

COMPSCI 345 Assignment 3

Human-Computer Interaction

Task One Design Documentation

PERSONA

Name

Ron Swanson

Goals

Ron is the hard-working, single father of 2 children, who resides in a suburban region. Due to high traffic and the driving distance from work to his home, he always arrives home later than his kids, when they get back from school. Therefore he wants to be able to check up on his kids and make sure that they have made it back home safe. At the moment he is relying on txt messages and calling which has become more and more inconsistent over time.

Since he is busy at the end of the day, he also wants to be able to swiftly lock up and turn off any appliances/lights that may have been left on, instead of manually checking every single room.

Finally, he needs a solution to be able to let in workers to fix his kitchen, other than leaving the spare house key under the pot plant, it needs to be a safe and secure method that he is able to control and be aware of.

Behaviors

As a parent he is constantly concerned and looking over his children. Not overly protective but still requires some sense of knowledge of their status to breathe easy. Ron is very hardworking and

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challenges himself beyond his limits, sometimes to the point of almost neglecting his children but primarily wants a financially safe environment for his children to grow up in.

He likes to be in control in most situations, as he only trusts himself. This attitude has landed him a lot of leadership positions and roles in team projects and has set himself up for a potential promotion at the end of the summer.

Personality

Ron is known to be very generous and caring, obviously shown through his actions towards his children. He always put others first before himself, only catering to his needs once everyone has been satisfied.

But because of his pessimistic and small trust issues, it has led to him only relying on himself.

Relevant Background

In the past there was a case where he almost lost one of his kids, ever since then he has become more protective and caring of them in order to prevent another potential bad scenario. He has also tried to use other apps but they were all individual companies and software, which made it difficult to manage and monitor them all at once.

SCENARIO

People

Ron Swanson (Father, UX Designer)

Activities

Using the website browser ultimately for control and surveillance. The video surveillance allows him to view all the available camera views on one page, making monitoring a quick glance. The lights and other appliances are also controlled on the same site, via different tabs. Also having the ability to let in the workers coming into to fix his house whilst at work via the 'Security System' tab which controls all the exterior doors, this way he is in control and can monitor the workers for any potential integrity issues.

Context

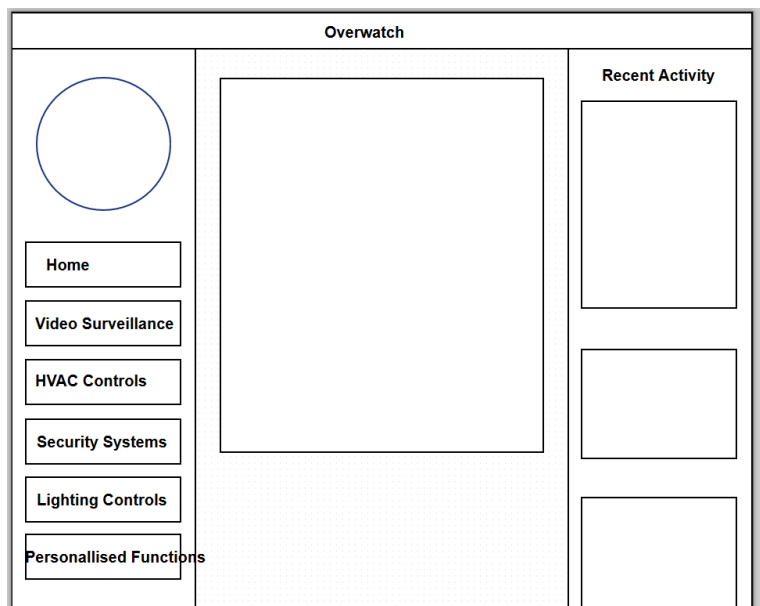
Ron is a UX Designer who constantly uses his computer, having the website always open on the desktop allows for quick access and control.

Technology

PC interface, Door locking mechanisms, Video Surveillance systems.

WIREFRAME WALKTHROUGH

The Main Template



This will be main layout of the every page off the website. The only part of this that will change will be the middle column, where the main components of each function is displayed.

For this assignment and the specific scenario I will go over the 'Home', 'Video Surveillance', 'Security System' and 'Lighting Controls'.

