

Use Cases

Note: Use case diagram file names correspond numerically to the respective use cases in this PDF.

Use Case 1: Create User Profile

Primary Actor: User

Stakeholders and Interests:

User - wants to create a profile to store exam results under.

RaDoTech Company - wants their customers to be able to easily organize their exam results with profiles.

Preconditions: The app is already running.

Success Guarantee: The app will create a user profile with the given information, and store it for future use.

Main Success Scenario:

1. The user clicks on the profiles option at the top of the screen to take them to the profiles page.
2. The user selects the create profile button.
3. The user fills in the information in the form displayed.
4. The user selects the submit button to create and store their profile page.

Extensions:

2a. The maximum number of profiles has been created.

2a1. The user is prompted via message box popup to delete a profile before creating a new one.

Use Case 2: Update User Profile

Primary Actor: User

Stakeholders and Interests:

User - wants to update their profile so that the information it contains is accurate.

RaDoTech Company - wants to ensure that profiles can be updated after their creation so that the information they contain can remain accurate.

Precondition: The app is already running.

Success Guarantee: The app will update a user profile with the given information.

Main Success Scenario:

1. The user clicks on the profiles option at the top of the screen to take them to the profiles page.
2. The user selects the profile from the dropdown menu that they wish to modify.
3. The user enters the password that corresponds to the profile they want to change.
4. The user changes the information in the form displayed.
5. The user selects the submit button to update and store their profile page.

Extensions:

3a. The password is incorrect.

3a1. An error will be displayed and the user will be returned to step 2.

Use Case 3: Delete User Profile

Primary Actor: User

Stakeholders and Interests:

User - wants to delete a profile they no longer want.

RaDoTech Company - wants the user to be able to delete profiles the user no longer wants to free space for more profiles.

Precondition: The app is already running.

Success Guarantee: The app will delete a user profile.

Main Success Scenario:

1. The user clicks on the profiles option at the top of the screen to take them to the profiles page.
2. The user selects which profile they want to delete from the drop down menu.
3. The user enters the password that corresponds to the profile they want to change.
4. The user selects the delete button to delete the account.

Extensions:

3a. The password is incorrect.

3a1. An error will be displayed and the user will be returned to step 2.

Use Case 4: Select User Profile for Device Use

Primary Actor: User

Stakeholders and Interests:

User - wants to be able to select their desired profile for examinations.

RaDoTech Company - wants the user to be able to select the profile they want to use for examinations.

Precondition: The app is running, the profile that the user wishes to select exists.

Success Guarantee: The app will select a user profile.

Main Success Scenario:

1. The user clicks on the profiles option at the top of the screen to take them to the profiles page.
2. The user selects the account they want to use from the dropdown menu.
3. The user enters the password that corresponds with the profile the user wishes to select.
4. The user presses the select button.

Extensions:

3a. The password is incorrect.

3a1. An error will be displayed and the user will be returned to step 2.

Use Case 5: Connect App to Hardware

Primary Actor: User

Stakeholders and Interests:

User - wants to connect a RaDoTech device to the app to take exams with.

RaDoTech Company - wants the user to be able to use their RaDoTech devices to take exams.

Precondition: The RaDoTech device has been switched on and charged, the app is running.

Success Guarantee: The device successfully connects to the RaDoTech app.

Main success scenario:

1. The user presses the button to turn on the RaDoTech device.
2. The user presses the connect device button that pairs the device with the app.

Extensions:

2a. There is an error while pairing the devices.

2a1. A popup appears to tell the users there is an error and to try again.

Use Case 6: User Takes Readings With RaDoTech Device

Primary Actor: User

Stakeholders and Interests:

User - wants to use the RaDoTech device to take a health examination.

RaDoTech company - wants users to be able to use their app and device to take health examinations.

Precondition: The RaDoTech device is charged and functional, the user has their desired profile selected in the app.

Success Guarantee: The RaDoTech app takes the readings of key points on the user's body.

Main Success Scenario:

1. The user clicks on the exams option at the top of the screen to take them to the exam page.
2. The user clicks the start new exam button.
3. The app will mark an area that the user has to scan.
4. The user lightly sprays water on the area specified on the app.
5. The user gently presses the device's sensor on the area.
6. The user holds the device against the designated area until the app indicates they can remove the device.
7. The user removes the device from the area.
8. The app displays the next area required to take the readings of.
9. The user repeats steps until 3 to 7 until they have scanned all the critical areas on both their arms and feet.
10. Once the user has completed the readings, a popup will appear signifying that their scan is complete.

Extensions:

2a. RaDoTech device is not paired to the app

- 2a1. You are taken to a window for the pairing, refer to *Use Case 5*.
- 6a. RaDoTech device does not get a proper reading
 - 6a1. Popup window signifying an error and previous reading is erased.

Use Case 7: Show or View Historical Examination Data to User

Primary Actor: User

Stakeholders and Interests:

User - wants to see a previous examination they have taken

RaDoTech Company - wants users to be able to see old exams they have taken.

Precondition: A successful exam has been taken using a RaDoTech device connected to the app, the profile the user took the exam under is currently selected.

Success Guarantee: The user can see their exam results on the RaDoTech app.

Main Success Scenario:

1. The user clicks on the results option at the top of the screen to take them to the results page.
2. The user selects the exam they want to view.
3. A graph displaying the exam results appears on the app.

Use Case 8: Display Health Recommendations to User

Primary Actor: User

Stakeholders and Interests:

User - wants to see health recommendations based on examinations they have taken.

RaDoTech Device - wants the user to be able to see recommendations based on the data a

RaDoTech device collects from exams.

Precondition: Users' body statistics have been successfully recorded and stored by the RaDoTech app.

Success Guarantee: user gain some health recommendation for their current body state

Main Success Scenario:

1. The user clicks on the results option at the top of the screen to take them to the results page.
2. The user selects the exam they want to view.
3. Recommendations corresponding to the results of the exam appear below a graph of the results on the app.

Extensions:

3a. The user wants further recommendations or has questions about how to best interpret the data.

- 3a1. The user can email prime@RaDoTech.com to ask the customer support team for help.

Use Case 9: RaDoTech Device Indicates it is at Low Power

Primary Actor: RaDoTech Device

Stakeholders and Interests:

User - wants to know when the battery reaches low power so they know it needs to be charged.

Preconditions: The device is powered on and functioning, the device power is under “low power” threshold

Minimal Guarantee: RaDoTech device will detect the device power is at low power.

Success guarantee: RaDoTech device will show a low power warning to the user.

Main Success Scenario:

1. The device triggers a “low power” warning pop up window on the app.

Use Case 10: RaDoTech Device Loses Battery Charge

Primary Actor: RaDoTech device

Stakeholders: User

Precondition: The device is powered on and functioning.

Minimal Guarantee: The battery value will change when the power level lowers.

Success Guarantee: The battery value will decrease as use time increases.

Main Success Scenario:

1. The device is powered on.
2. Device battery level decreases as the time the device is on increases.
3. The device triggers use case 9 if power is under “low power” threshold (10%).

Use Case 11: RaDoTech Device Gracefully Shuts Down When Out of Power

Primary Actor: RaDoTech Device

Stakeholders: User

Precondition: The device is powered on and functioning, the device power was under the “shutdown” threshold.

Minimal Guarantee: The device will acknowledge that it is out of power.

Success Guarantee: The device will gracefully shutdown.

Main Success Scenario:

1. The device triggers a “No power, shutting down” warning pop up window on app display.
2. The device turns itself off.