# U08048 – CW 1 Specification Report


| | | |
|---|---|---|
| 1606 9781 | Device Manufacturer | (Leader) |
| 1603 1512 | Family Members | |
| 1605 3389 | Third Party Service Providers | |
| 1606 3222 | System Operators | |
| 1607 7827 | Home Owners | |


## Contents

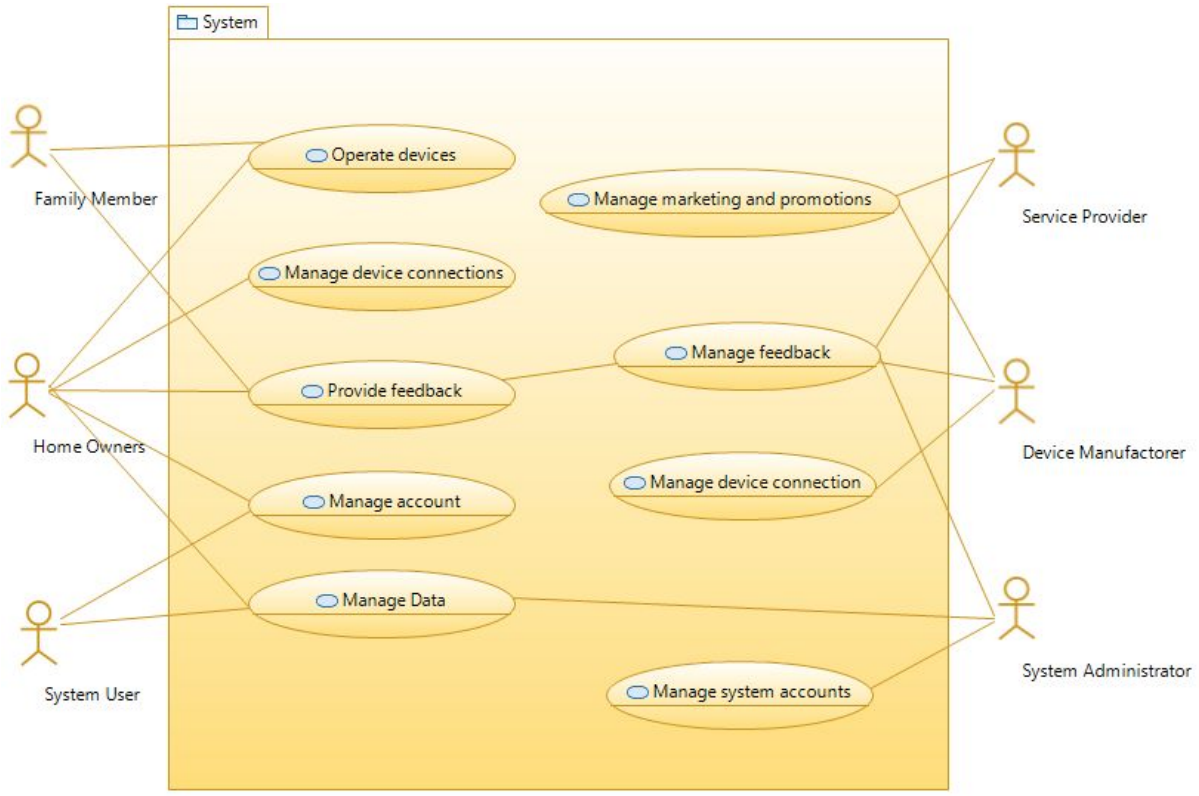
## 0.1 Introduction

This is the requirements specification document for the CloudSoft “Smart Home Hub” system. This system allows users to control the interactions between multiple Smart Home devices through a mobile application and web interface. The system is capable of catering towards all necessary user types, including: Home Owners, Family Members, Third Party Service Providers, Smart Device Manufacturers and System Operators.

The system is designed to ensure fluid usability for all of the Home Owner and Family Member’s Smart Devices through their smartphones, while hiding the backend mechanics through an interface which only the final three user types are able to interact with.

The system will be capable of catering both new users, and existing users, allowing for the creation, update of, and deletion of accounts; as well as providing the users with a method to provide easy feedback to the three final user types.

