Meeting 1 Notes

Armed modes

* Home
* work (away)
* extended away.

Devices

* smoke and carbon monoxide detectors
* interior and exterior cameras
* door/window sensors
* alarm
* interior control panel
* smart device application

1. **Concept Statement:**

The Protecc Command Center is a home security system that permits the home-owner to monitor the exterior and interior of their property either directly through a PC or remotely via the internet. Command Center incorporates various devices, supplied by Protecc, that a home-owner can install in order to ensure the prevention of theft and the safety of their family. Among these devices are external cameras, **smoke detectors, gas leak detectors, door/window sensors, and motorized locks for doors and windows.** **Command Center offers two different armed modes: home and away.**

Home mode is meant to be used when the house is occupied. Away mode is meant to be used when the homeowner leaves the house for a short amount of time (less than 24 hours). The mode allows the emergency services and responses from Protecc to be appropriate for the situation. If the mode is set to home, then the services know to expect people at home. Emergency services should be prepared to protect the home-owner. If the mode is set to away, then since nobody is expected to be home then the response should expect that either the home-owner is returning to the house or somebody is breaking in.

The cameras are installed around home entry points and provide constant surveillance. The Command Center allows direct access to any of the camera feeds for the home-owner. When cameras detect motion**,** they immediately notify the user and send a picture of the intrusion. The cameras use classification to determine whether the motion is caused by a person or something else such as an animal.

Intrusion detectors are motion sensors detecting if a door or window is open or if there is movement coming through the door or window. Similarly, to the cameras, abnormal readings for these sensors default to sending notifications to the user through system notifications.

The Command Center also includes motorized locks for doors and windows. Through the Command Center interface, the home-owner can both see what doors and windows are unlocked. The homeowner can then choose to lock them all through a “Lockdown” command or lock them all individually. The doors can be manually unlocked as well without the application but the home-owner will be notified if any doors or windows open without using the application.

The Command Center application gives the home-owner control of what they see and when they see it. Upon entering the application, the home-owner is shown the most recent and important notifications. If there are images associated with the notification, such as via the video feed, then the home-owner can easily expand the notification to view it. From the main menu, the home-owner can access settings or speak with a company security specialist if they have any specific questions. This specialist will either be called directly or sent a notification to contact the home-owner. The specialist can provide information pertaining to the system as well as assist setting up components and sensors remotely.

There are many settings within the Command Center that the home-owner can adjust. The primary setting is how they want to receive notifications and which ones they prioritize. Relating to the video feed, the user may wish to only be notified for intrusions that they consider a threat. If the system classifies the intrusion as a deer, then the person would not be notified directly but the notification would still be archived. If the intrusion is a person, however, then the notification would be sent directly to the home-owner. Similarly, the home-owner can set up the system to automatically notify the authorities for specific sensor readings. If a gas leak is detected or a smoke alarm stays on for a certain duration of time, then the fire department can be alerted. Or if a person is detected attempting to break into the home then the police department can be immediately notified. If the user gives Protecc permission, the image notifications from their video feed will be used to continue to improve the classification model used in order to provide the most effective home protection possible.

Potential Use Cases:

* Access Application
* Arm System - Brett
* Disarm System
* Adjust Settings
* Create Report - Hunter
* Receive Report - Hunter
* Add Sensor
* Remove Sensor
* View Live Feed - Chris
* Trigger Alarm - Grant
* Turn off Alarm - Grant
* View Log - Brett
* Contact Emergency Services – Chris