**Use case:** login as a family member

**Actor:** Family member (co-owner)

**Goal in context:** Family member wants to access the system and can monitor sensors but can't change the setting of system.

**Preconditions:** Homeowner made profiles of family members so that only those members can access the system.

**Scenario:**

- Family member logs onto Safe Home website.
- Family member enters his user ID and password.
- System validates the user's credentials.
- If user enters valid credentials then system displays menu buttons of major functions.
- If user enters an invalid credentials unintentionally system asks for reentry for a limited number of times.
- If user forgets his password he clicks "forget password" button on login page.
- After login, a Family member can perform specific tasks like monitoring sensors.

**Exceptions:**

- Login credentials are invalid.
- No input tries remain but still coowner unable to login.
- Homeowner hasn't made family members profiles.

**Priority:** Essential, must be implemented

**When available:** Increment in which administrator/homeowner can create/update family members' profiles.

**Frequency of use:** Few times per month

**Channel to actor:** Via internet (web browser)

**Post-conditions:**

- After login, user can monitor sensors.

- User can update his profile (change his username or any other credentials).
- After monitoring the system, checks all sensors and current situation,
- User logged out from website.

**Use case:** Reset password

**Primary actors:** Homeowner, Co-owner, Admin

**Goal in context:** After login, homeowner wants to reset his password

**Preconditions:** profile of user (homeowner/coowner) is already registered on the system. Contact of homeowner should be stored on system server.

**Scenario:**

- User wants to login system.
- User forgets his password.
- User selects "forget password".
- To confirm user is homeowner/co-owner or Admin, System asks for a phone number or email id.
- If an email or phone number is valid, system sends a varification code to that contact.
- After verification of contact through code, system asks for a new password.
- User enters new password and then re-enter for confirmation.
- System validates new password.
- After changing the password, homeowner logins.
- User performs major functions that are provided by system.

**Exceptions:**

- For login, no input tries remain so system may be locked.
- User enters an invalid phone number or email.
- While entering a new password, User entered invalid credentials.

**Priority:** Essential, must be implemented

**When available:** First increment

**Frequency of use:** Few times in months

**Channel to actor:** Via internet (web browser)

**Post-conditions:**

- When the password reset, User logins.
- To access system, the next time user enters an ID and a new password.

**Use case:** activate/deactivate sensors

**Primary Actor:** Homeowner

**Goal in context:** After login, the homeowner can activate/deactivate sensors via web portal or control panel.

**Preconditions:**

- Homeowner logged on safe home website.
- System validated user's credentials.
- After logged in user can see major functions buttons.
- Sensors are placed at home at required positions.

**Scenario:**

- System displays major functions buttons.
- Homeowner selects "configure sensors" button.
- Homeowner selects "type of sensors".

- Homeowner selects specific sensor from sensors list.
- System displays specifications of that sensor.
- Homeowner can see buttons in end.
- System displays status of sensor (activated or deactivated).
- If homeowner wants to activate sensor he clicks on activate button.
- If homeowner wants to deactivate sensor he clicks on deactivate button.
- Status of sensors is set according to user.

**Exceptions:**

- Login credentials are invalid.
- Sensors are not placed at home.
- Homeowner wants to deactivate sensor which is already not active.
- Homeowner wants to activate sensor which is already active.
- Recently activated sensor is not operating.

**Priority:** Essential, must be implemented

**When available:** First increment

**Frequency of use:** many times, per day

**Channel to actor:** Via internet (web browser) or control panel.

**Secondary actor:** sensors

**Channel to secondary actor:** hardwired and radiofrequency interfaces

**Post-conditions:**

- After activate/deactivate sensors, the homeowner observes sensors.
- Activated sensors are operating.

**Use case:** equip new sensor

**Primary Actor:** Homeowner, Admin

**Goal in context:** After login, homeowner can equip new sensor to system.

**Preconditions:**

- Homeowner/Admin can access website by entering an ID and password .
- System validated user's credentials.
- Sensors are placed at home at required positions.
- New sensor that we want to add must be placed in home

**Scenario:**

- System displays major functions buttons.
- User selects "configure sensors" button.
- User selects "specific type of sensors".
- In particular types of sensors list, system displays "equip sensor" button.
- User clicks "equip sensor" button.
- System asks for specifications of that sensor.
- Homeowner can see buttons in end.
- System displays status of sensor (activated or deactivated).
- If homeowner wants to activate sensor he clicks on activate button.
- If homeowner wants to deactivate sensor he clicks on deactivate button.
- Status of sensors is set according to user.

**Exceptions:**

- Login credentials are invalid.
- New sensor that user wants to add to system is not placed at home.
- New sensor is not operating after activation.
- Sensor is not placed in required position.

**Priority:** Essential, must be implemented

**When available:** second increment

**Frequency of use:** Few times per month

**Channel to actor:** Via internet (web browser)

**Secondary actor:** sensors

**Channel to secondary actor:** hardwired and radiofrequency interfaces

**Post-conditions:**

- Status of new sensor is settled according to user.
- User observes working of sensors.
- Recently added sensor started working.
- Activated sensors are operating.

**Use case:** unequip sensor

**Actor:** Homeowner, Admin

**Goal in context:** After login, homeowner can add dismantle useless sensor.

**Preconditions:**

- Administrator accesses website by entering an ID and password or he can access control panel.
- System validated user's credentials.
- After logged in user can see major functions buttons.
- Sensors are placed at home at required positions.

**Scenario:**

- System displays major functions buttons.
- Homeowner/Admin selects "configure sensors" button.

- Homeowner/Admin selects "specific type of sensors".
- Homeowner/Admin  selects specific sensor from sensors list.
- System displays specifications of that sensor.
- Homeowner sees buttons in end.
- System displays status of sensor (activated or deactivated).
- System also displays "unequip sensor" button.
- Sensor deactivated automatically.
- Status of sensors is set according to user.
- Selected sensor stopped working.

**Exceptions:**

- Login credentials are invalid.
- Sensor that user wants to dismantle does not exist.
- User wants to unequip that sensor which is concerning other sensors.
- By unequipping sensor, other sensors are not operating perfectly fine.

**Priority:** Essential, must be implemented

**When available:** second increment

**Frequency of use:** Few times per month

**Channel to actor:** Via internet (web browser)

**Secondary actor:** sensors

**Channel to secondary actor:** hardwired and radiofrequency interfaces

**Post-conditions:**

- Homeowner/Admin observes sensors.
- After dismantling the sensor, other sensors are correctly working.