## 0.2 Overall Functional Model [Group]




**System operator [Oscar Witney 1606 3222]**

*Manage System Accounts*

- Create Account

  System operator is able to login to the system and create a new account. They provide the details such as name and other relevant information before the account is added into the system as an inactive account.

- Activate Account

  System operator is able to login to the system and view all inactive accounts within the system. From there, they are able to select an account or multiple in order to activate to allow full usage of the account. (Activation automated unless flagged otherwise)

- Delete Account

  System operator is able to login to the system and view all account within the entire system. Within the list, they are able to select any account they see fit to delete from the system. Able to also sort accounts to only show accounts with flags for deletion.

*Manage Data*

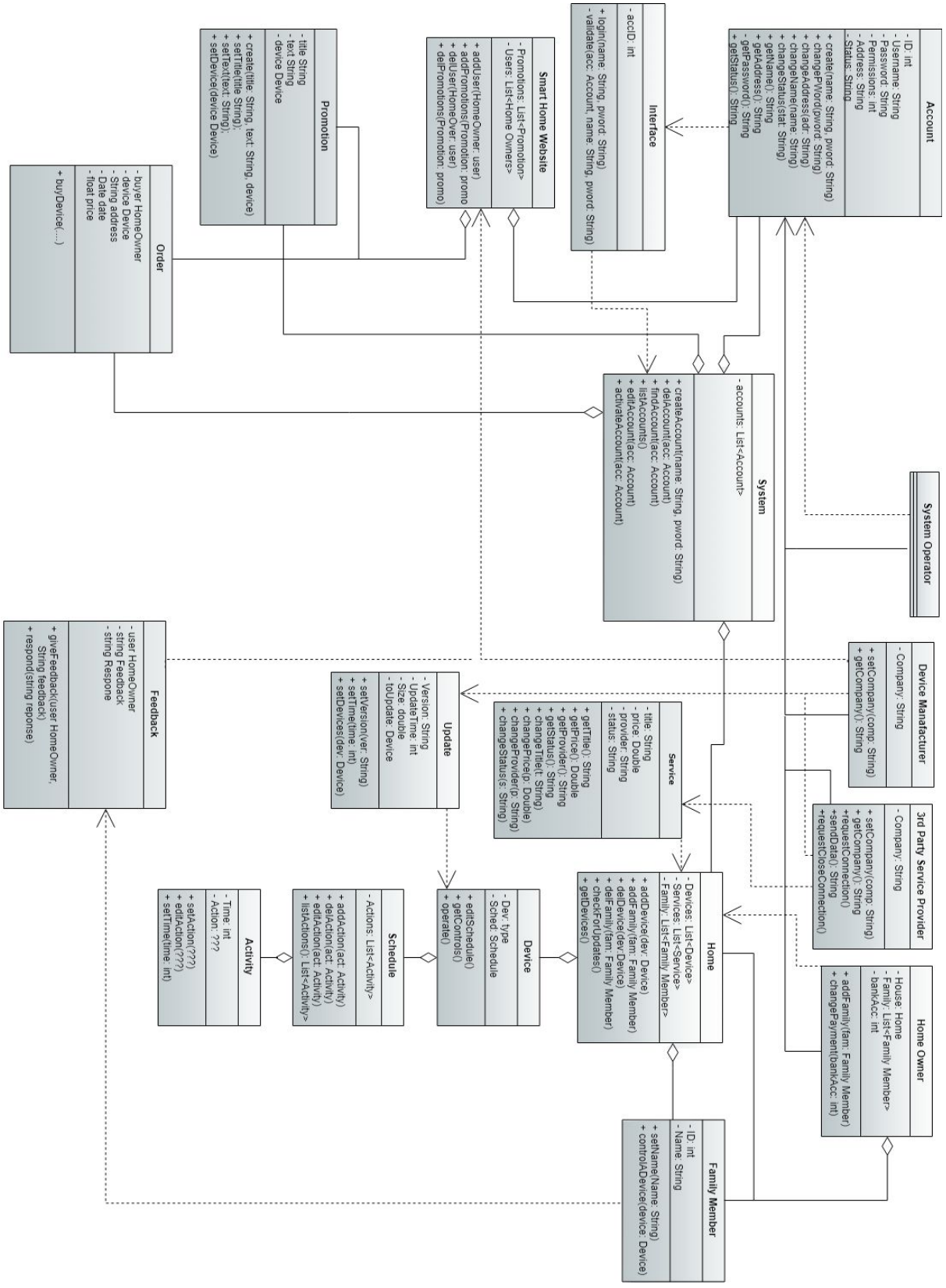
- View Data

  System operator is able to login and access all data relevant within the system. Including, but not limited to, number of account, number of homes, number of devices, average devices per home, device uptimes, etc, etc.

