These requirements concern being able to get a general overview of the smart home and its operation
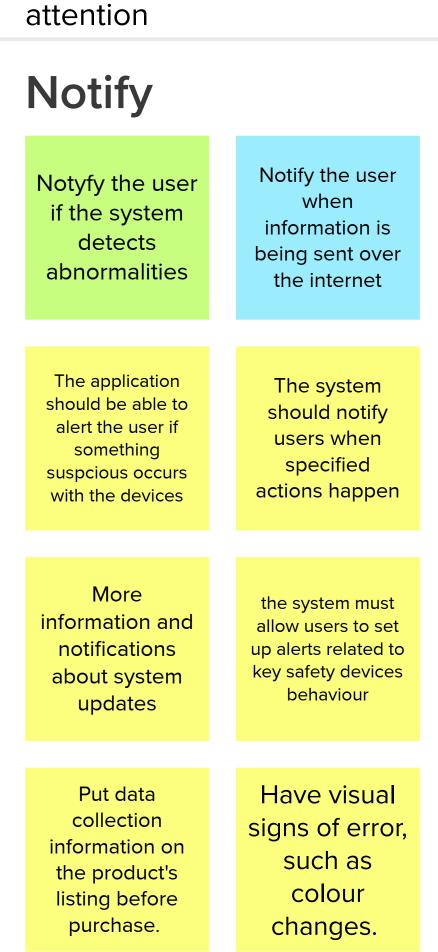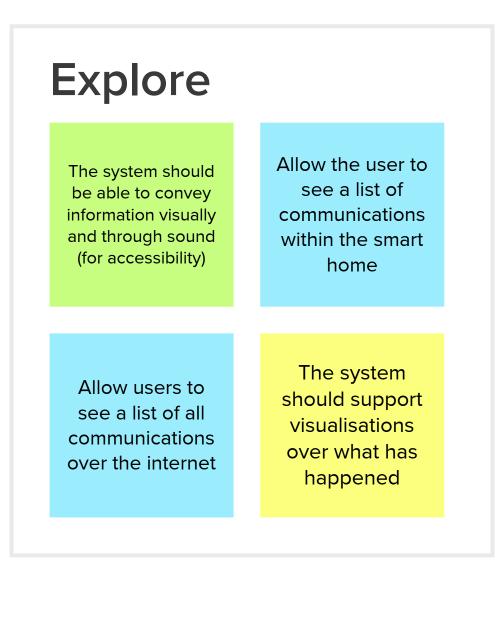
The Notify theme concerns being prompted whenever the system detects that something could be wrong or requires attention

The Investigate theme concerns being able to investigate specific issues or concerns through finding more information

The Investigate theme concerns being able to investigate specific issues or concerns through finding more information

The Usability theme concerns the system providing support functionality to users

## Oversee

- Allow users to see the status of devices
- Allow users to see a list of connected devices
- Allow users to export information to other services/ devices
- The system could have a visual representation of the home

## Notify

- Notyfy the user if the system detects abnormalities
- Notify the user when information is being sent over the internet
- The application should be able to alert the user if something suspicious occurs with the devices
- The system should notify users when specified actions happen
- More information and notifications about system updates
- the system must allow users to set up alerts related to key safety devices behaviour
- Put data collection information on the product's listing before purchase.
- Have visual signs of error, such as colour changes.

## Explore

- The system should be able to convey information visually and through sound (for accessibility)
- Allow the user to see a list of communications within the smart home
- Allow users to see a list of all communications over the internet
- The system should support visualisations over what has happened

## Investigate

- The user should be able to access more granular, hierarchical information about what happened
- The system should provide advanced controls
- Accurate logs of actual errors, not just erroneous actions.
- The system should record the cause of actions
- Record when updates are installed and by whom
- Allows user to see history of device status over user specified time range
- System should record energy usage of each device in the home

## Usability

- The system should provide further support when issues occur
- Minimal technical language in high-level explanations
- Have moderated online forums where people can ask questions.
- Recommending an automation or script based on frequently used smart home features
- The system should meet usability criteria
- The system should meet accessibility criteria

## Key

- Respondents
- Students
- Both

The Control theme concerns providing users with control over aspects of the system

The Safety theme concerns providing users with functionality to ensure the safety of the devices and home

The Security theme concerns providing users with functionality to ensure the security of the devices and home

The Modality theme concerns how users will interact with the system

## Control

- The system should have permissions for privacy control
- The user should be able to add other users to view the status
- Option to opt out of information sharing
- Option to have second layer of authentication for financial transactions
- A list of all agreed-upon permissions can be re-viewed later

## Safety

- The system must be able to be manually overriden (with appropriate permissions, like keys)
- Built in safety features for contacting emergency services in extreme circumstances
- Ability to override safety features, e.g. if entering the house, prove that you aren't breaking in.
- Have useful/ safe default settings, such as your doors being locked.

## Security

- Option to have second layer of authentication for critical security features (locks, garage door)
- Built in safety features for contacting emergency services in extreme circumstances
- Does not rely on outside internet connectivity - runs intranet between devices instead
- Data that can be processed on-device should be (instead of in the cloud)
- By default, devices are unaware which other devices are present in the house
- Secure method of connecting new devices

## Modality

- There could be physical hub with a simple UI that shows information
- The system could be accessible through a mobile and web app
- Have digital setup guides, as well as paper ones, as these can easily be updated.
- Be able to get an overview of the device's features easily. e.g. by saying "help" or pressing a help button.