GROUP8 SMARTHOME

A home assistant for an easy life

CS3307A Fall 2019 | Stage 3

Group members

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a. As a host, I want to get alert as long as the main door is unauthorized opened. (25 points)

Test: unknown person opens the door, the red light on -- PASS

Test: unknown person opens the door, The red light not on -- FAIL

Test: host opens the door the red light on -- FAIL

Test: host opens the door the red light not on -- PASS

b. When a person enters the room, the lights will automatically turn on so that people don't have to find where is the light switch. (25 points)

Test: user enters the room in the evening (lights on), The floodlight ON -- PASS

Test: user enters the room in the evening (lights on), The floodlight not ON -- FAIL

Test: user enters the room in the morning (lights off), The floodlight ON -- FAIL

Test: user enters the room in the morning (lights off), The floodlight not ON -- PASS

c. As a user, I want to get the weather report quickly. (5 point)

Test: get today's weather, Get the right weather searching by the date -- PASS

Test: get today's weather, Get the wrong weather searching by the date or cannot get the weather report -- FAIL

Test: search by the city's name, Get the right weather searching by the location -- PASS

Test: search by the city's name, Get the wrong weather searching by the location or cannot get the weather report -- FAIL

d. As a user, I want to get the information of my home appliances on my smartphone. (12 points)

    Test: Turn off/on the light, Showing Light OFF on the APP -- PASS

        Test: Turn off/on the light, Showing Light on the App -- FAIL

    Test: Open the door, showing door is opening on the APP -- PASS

    Test: Open the door, showing door is closed on the App -- FAIL

        Test: Close the door, showing door is closed on the APP -- PASS

        Test: Close the door, showing door is opening on the App -- FAIL

e. As a user, I want to easily play music by just type the name on the pi. (5 points)

        Test: Input correct music name in PI, be able to play it on front end -- PASS

    Test: Input correct music name in PI, unable to play it on front end or play the music -- FAIL

        Test: Input invalid music name in PI, be able to return an alert -- PASS

        Test: Input invalid music name in PI, unable to return an alert or play the music-- FAIL

f. As a home member, I want the home assistant to help me call 911 when the alert is activated for too long (15 points)

    Test: alert activating longer than a preset time, Calling to 911 -- PASS

    Test: alert activating longer than a preset time, calling fail or do not do any reaction -- FAIL

    Test: For the alert activate for relatively short time, Calling to 911 -- FAIL

    Test: For the alert activate for relatively short time, do not do any reaction -- PASS

g. I want to get the weather report of a specific date when I requested it on PI (5 points)

    Test: Requested for weather report for today, returned today weather -- PASS

    Test: Requested for weather report for today, Return a wrong date weather or no return value -- FAIL

    Test: Requested for weather report for any day except today, returned the correct date weather -- PASS

    Test: Requested for weather report for any day except today, Return a wrong date weather or no return value -- FAIL

Wish List:

h. As a home member, I want my home always to be at the right temperature that I feel comfortable. (35 points)

    Test: If the temperature is low, status change to heating -- PASS

    Test: If the temperature is high, status change to cooling -- PASS

    Test: If the temperature is equal to pre-set integer, heating / cooling process should be terminated for me -- PASS

    Test: If the temperature is low, status is cooling or does not change -- FAIL

    Test: If the temperature is high, status is heating or does not change --FAIL

i. On my way home, I want the home assistant to activate all the appliances as I preset so that can feel comfortable when I am back (30 points)

    Test: While ten minutes before User arrive home, heat on --PASS

    Test: While 5 minutes before User arrive home, turn on the light -- PASS

    Test: When User arrives home, nothings activated -- FALL

Important notes on deletion of one feature:

    We deleted the feature of control tablets / phones through PI, taking into consideration the amount of time that would be devoted to test it, and the feature itself would be more related with the electronic devices rather than Raspberry PI. Since this feature appears on our wish list, the removal of it would not have any impact on any required features.