

FutureHeat Smart Thermostat App

Proposed Revisions to the UI Design of the thermostat screen

REPORT

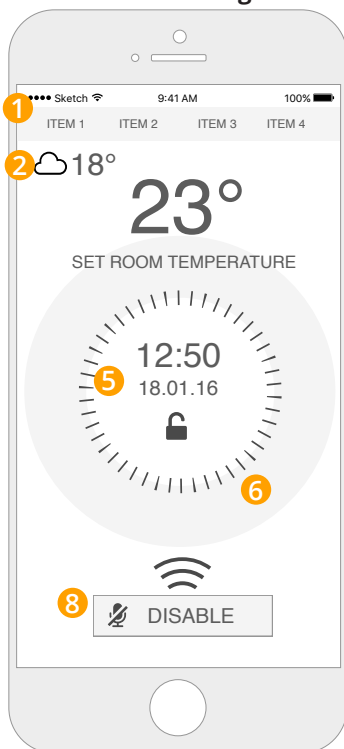
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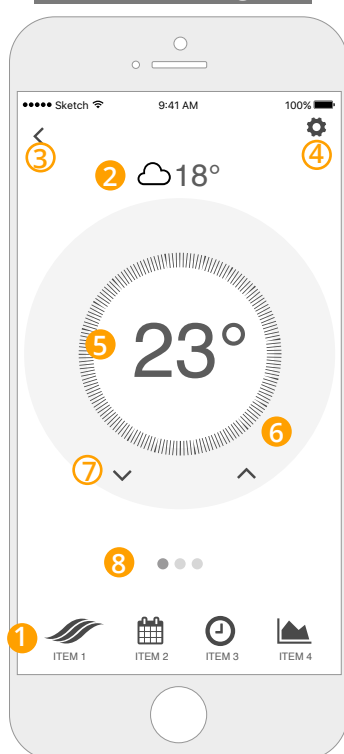
INTRODUCTION

This report was written in response to the requirement for a revised more refined UI design for the main thermostat screen within the *FutureHeat Smart Thermostat App*. The current UI design is in concept phase only, so lacks detailed UX/UI consideration. In addition, due to the increasing rate of development in the areas of IOT (Internet of Things) and home security the initial mockup is already out of date after 8 months. Below is a comparative visual showing the recommended revision points and the justifications for them. Colour mockups showing additional comparative stylistic revisions are shown on the second page.

