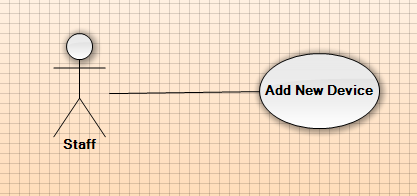
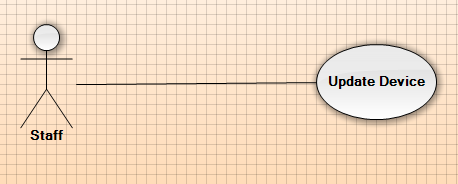
<Staff> Add New Device



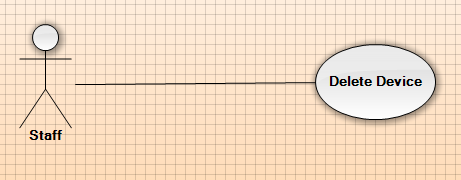
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| **USE CASE - UCA01** | | | |
| **Use Case No.** | UCA01 | **Use Case Version** | 1.1 |
| **Use Case Name** | Add New Device | | |
| **Author** | QuyHK | | |
| **Date** | 30/09/2015 | **Priority** | Normal |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff can add new device.   **Goal:**   * System can support read data of many type of wristband.   **Triggers:**   * Staff sends the add new device command.   **Preconditions:**   * User logged in to the system as staff role.   **Post Conditions:**   * **Success:** Device insert into database and show list device. * **Fail:** Error message displayed that wrong data input.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff goes to add new device view. | This view requires following information:   * Brand Name: free text input, required, length 2 - 24. * Brand UUID: free text input, required, required length 8 * Number of Step UUID: free text input, required, required length 8 * Position Number of Step: free text input, required, value from 0 - 20   Text input UUID have to have example: **0000180a** | | 2 | Staff inputs Brand Name, UUID Brand Name, UUID Number of Step, Position of Number of Step. | When user finishes input one field, if condition doesn’t match. System will show an error message next to that field. | | 3 | Staff sends command add new device. | System add new device information to system.  System update list device to show for staff and show message successfully. [Exception 1, 2, 3, 4] |   **Alternative Scenario:** N/A  **Exceptions:**  [Exception 1]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Missing of required fields | Show message notify staff which field is required. |   [Exception 2]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Wrong format of UUID | System message notify staff use right format of UUID |   [Exception 3]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Length of field’s value is out of range | Show message notify staff which field’s value is out of range |   [Exception 4]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Device had exist in system | Show message notify entered device is exist |   **Relationships:** N/A  **Business Rules:**   * UUID have to right format of Bluetooth standard on page <https://developer.bluetooth.org/gatt/characteristics/Pages/CharacteristicsHome.aspx> * A valid UUID must have 8 characters and start with “0000” characters. * System will insert new device information including: Brand name, Brand UUID, Number of step UUID, Positon number of step to system. * All fields input does not empty. * Brand name does not have special characters. | | | |

<Staff> Update Device



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| **USE CASE - UCA01** | | | |
| **Use Case No.** | UCA01 | **Use Case Version** | 1.1 |
| **Use Case Name** | Update Device | | |
| **Author** | QuyHK | | |
| **Date** | 29/09/2015 | **Priority** | Normal |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff can update device.   **Goal:**   * System can read data of wristband if manufacture chang UUID to save data on wristband.   **Triggers:**   * Staff sends the update device command.   **Preconditions:**   * User logged in to the system as staff role. * Staff select a device exist in system.   **Post Conditions:**   * **Success:** Device information will be updated in database and show list device to staff. * **Fail:** Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff goes to update device information. | View have to show these information:   * Brand Name: free text input, required, length 2 - 24. * Brand UUID: free text input, required, length 8 * Number of Step UUID: free text input, required, length 8 * Position Number of Step: free text input, required, value from 0 - 20   Text input UUID have to have example: **0000180a** | | 2 | Staff edit information of device. | When user finishes update one field, if condition doesn’t match. System will show an error message next to that field. | | 3 | Staff send command to save new information | System update information of device and show message notify device is updated successfully.  [Exception 1, 2, 3, 4] |   **Alternative Scenario:** N/A  **Exceptions:**  [Exception 1]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Missing of required fields | Show message notify staff which field is required. |   [Exception 2]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Wrong format of UUID | System message notify staff use right format of UUID |   [Exception 3]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Length of field’s value is out of range | Show message notify staff which field’s value is out of range |   [Exception 4]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Device had exist in system | Show message notify entered device is exist |   **Relationships:** N/A  **Business Rules:**   * An UUID have to start with 0000 in head and have to have 8 characters. * System will update new device information including: Brand name, Brand UUID, Number of step UUID, Positon number of step to system. * All fields input does not empty. * Brand name does not have special characters. | | | |

