



# CS350 Software Engineering SafeHome Project

Bug Report for Team 6

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## 1. Manual System-Level Testing

### 1.1. BUG-101: Can not clone the document directly from the given procedure

**Author :**Tattep

**Bug description:** Can not clone the document directly from the given procedure

```
❸ (.venv314) (base) tattep@Tatteps-MacBook-Pro ~ % git clone https://github.com/24seconds/CS350_HW3.git
Cloning into 'CS350_HW3'...
remote: Repository not found.
fatal: repository 'https://github.com/24seconds/CS350_HW3.git/' not found
```

### 1.2. BUG-102: Dependency Conflict

**Author :**Tattep

**Bug description:** After pip install -r requirements.txt, some of the libraries still need to be installed separately. Although the document said that this will be included in standard normal Python installations, they did not provide what “standard normal” means.

**How to reproduce:**

1. Run pip install -r requirements.txt successfully
2. Run python src/main.py
3. An error in the figure below shows:

```
❸ (.venv314) (base) tattep@Tatteps-MacBook-Pro CS350_HW3_submission % python src/main.py
Traceback (most recent call last):
  File "/Users/tattep/Downloads/submission/CS350_HW3_submission/src/main.py", line 3, in <module>
    import tkinter as tk
      ^^^^^^^^^^
  File "/opt/homebrew/Cellar/python@3.14/3.14.2/Frameworks/Python.framework/Versions/3.14/lib/python3.14/tkinter/__init__.py", line 38, in <module>
    import _tkinter # If this fails your Python may not be configured for Tk
      ^^^^^^^^^^
ModuleNotFoundError: No module named '_tkinter'
```

### 1.3. BUG-103: Ungiven Initial Password.

**Author :**Tattep

**Bug description:** Initial passwords are not given and differ by user,( I tried 1234 in my PC and It does not work, 0000 works. But on my friend's PC 1234 works, but not 0000.)

**How to reproduce:**

1. Run python src/main.py and press FN+1
2. Type 1234 as a password.
3. Invalid password sign shows, the correct password is 0000 (not given in the manual)

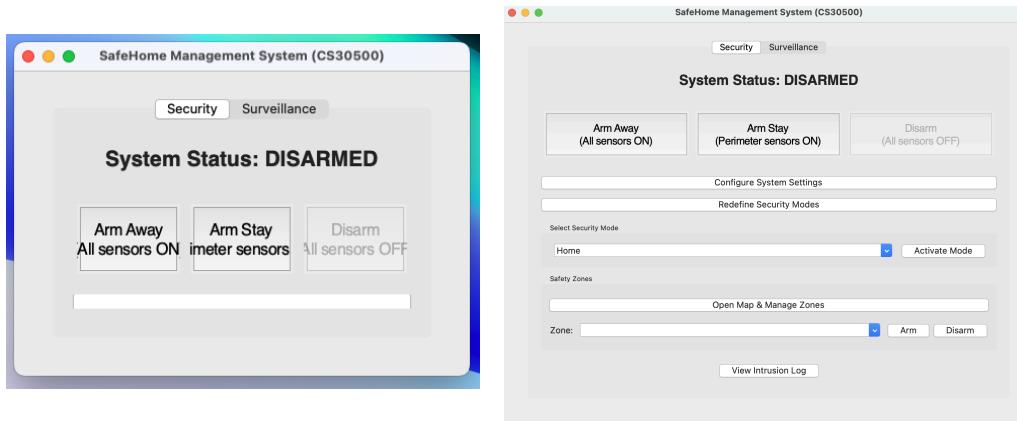
### 1.4. BUG-104: UI is unable to read and use when the screen is minimized.

**Author :**Tattep

**Bug description:** UI is unable to read and use when the screen is minimized.

**How to reproduce:**

1. After typing a correct password, a screen is shown
2. Sometimes the management system is unable to read and use (left figure), sometimes it looks fine(right figure).