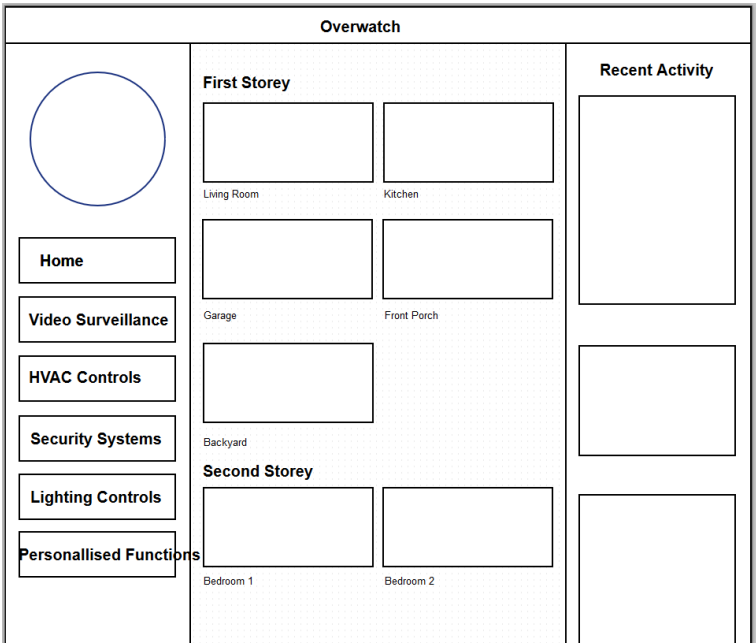
The Recent Activity panel on the right displays all the specific activity that has occurred captured by each of the connected devices (e.g Front Door Opened 12:35pm). Each box represents a different day, having the

most current date at the top, which is labelled 'Today' along with the time.

The top panel has no other purpose other than displaying the name of the company.

The right panel houses a vertical navigation bar that display all the functions available. Clicking on the function name will bring up a new page with the features being displayed in the middle column

Video Surveillance

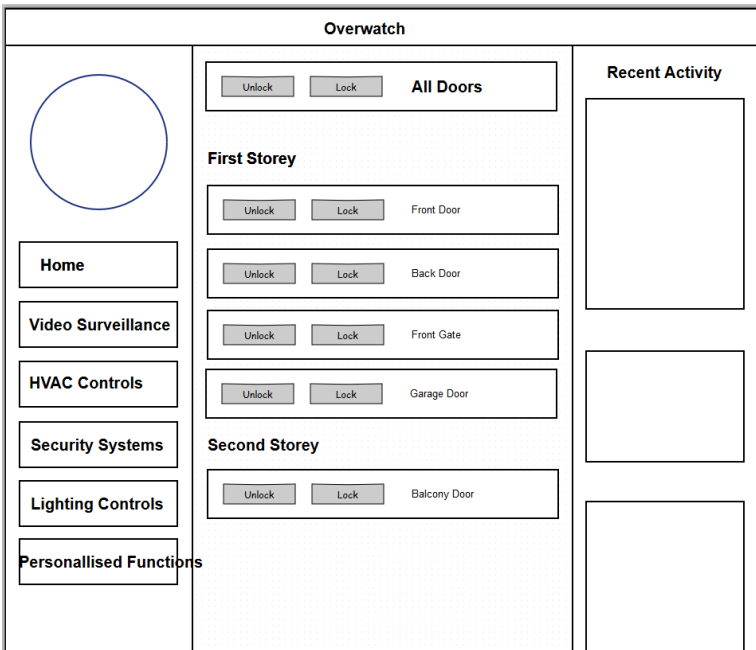


This page is one of main features of the website, the Video Surveillance page displays time stamps of each security camera, which are divided dependent on which ever storey/floor the camera is situated.

Clicking on the image of the timestamp will bring up the actual live feed and will also expand the size of the video screen.

