Scenario #1: User Enters Home Walking

- **Outside Method Authentication:**
  - **User enters a 4-digit numeric password on the keypad to unlock the front door.**
  - **Two-way authentication:**
    - **If the password is correct:**
      - **Green LED indicates success.**
      - **Servo opens the front door.**
    - **If the password is incorrect:**
      - **Red LED indicates failure.**
      - **After the third wrong attempt:**
        - **Sends notification to the user's phone.**
        - **Buzzer sounds.**
        - **Garden lights turn red.**
        - **Locks the system for an hour.**
- **Inside House Method Authentication:**
  - **User enters another password within 30 seconds of entry.**
  - **If the password is correct, the system unlocks and first-floor lights turn on.**
  - **If the password is incorrect:**
    - **After the third wrong attempt:**
      - **Locks the user inside the house.**

- - - Only unlockable via phone app.
      - If there's fire, the system unlocks for firefighters.
  - After the fourth wrong attempt:
    - Locks the system until police arrive.
    - Lights flash red, buzzer sounds.

Scenario #2: User Enters Home with His Car

- Ultrasonic sensor senses the car and opens the garage door.
- User must enter a second keypad password.

Scenario #3: User Enters Home without Problems

- Can control systems via keypad or app.
- Room lights turn on/off based on motion sensors.

Scenario #4: There is Fire

- System detects fire, unlocks, and calls fire station.
- Garden lights turn red, buzzer sounds.

Scenario #5: The Weather is Hot

- Temperature sensor activates the fan if temperature is above 25°C.
- User can override fan control via app or keypad.
- Priority is to evacuate in case of fire.

Scenario #6: In the Morning

- **Light-dependent resistor (LDR) turns off garden lights in the morning.**

- **Lights turn red in case of fire or intrusion.**

Additional Notes:

- **Multiple keypads and sensors are strategically placed for security and convenience.**

- **The garage is separate from the house but within the system's parameters.**