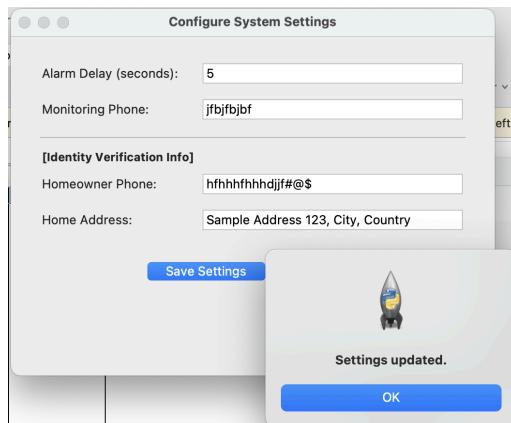
## 1.5. BUG-105: Phone number accepts string

**Author :**Tattep

**Bug description:** Phone number accepts string

**How to reproduce:**

1. After successfully login, click “Configure System Settings”
2. Randomly type string type in Monitoring Phone and Homeowner phone and click “Save Settings”
3. Settings updated, which should not.



## 1.6. BUG-106: Old password accepted after change

**Author :**Tattep

**Bug description:** Old password accepted after change (login)

After changing the password, the old password can still be used to login the system again.

### How to reproduce:

1. After changing the password by Manual's method, logout and login again. In this case, I change the password from 0000 to 1234.
2. Found that 0000 (old password) can be used to login to the system.

```
Boot sequence complete. System is ready.
Control Panel: Key '1' pressed.
Keypad buffer: 1
Control Panel: Key '2' pressed.
Keypad buffer: 12
Control Panel: Key '3' pressed.
Keypad buffer: 123
Keypad buffer: 1234
Keypad Login successful. Entering Command Mode.
Log created: [2025-12-08 18:14:58 KST +0900]           SYSTEM: Login via Control Panel.
GUI: Switched away from Surveillance tab.               Stopping camera feed.
Control Panel: Custom 'SYSTEM OFF' button pressed.
System turning off...
Log created: [2025-12-08 18:14:59 KST +0900]           SYSTEM: System powered off.
Control Panel: Custom 'SYSTEM ON' button pressed.
System turning on...
LoginManager initialized.
SensorController initializing...
Alarm device initialized.
CameraController initializing...
    Created and initialized 3 cameras.
LogManager initialized.
ConfigurationManager initialized.
Log created: [2025-12-08 18:15:05 KST +0900]           SYSTEM: System powered on.
Boot sequence complete. System is ready.
Keypad buffer: 0
Keypad buffer: 00
Keypad buffer: 000
Keypad buffer: 0000
Keypad Login successful. Entering Command Mode.
```

## 1.7. BUG-107: Old password accepted to disarm

**Author :**Tattep

**Bug description:** Old password accepted to disarm. After changing the password, the old password can still be used to disarm the system again.