Ron could use this to monitor the actions of the worker fixing his kitchen and to make sure than his kids have made it back home safely

Security Systems



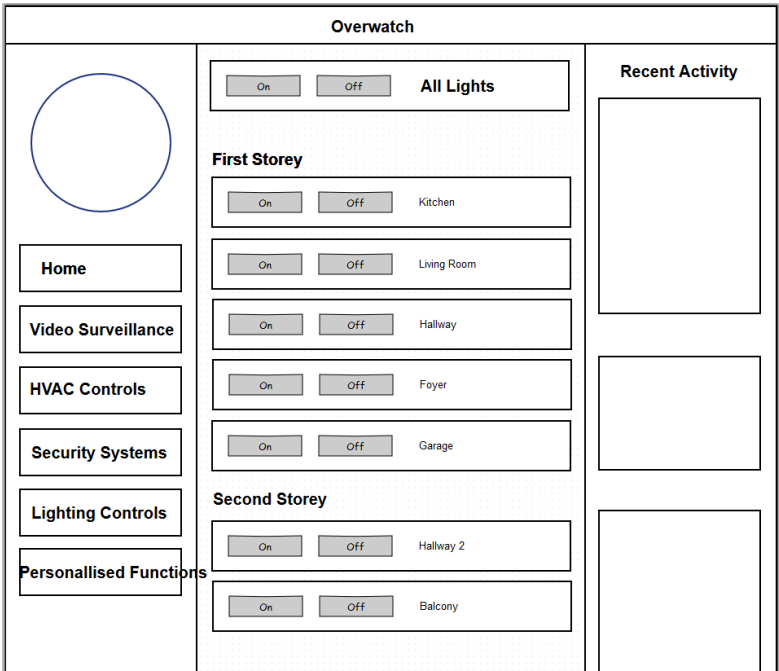
Security Systems controls all the locking mechanisms of all the exterior doors of the house.

The first panel controls all the doors under its controls. Pressing unlock will unlock all the doors and vice versa with the locking function. If one of the doors listed below are unlocked or locked this will change the state of the All Doors buttons to a neutral color. (Hopefully the actual prototype can help you understand this)

And of course, each door can be individually locked and unlocked via the appropriate buttons located on the left side of the column

This feature will become particularly useful for Ron as the worker is regularly coming into to do maintenance work in his kitchen, after receiving a txt or call from a worker that he has arrived at his home, Ron can easily login-in to the website and unlock the Front Door.

Lighting Controls



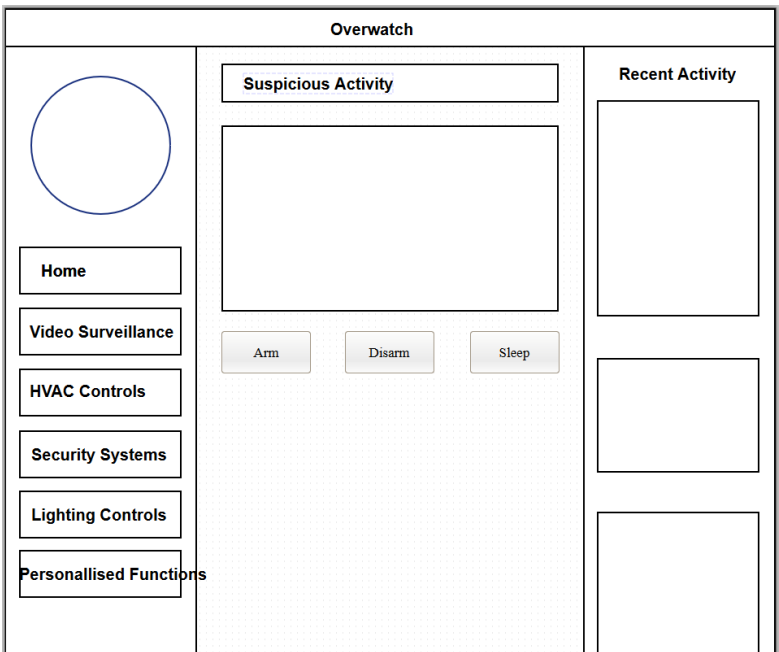
This is the last function that I will featuring in this assignment. The Lighting Controls work on the same basis and logic of the doors from the Security Systems page. Instead of doors, each panel is divided into rooms of which the lights in that room are able to be turned on or off via the website.

Like the previous page, there is an ‘All Lights’ button that controls all the lights.

This will help Ron easily lock up and turn off all the lights in house from the comfort of his computer instead of having to manually to go to each room to do the same task. Since he

works hard at his job, this feature will become a very helpful and efficient method for his daily routine.

Home Page / Dashboard



This will be the first page that the user will see when they login to the website. It includes a panel at the top that reports the user of any suspicious activity, which is captured by the video camera whilst the system is armed.