- Transfer Data

  System operator is able to login and compile batches of information to be able to be transferred to people of which are able to use it. Such as device related data to device manufacturers. (Automated to a degree)

## 0.3 Overall Structural Model [Group]



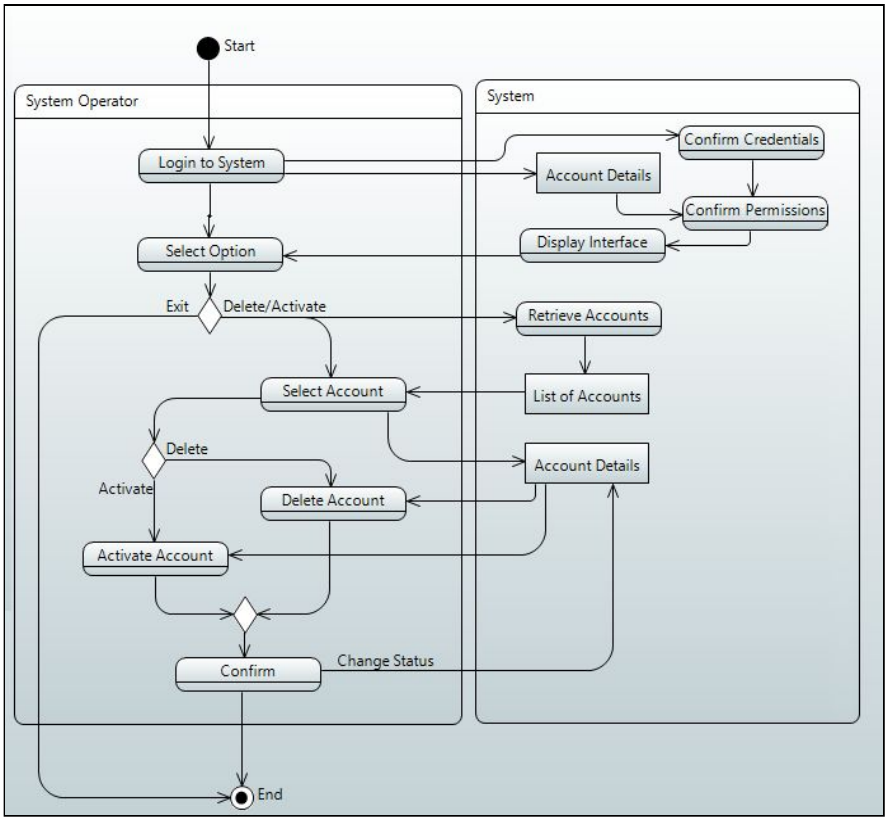
# 5.0 System Operators [Oscar Witney 1606 3222]

## 5.1 Scenario Description

| | | |
|---|---|---|
| **Use Case:** Manage System Accounts | **Actor:** System Operator | **Goal:** Activate a User Account |
| **Entry Condition:** Operator has an account of appropriate level as well as access to the management system via a computer. | | |
| **Exit Condition:** Operator leaves the 'Accounts' screen and/or logs out of the system. | | |
| **Success Condition:** A or Multiple account are activated with the system and are ready for full usage by the users. | | |
| **Event Flow:**<br>**1:** Operator access the management system via a computer.<br>**2:** Inputs their credentials at a login page.<br>**3:** Home Page of system shows up after confirming credentials.<br>**4:** Operator selects a tab marked 'Accounts.'<br>**5:** Operator selects a tab marked 'Activation.'<br>**6:** List of flagged accounts requiring activation show up on screen.<br>**7:** Operator selects an account to be activated.<br>**8:** Details about account show up on screen.<br>**9:** Operator selects a button marked 'Confirm Activation'<br>**10:** Account in question now activated within the system. | | |
| **Alternate Flow:**<br>**3.1:** Invalid Login screen shown due to incorrect credentials.<br>**7.1:** Operator selects a button marked 'Cancel' returning to the 'Accounts' page.<br>**7.2:** Operator marks multiple accounts at once for processing.<br>**9.1:** Operator selects a button marked 'Reject Activation.' (or similar)<br>**9.2:** Operator selects a button marked 'Cancel' returning to the list of accounts. | | |