### How to reproduce:

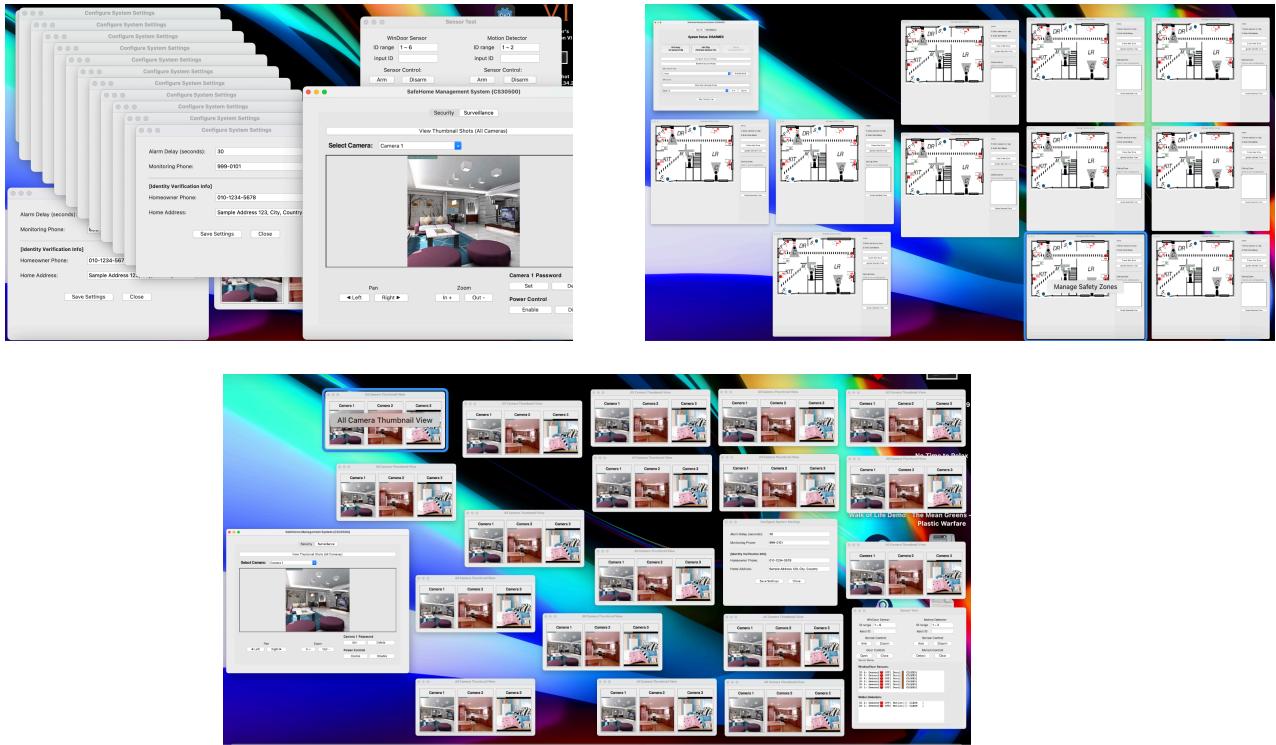
1. After changing the password by Manual's method, logout and login again. In this case, I change the password from 0000 to 1234.
2. Found that 0000 (old password) can be used to disarm the system.

```
GUI: Arm Away button pressed.  
System: Attempting to Arm Away..  
System: Sensor poll loop STARTED.  
Log created: [2025-12-08 18:22:34 KST +0900] SYSTEM: System Armed (Away).  
System: Armed Away.  
Keypad buffer: 0  
Control Panel: Fn button toggled to True  
Control Panel: FN + 0 (DISARM) activated.  
Control Panel: Disarm via FN + 0  
Keypad buffer: 00  
Keypad buffer: 000  
Keypad buffer: 0000  
Alarm is ringing, treating keypad input as disarm attempt...  
Password valid. Disarming system.  
System: Disarming...  
Log created: [2025-12-08 18:22:47 KST +0900] SYSTEM: System Disarmed (from status 1).  
System: Disarmed
```

## 1.8. BUG-108: Infinite window creation

**Author :**Tattep

**Bug description:** Some window can be created infinitely



### How to reproduce:

1. Click “Open Map & Manage Zone”, “View Thumbnail Shots”, “Configure System Settings” in Safe Home Management System many times
2. Found that the Manage system zone window shows everytime “Open Map & Manage Zone”, “View Thumbnail Shots”, “Configure System Settings” clicked.

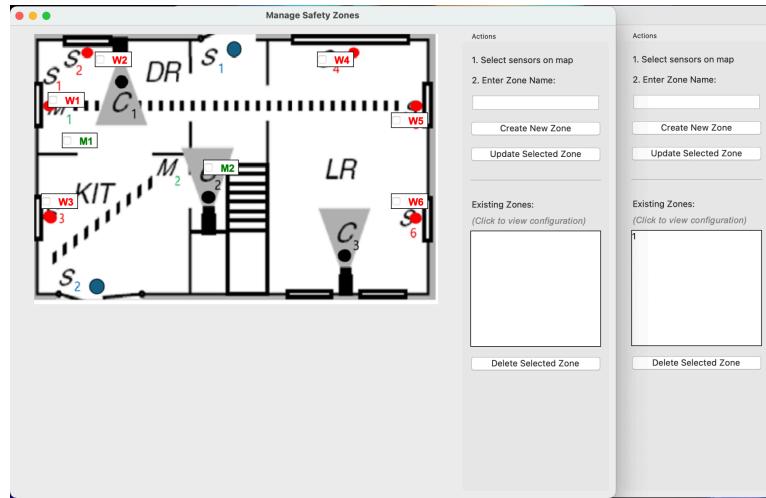
## 1.9. BUG-109: Manage system zone windows information did not synchronized

**Author :** Tattep

**Bug description:** Manage system zone windows information did not synchronized

### How to reproduce:

1. Click “Open Map & Manage Zone” in Safe Home Management System 2 times
2. After changing the zone in one window, the detail in the other window does not change.