Below is a live feed of the home, with 3 buttons below, ‘Arm’, ‘Disarm’ and ‘Sleep’. These buttons are simple presets that activate a group of functions according to its state.

The ‘Arm’ Button will lock all doors and begin to record activity from the surveillance cameras. The ‘Disarm’

Button will disarm this feature. And the ‘Sleep’ Button will lock all doors, turn off all lights/Heating/Ventilation/AC connected via the website.

COLOUR SCHEME



Black: RGB (0, 0, 0) Mainly for body text and captions that are to be used. Black text will always have a white background color to create a clear and distinct contrast.



Dark Grey: RGB (26, 26, 26) Background color for the left and right column panels. Clearly displays separation from the middle column.



White: RGB (f#####) Bordering content on the page so there is a clear distinction between it and the grey background color.



Orange: RGB (255, 165, 0) To be used in highlighting small and specific details such as indicating the current tab that you're on and the top panel to show importance.



Green: RGB (0, 128, 0) The saturation of the default green as stated in html is not set to its highest point. This makes it easier and more pleasant to look at. This color will mainly be used to indicate the "UNLOCK", "ON" and "DISARM" buttons.



Red: RGB (255, 0, 0) The color red has a very high contrast and high saturation. It is commonly use to alert users of an important state. This color will be used in the "LOCK", "OFF" and "ARM" buttons.

LAYOUT SCHEME

The design is going to consist of a vertical navigation bar that is fixated to the left side of the screen. On this Navigation bar it will consist of all the functions that the website offers. In total there are 5 functions so with 5 tabs on the side, it will also house the logo at the top left corner of the screen. An active button will be housed with an orange border to clearly indicate the page that the user is currently on and a hover feature will be enabled for better accuracy.

At the top there will be a thin horizontal bar that only contains the name of the website 'Overwatch'. Highlighted by a bright orange to clearly display the company.

The right panel will consist of the 'Recent Activities' which include small windows displaying recent activities such as, 'doors opening at a certain time' or 'light #2 has been turned on'. The first box at the top of the panel will be the most current activity listed under "Today + current-time". Each day will be separated by a different boundary with a slightly different shade of grey to the panel itself.

In the middle of the screen it will house the area in which the main components of each functions are displayed and controlled. Clicking on a new function will bring up a new window that solely displays that function and nothing else. All components will have a border of some sort, buttons will be big and clear for simple and visibility of status.

RESOURCES USED

Fonts

- 'Montserrat' by Julieta Ulanovsky. Source: <https://fonts.googleapis.com/css?family=Montserrat>

Images

- Overwatch Logo. Source: <http://i.imgur.com/YZ4w2ey.png>
- Homepage Armed/Disarmed/Sleep: Source: <http://clevelandoutdoorlighting.com/wp-content/uploads/2013/05/Cleveland-outdoor-lighting-from-day-to-night1.jpg>
- Living Room. Source: <http://www.impressiveinteriordesign.com/wp-content/uploads/2012/09/Photos-Of-Modern-Living-Room-Interior-Design-Ideas-0.jpg>
- Kitchen. Source: <http://www.arredamentidassi.com/wp-content/uploads/2015/12/dassi-cucina.jpg>
- Hallway. Source: <http://ghar360.com/blogs/wp-content/uploads/Modern-Wooden-Corridor-Design-Ideas-550x400.jpg>
- Bedroom1. Source: <https://s-media-cache-ak0.pinimg.com/600x315/a8/5b/f2/a85bf2d492d7f83d965508b62b666bd2.jpg>
- Garage. Source: <http://wiib.letmeoutdoors.com/wp-content/uploads/2014/12/Simple-and-modern-garage-doors.jpg>
- Backyard. Source: <http://cdn.freshome.com/wp-content/uploads/2014/06/Naroon-modern-backyard-project-by-Signature-Landscapes-COS-Design-and-Serenity-Pools-2.jpg>
- Bedroom2. Source: <http://ideasforhomedesigns.com/wp-content/uploads/2015/10/simple-bedroom-photo.jpg>

CSS/Javascript Code

- Advanced Image Gallery (used in Video Surveillance, modified) Source: http://www.w3schools.com/css/tryit.asp?filename=trycss_image_gallery_responsive_js

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- Left Navigation Bar (Used on every page) Source:
‘http://www.w3schools.com/css/css_navbar.asp”