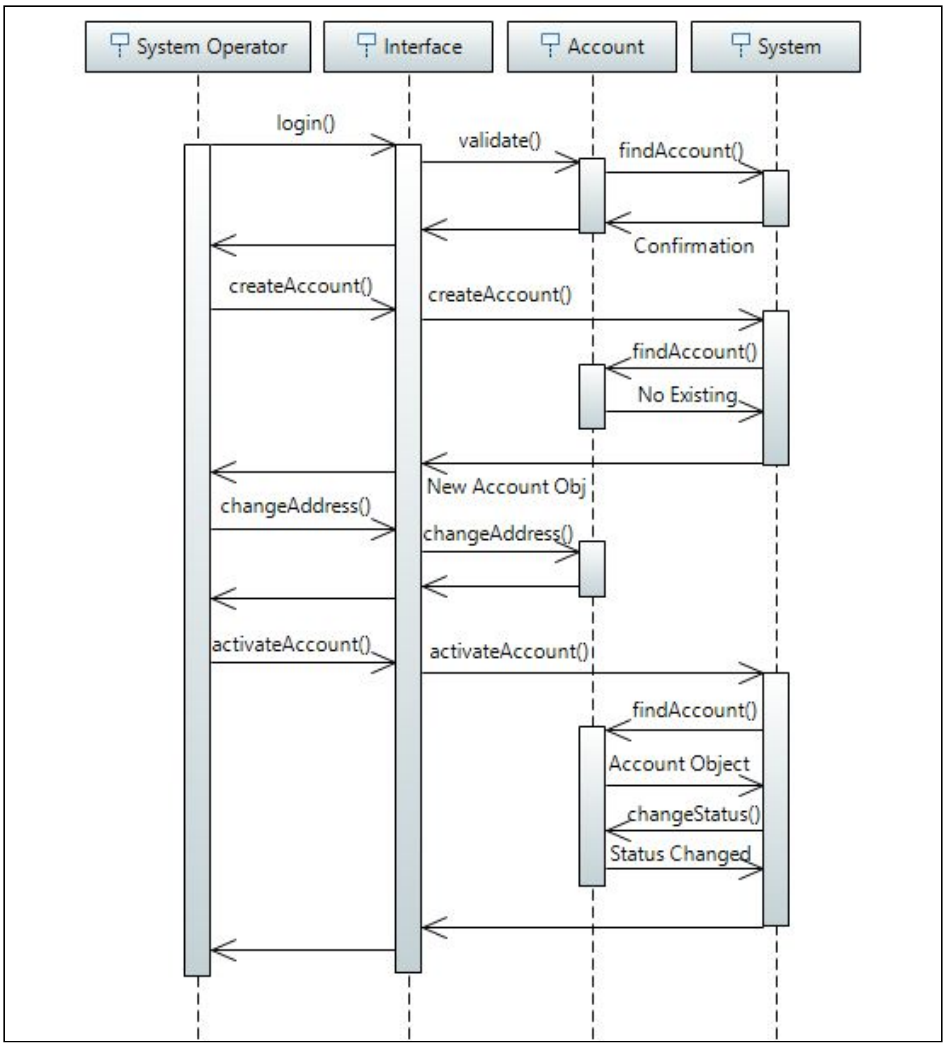
## 5.2 Activity Model:

The activity model shown follows the actions the System Operator and their interaction with the system in order to make changes to existing accounts within the system. The actions specifically shown within the model are the deletion of accounts and the activation of accounts that already exist within the system.



## 5.3 System Behaviour Model:

This specific System Behavior model is the continuation of the activity model above and looks at the System operators interaction with the system in regards to interaction and manipulation of system account. This one specifically looking at the creation of an account and some alteration of information about said account.



## 5.4 Object Behaviour Model:

This final model of the System Operator section is the object behaviour model of the Account Object. Since accounts are the class the System Operator interacts and uses the most, it was chosen for the model. It goes through the possible states of an Account and the paths to reach them.