## 1.10. BUG-110: Old password accepted in panic

**Author :**Tattep

**Bug description:** After changing the password, the old password can still be used to disarm the system while panicking.

```
Control Panel: 'PANIC' (Button #) pressed.  
PANIC! Calling monitoring service...  
ALARM: Ringing! BEEP! BEEP!  
Log created: [2025-12-08 19:07:17 KST +0900]           INTRUSION: Intrusion detected by sensor ID PANIC BUTTON  
ALARM DELAY EXPIRED. Calling monitoring service...  
Log created: [2025-12-08 19:07:17 KST +0900]           SYSTEM: Calling monitoring service...  
Keypad buffer: 0  
Keypad buffer: 00  
Keypad buffer: 000  
Keypad buffer: 0000  
Alarm is ringing, treating keypad input as disarm attempt...  
Password valid. Disarming system.  
System: Disarming...
```

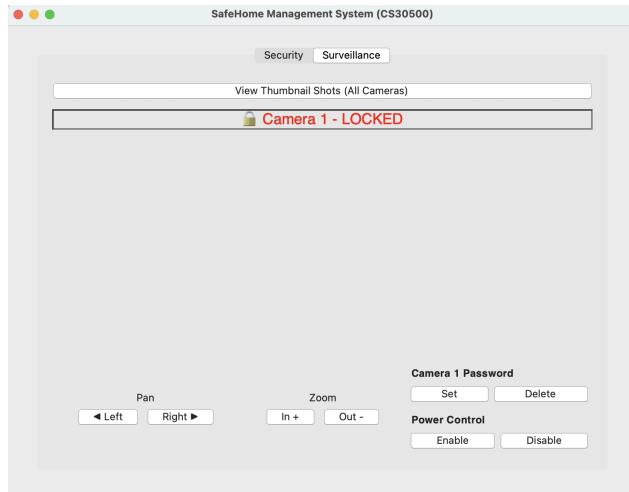
### How to reproduce:

1. After changing the password by Manual's method In this case, I changed the password from 0000 to 1234.
2. Click \* (panic button)
3. Found that 0000 (old password) can be used to disarm and stop the panicking to the system.

## 1.11. BUG-111: No retry after wrong password

**Author :**Tattep

**Bug description:** After typing a wrong password, there is no chance to retype.



### How to reproduce:

1. After setting the camera's password by Manual's method.
2. Try to look at that camera and type a wrong password
3. Locked screen shows, but no chance to retype.

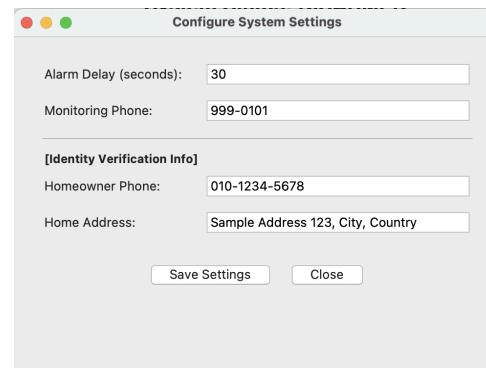
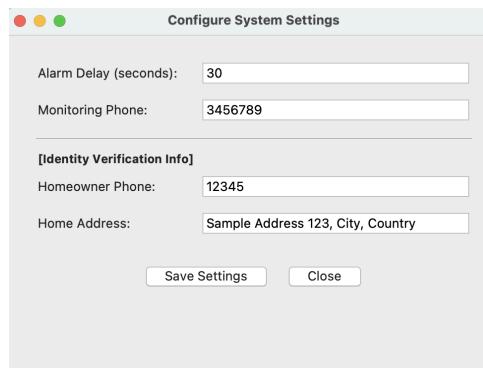
## 1.12. BUG-112: Values not persisted

**Author :**Tattep

**Bug description:** Some of the values do not save through the database system, forget when reset or restart the system.

**How to reproduce:**

- 1.Login Successfully
2. do smth
3. Configure some setting (Left figures)
  - Change phone number and location
  - Add, Update Safety Zone
  - Set password Camera
  - Add/Remove sensor from mode configuration
  - Add, Update Mode
4. Close all tab or reset or off and on again
5. run python again or reopen the system
6. No setting is saved. (Right figures)



## 2. Test Oracle

### 2.1. Common Use Cases

#### 2.1.1. Summary

Use Cases (From SRS/SDS)	Result	BUG ID
Log onto the system through control panel	Pass	
Log onto the system through web browser	1 issue	BUG-201
Configure system setting	Pass	
Turn the system on	Pass	
Turn the system off	Pass	
Reset the system	Pass	
Change master password through control panel	Pass	

