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Pi WEATHER PROJECT

INFO3604-PROJECT COURSE

USE CASES FOR WEB APPLICATION

**High level use cases**

1)

Use case: get location weather

Actors: app user

Type:Primary

Description: The user opens the app and logs into the main screen. He selects the option to get weather conditions and is greeted by a search bar with several search options and a button that gets weather stations at his location. He selects to have the bar search by location and inputs the relevant location name for the app to search for. The app displays a list of stations found to the user at or around that location. The user selects the station he is looking for, and is greeted by a screen displaying weather conditions and logs. After he is done checking the conditions and logs he closes the app.

2)

Use case: check own station

Actors: weather station owner

Type:Primary

Description: The weather station owner opens and logs into the app to look for weather conditions at one of his own stations. The station owner taps the option to display his pi weather stations and is greeted with a list of weather station he owns. The user checks his stations and closes the app when he finishes.

3)

Use case: log in

Actors: app user

Type:Primary

Description: The user starts the app to perform some task. The app opens up and greets him with a login screen. The user types in his credentials into the input boxes and after the app has validated his credentials, it takes him to the main screen.

4)

Use case: add to favourites

Actors: app user

Type: Optional

Description: The app user starts the app, logs into the main screen and chooses the option to get weather conditions. After using the function to get a list of weather stations he selects a station and the app displays the weather conditions and logs of that station. He selects the option to add the station to his favourites which adds the weather station to a list of his personal favourite weather stations, and exits when he is finished.

5)

Use case: get favourites

Actors: app user

Type:Optional

Description:The app user starts the app and logs into the main screen. The user selects the function to view his favourite stations. The app displays a list of the app user’s favourite weather stations. When he is done checking his favourite station, he exits and closes the app.

**Expanded use cases**

1)

Use case: get location weather

Actors: app user(initiator)

Purpose: Search for weather conditions at a particular location

Overview: The user opens the app and logs into the main screen. He selects the option to get weather conditions and is greeted by a search bar with several search options and a button that gets weather stations at his location. He selects to have the bar search by location and inputs the relevant location name for the app to search for. The app displays a list of stations found to the user at or around that location. The user selects the station he is looking for, and is greeted by a screen displaying weather conditions and logs. After he is done checking the conditions and logs he closes the app.

Type: Primary and essential

Cross References: (use case) log in.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System response |
| 1. This use case begins when the user opens the app and logs in(see use case log in). | 1. Takes the user to the main screen |
| 3. The user selects the option to get weather conditions | 4. Displays a search bar to enter some value to search by, selectable input criteria to filter the search, and a button that gets stations at the user’s immediate location. |
| 1. The user selects to search by location and enters the location’s name into the search bar | 1. Presents a list of available weather stations in or around that region. |
| 1. The user taps his preferred pi weather station | 1. Displays the weather station’s weather conditions with it’s logs. |
| 1. After checking the conditions the user closes the app | 1. Shuts down. |

Alternative Courses:

* Line 5: User decides to use the button and is immediately greeted with a list of weather stations at his location.
* Line 5: User entered incorrect location information. Indicate that the location name the user entered is incorrect.
* Line 5: User changes criterion to “station name” and searches by name instead. Validate name and display station user is looking for if it is correct.
* Line 5’: User entered incorrect station name input. Indicate name is incorrect.
* Line 7: User does not find the station he is looking for and so re-searches using different input. Search using new input.

2)

Use case: check own station

Actors: weather station owner(initiator)

Purpose: Check a weather station owned by this user

Overview: The weather station owner opens and logs into the app to look for weather conditions at one of his own stations. The station owner taps the option to display his pi weather stations and is greeted with a list of weather station he owns. The user checks his stations and closes the app when he finishes.

Type: Primary and essential

Cross References: (use case) log in.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System response |
| 1. This use case begins when a weather station owner opens the app and logs in(see use case log in). | 1. Takes the user to the main screen |
| 1. The station owner selects the option to display his weather stations | 1. Displays a list of stations that the owner has |
| 1. The station owner selects a particular weather station | 1. Displays station weather conditions and logs |
| 1. The station owner backs out of the station | 1. Takes station owner back to list |
| 1. The owner continues to check stations until he is satisfied and then closes the app. | 1. Shuts down. |

Alternative Courses:

N/A

3)

Use case: log in

Actors: app user(initiator)

Purpose: Log in to use the app and validate the user for security measures

Overview: The user starts the app to perform some task. The app opens up and greets him with a login screen. The user types in his credentials into the input boxes and after the app has validate his credentials, it takes him to the main screen.

Type: Primary and essential

Cross References: N/A

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System response |
| 1. This use case begins when the app user opens the app. | 1. Displays a login screen to the user with several input boxes for relevant information and a register option. |
| 1. User types his credentials into each box and presses enter | 1. Validates the user’s credentials. |
|  | 1. Displays that login is successful to the user and then takes the user to the main screen. |

Alternative Courses:

* Line 3: User selects register. Display input boxes for entering user registration information.
* Line 3: User entered wrong login credentials. Request re-input
* Line 5’: User inputs credentials into boxes displayed for registration. Validate information and add user if valid.
* Line 5’: User entered wrong registration information. Request re-input

4)

Use case: add to favourites

Actors: app user(initiator)

Purpose: To add a weather station to the user’s personal, favourite viewing list

Overview: The app user starts the app, logs into the main screen and chooses the option to get weather conditions. After using the function to get a list of weather stations he selects a station and the app displays the weather conditions and logs of that station. He selects the option to add the station to his favourites which adds the weather station to a list of his personal favourite weather stations, and exits when he is finished.

Type:Optional and essential

Cross References: (use case)log in, (use case) get location weather

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System response |
| 1. This use case begins when the actor turns on the app, logs in and selects the option to get weather conditions | 1. Display relevant search bar and button(see use case get location weather) |
| 1. User types in location name to get the stations at that location | 1. Displays a list of weather stations at the location |
| 1. The user selects a station from the displayed list. | 1. Displays screen with the weather conditions and logs of that station |
| 1. After checking the conditions the user selects the option to add the station to a list of his personal favourite stations | 1. Adds the station to a list of his personal favourites to remember. |
| 1. After the user is done he closes the app | 1. Shuts down |

Alternative Courses:

* Line 3: User uses the button instead. Get’s station at his immediate location.
* Line 3: User searches by different criteria. Search by appropriate criteria.
* Line 3: User types in invalid input. Display error and request re-input.
* Line 5: List does not contain station that the user is looking for so he re-searches. Search by new input

5)

Use case: get favourites

Actors: app user(initiator)

Purpose: To get a list of the user’s personal favourite stations

Overview:The app user starts the app and logs into the main screen. The user selects the function to view his favourite stations. The app displays a list of the app user’s favourite weather stations. When he is done checking his favourite station, he exits and closes the app.

Type: Optional and essential

Cross References: (use case) log in

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System response |
| 1. This use case begins when the user opens the app and logs in | 1. Displays the main screen |
| 1. The user selects the option to view his personal favourite stations | 1. Displays a list of the user’s favourite stations |
| 1. After the user is done checking his personal favourite stations, he closes the app | 1. Shuts down. |

Alternative Courses:

* Line 4: The user does not have any favourite stations and so display that there is nothing in his list.

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