TEST CASES AIR QUALITY MONITORING

SPRING 1

User administration test case

- 1 Can create and delete user's accounts
 - An researcher account is created with user password
 - ✓ An administrator account is created with user and password
 - ✓ Error in creation: the user already exists
 - ✓ A researcher account is deleted
 - ✓ An administrator account is deleted
 - ✓ Deletion error: the user does not exist
- 2 Register with a user name and password, as well as your profile.
 - ✓ You log in with username and password
 - ✓ Invalid user connection error. The user does not exist
 - ✓ Invalid password connection error. The password is incorrect

Sensor administration

5 Add new sensors

Successful sensor registration: The new sensor is entered

- ✓ Error in sensor name: Invalid sensor name
- ✓ Latitude error: Invalid latitude value
- ✓ Length error: Invalid length value

8 Delete sensors admin user only

- ✓ Successful deletion: the sensor has been removed
- ✓ Non-existent sensor error: the sensor does not exist

Data recovery

- 12 Data recovery according to the established filters and validating user
 - ✓ Successful recovery: The data of all the sensors is recovered in a period of time
 - ✓ Loading error: No information available in that period

SPRING 2

User administration test case

- 4 Modify password
 - ✓ Successful password change: The user changes his password
 - ✓ Password change error: Passwords are not the same

Data recovery

- 13 Calculation of the averages according to the selected grouping (daily, weekly, monthly or annual)
 - ✓ Successful daily grouping: Hourly averages of all sensors are generated
 - ✓ Daily grouping error: Hourly averages cannot be calculated due to error in the values
 - ✓ Successful weekly grouping: Daily averages of all sensors are generated
 - Weekly grouping error: The averages per day cannot be calculated due to an error in the values
 - ✓ Successful monthly grouping: The weekly averages of all sensors are generated
 - ✓ Monthly grouping error: The averages per week cannot be calculated due to an error in the values
 - ✓ Successful annual grouping: Monthly averages of all sensors are generated
 - ✓ Annual grouping error: The averages per month cannot be calculated due to an error in the values

SPRING 3

Sensor map generator

- 19 Associate the sensor information with each pointer and display it on the screen
 - ✓ Successful recovery: The data of the specified sensor is recovered in a period of time
 - ✓ Loading error: There is no information available from that sensor in that period
 - ✓ Sensor error: The specified sensor does not exist