

Project: Smart Home Hub (SHH) v1.0

- **3.1 System Architecture:** The SHH architecture consists of three main modules:
 - **Wi-Fi Communication Module:** This module handles all network traffic for communicating with smart devices. It supports the Wi-Fi protocol.
 - **Control Interface Module:** This module renders the on-device GUI and processes user inputs.
 - **Security Sensor Integration Module:** This module receives data from the connected camera sensor and sends a signal to the Audio Alert Module upon detection.
 - **Audio Alert Module:** A basic component that triggers a local alarm sound.
- **3.2 Design Decisions:**
 - To simplify development, the system will not support external integrations with third-party mobile notification services.
 - The system will use a proprietary data format for communication with the security sensor.