommendations based on the data received from that scan

Use Case 2:

Name: Creating a new RaDoTech Profile

Primary Actor(s):

- New application user
- RaDoTech application

Stakeholders:

- RaDoTech

Pre-condition(s):

- The user has downloaded the RaDoTech application from app store/google play store onto a supported device

Success guarantee(s) (equivalently Post-conditions):

- New user account is created
- User is logged into the application with the new account
- Main app home screen is displayed to user
- User can access application features

Main success scenario:

1. The user opens the RaDoTech app.
2. Welcome screen is displayed and allows the user to either login to an existing profile or create a new profile.
3. User clicks on "Create Profile".
4. App displays a user registration form containing information such as:
 - a. First name
 - b. Last name
 - c. Gender
 - d. Weight
 - e. Height
 - f. Date of birth
 - g. Country

- h. Phone number
 - i. Email address
 - j. Password
 - k. Password confirmation
5. User fills out required fields in the form.
 6. User clicks "Save and Continue".
 7. System collects details in the form and creates a new account for the user.

Extensions:

- 7a. The form may need to be improperly filled, thus the system will prompt the user to re-enter details before creating the profile.
- 7b. There may be specific password requirements that need to be verified by the system before the account is created.

Use Case 3:

Name: Charge RaDoTech device

Primary Actor(s):

- RaDoTech device
- User
- USB charging cable

Stakeholders:

- RaDoTech

Pre-condition(s):

- User has radotech USB charging cable
- User has a usb power adapter which they can connect to the wall
- User has a RaDoTech device

Success guarantee(s) (equivalently Post-conditions):

- User has charged the RaDoTech device.
- The RaDoTech device is ready for use.

Main Success scenario:

1. User connects usb charging cable to RaDoTech device
2. User connects the other end of the charging cable to a powered usb port.
3. User waits until device is fully charge
4. User removes charging cable from device

Extensions:

- 3a. Users may remove the charging cable prematurely.

Use Case 4:

Name: View Scan History

Primary Actor(s):

- User
- RaDoTech application

Stakeholders:

- RaDoTech
- Doctors

Pre-condition(s):

- User has downloaded the RaDoTech app
- User has a RaDoTech profile and has completed at least 1 full body scan.

Success guarantee(s) (equivalently Post-conditions):

- User views their scan history

Main success scenario:

1. User Opens app
2. User signs into their RaDoTech account using login credentials (email + password)
3. User expands side menu and clicks on history tab
4. A list of health scans is displayed in the GUI
5. The user selects a scan they want to review.
6. GUI is updated to show the generated health analysis report from the scan results
7. User navigates through different tabs such as Diagrams, indicators, comments, and Recommendations