#### 2.1.2. Log onto the system through web browser

##### 2.1.2.1. BUG-201: System does not ask for username

**Author:** Thommakoon

**Step:**

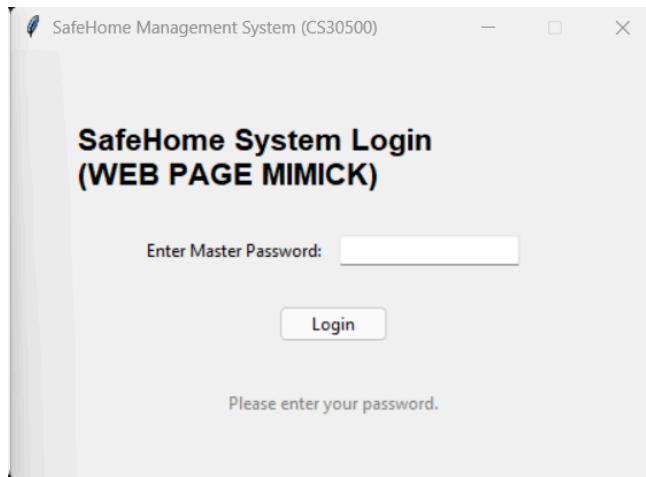
1. Run python src/[main.py](#)
2. Press FN button
3. Press “1” button

**Expected Result:**

Web ask for username and password

**Actual Result:**

- Control Panel is not separated from the web. User has to turn on system to open web interface.
- Only the master password is asked. No username.



## 2.2. Security Use Cases

### 2.2.1. Summary

Use Cases (From SRS/SDS)	Result	BUG ID
Arm/disarm system through control panel	Pass	
Arm/disarm system through web browser	Pass	
Arm/disarm safety zone selectively	Pass	
Alarm condition encountered	1 Issue	BUG-202
Configure safety zone	Pass	
Create new safety zone	Pass	
Delete safety zone	Pass	
Update an exist safety zone	Pass	
Configure SafeHome modes	Pass	
View intrusion log	Pass	
Call monitoring service through control panel	Pass	

### 2.2.2. Alarm condition encountered

2.2.2.1. BUG-202: Sensor is triggered, but there is no update on log page.

**Author:** Thommакoon

**Step:**

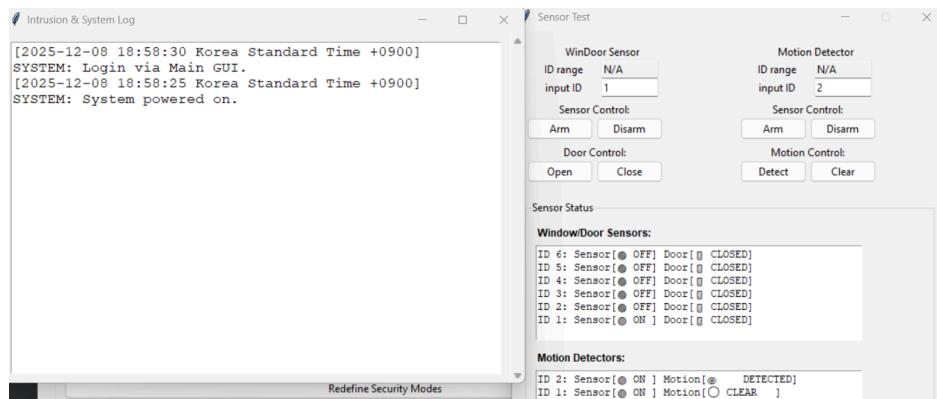
1. Run python src/[main.py](#)
2. Log onto web page
3. Arm motion sensor 1 in “Sensor Test” window
4. Press “Detect” button below “Motion Control” in “Sensor Test” window
5. Press “view instruction log” in “SafeHome Management System” window

**Expected Result:**

See the event log from motion sensor 1

**Actual Result:**

- No event log from motion sensor 1



## 2.3. Surveillance Use Cases

### 2.3.1. Summary

Use Cases (From SRS/SDS)	Result
Display Specific camera view	Pass
Pan/Zoom specific camera view	Pass
Set camera password	Pass
Delete camera password	Pass
View thumbnail Shots	Pass
Enable camera	Pass
Disable camera	Pass