<Staff> Delete Device



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| **USE CASE - UCA01** | | | |
| **Use Case No.** | UCA01 | **Use Case Version** | 1.1 |
| **Use Case Name** | Delete Device | | |
| **Author** | QuyHK | | |
| **Date** | 23/09/2015 | **Priority** | Normal |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff delete device.   **Goal:**   * System remove some device had been input wrong information or does not exist in market.   **Triggers:**   * Staff sends delete device command.   **Preconditions:**   * User logged in to the system as staff role.   **Post Conditions:**   * **Success:** Device will be delete in system and show list device to staff. * **Fail:** Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff goes to manage devices view | System list out information of devices in system:   * Brand Name: text. * Brand UUID: text. * Number of Step UUID: text. * Position Number of Step: text. | | 2 | Staff select device to delele in list. |  | | 3 | Staff sends command to delete device | System confirm with staff to delete device. | | 4 | Staff accept delete device  [Alternative 1] | System delete device and show message notify device is deleted successfully.  [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Staff sends cancel command. | System show list device for staff. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Admin sends command to delete device. | System shows error message device cannot remove themselves from the system. |   **Relationships:** none  **Business Rules:**   * Their must be at least 01 device in the system. * Device have to exist in system. * Remove device in system. | | | |

<Scheduler> Get Data From Wristband

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| **USE CASE - UCA01** | | | |
| **Use Case No.** | UCA01 | **Use Case Version** | 1.1 |
| **Use Case Name** | Get Data From Wristband | | |
| **Author** | QuyHK | | |
| **Date** | 24/09/2015 | **Priority** | Normal |
| **Actor:**   * Scheduler   **Summary:**   * This use case allows scheduler gets number of step from wristband.   **Goal:**   * Help system gets latest number of step of patient.   **Triggers:**   * System run a timer task that trigger check event.   **Preconditions:**   * Users logged in to system as patient role. * Android application have to pair with wristband * Android application is running. * Bring wristband near with smartphone. * Android application has connected with wristband. * Time between two time get data from wristband is 30 minutes.   **Post Conditions:**   * **Success:** Number of step from wristband is stored into android application. * **Fail:** Get data from wristband again after 30 minutes.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Scheduler tracking time of smartphone, if satisfying with preconditions, Scheduler get number of step from wristband. | System request value of wristband from number of step UUID.  System receive number of step and save in android application  [Exception 1, 2] |   **Alternative Scenario:** N/A  **Exceptions:**  [Exception 1]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Scheduler is interrupted | System get data from wristband again after 30 minutes. |   [Exception 2]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Wristband cannot sends number of step. | System get data from wristband again after 30 minutes. |   **Relationships:** none  **Business Rules:**   * Scheduler will get data after 30 minutes everytime from 4:00AM to 10:00PM. * System reset data save in mobile everyday. * Periodically, system will update the number of step. * System will remind patient open bluetooth and bring wristband near with their smartphone at 09:50 pm to get number of step last time. | | | |

<Scheduler>Analytic data of wristband

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| **USE CASE – UCA02** | | | |
| **Use Case No.** | UCA02 | **Use Case Version** | 1.1 |
| **Use Case Name** | Analytic data of wristband | | |
| **Author** | QuyHK | | |
| **Date** | 29/09/2015 | **Priority** | High |
| **Actor:**   * Scheduler.   **Summary:**   * This use case allows scheduler use formular to analytic number of step from wristband.   **Goal:**   * Calculate calories burned, distance from patient’s data.   **Triggers:**   * System run a timer task that trigger check event.   **Preconditions:**   * System time is at 23:00.   **Post Conditions:**   * **Success**: System update data of patient. * **Fail**: Error detail will be tracked in a log file.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | System run timer task to calculate calories burned and distance walking or running. | System use formula to calculate and response:   * Calories burned. * Distance walking or running.   [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**  [Exception 1]   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | System timer task is interrupted | Error detail will be tracked in a log file. |   **Relationships:** N/A  **Business Rules:**   * System have to analytic data using formula had latest update from staff. * System timer will send check event at 23:00 everyday. * System only calculate using data in that day. | | | |