Current Design

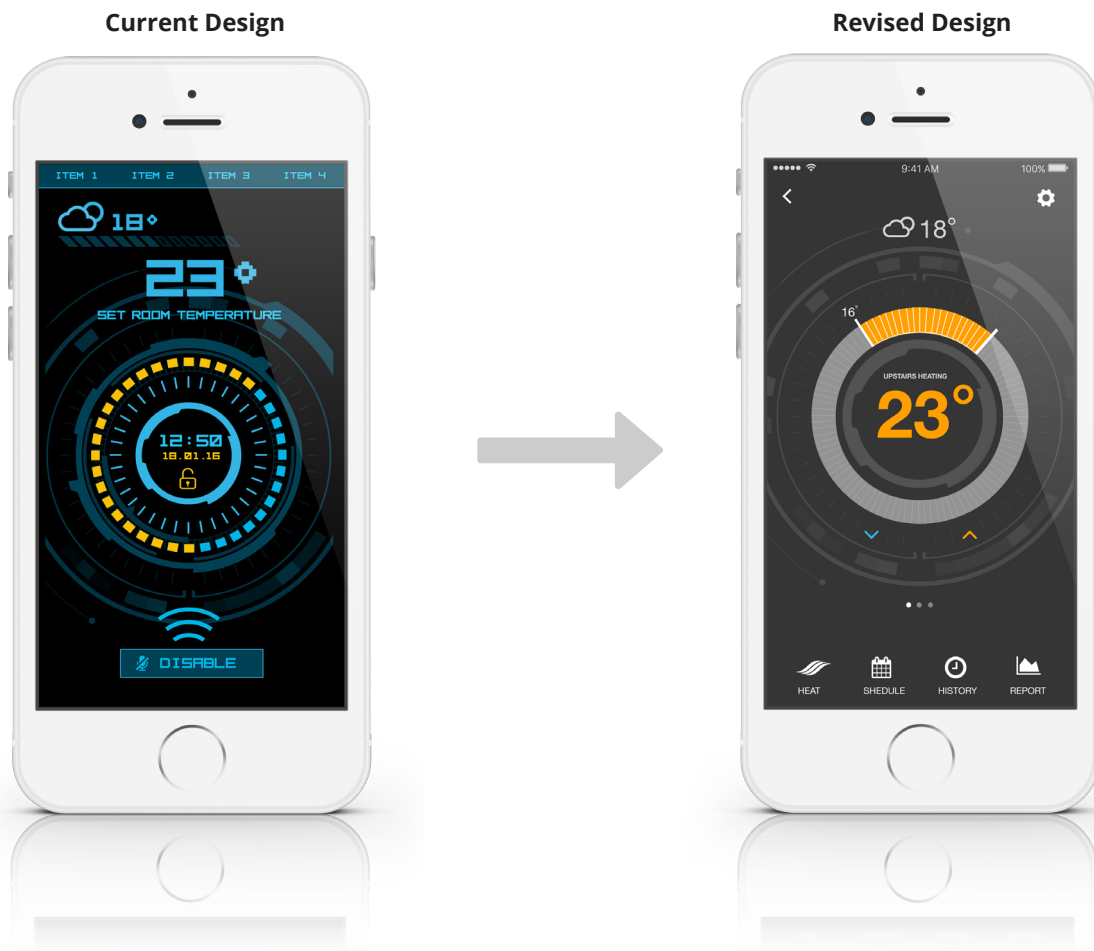


Revised Design



- 1 Change text tabs at the top to an icon 'Tab' pattern at the bottom of the screen**
The primary navigation should be within the 'thumb zone', giving easy access to different views within the app. Icons visually promote an understanding of the app's layout.
- 2 Centralize the external temperature display**
This adds more visual space around the elements and creates a closer proximity between internal and external temperatures for ease of comparison. This feature can be disabled/enabled from within the preferences menu.
- 3 NEW: There would be a home screen for the whole app and the thermostat section would potentially be one of a number of sections off of it (for example other sections could be live indoor and outdoor cams and smoke alarm integrations), so the thermostat section would need a back to home button top left.**
- 4 NEW: Include a preference settings 'inlay side drawer' menu using the familiar cog icon positioned top right**
People need to be able to quickly access and change settings for the app Items in the menu. typically they would be: a Fahrenheit/Centegrade toggle; Outside weather display on/off; Voice activation on/off; Location Control On/Off, Start up Animation On/Off
A cog icon offers good affordance for this menu.
- 5 Remove current time, date and padlock and replace with the room temperature display. Remove 'SET ROOM TEMPERATURE TEXT'**
The current time and date is unnecessary to display on screen. Current time is displayed at the top of device. The date can easily be found elsewhere on the device or in another section. The temperature is the most important information and should be featured in the centre. 'SET ROOM TEMPERATURE' should now just be the area of the home, the text can go in small text above the temperature
- 6 Add subdivisions one for each half degree to the circular display and improve the general useability of the dial**
To convey a more accurate representation of temperature changes when using the drag gesture on the dial. See page 2 for more detail.
- 7 NEW: Add arrow buttons to increase and decrease the temperature as an alternative to the drag gesture dial method of control**
Some users will find the circular drag gesture on the interface awkward to use. Provide a button tap gesture alternative.
- 8 Completely remove the voice activation button (feature powered by Amazon Alexa).**
This feature would be enabled/disabled from the preference settings menu so no need to display on screen. The icon also looks more like a wi-fi button and so confusing for user.

Replace with 'Sliding Drawer' pattern indicators to show that users can swipe to thermostats for different parts of their home as well as their hot water.



The current UI styling lacks focus with a number of elements being of equally high contrast therefore making it confusing for the user to determine where to focus their attention. The primary function of this screen is to allow the person to easily alter the temperature in the predetermined areas of their home. The revised design has a reduced number of background, and brightly coloured elements making the temperature dial the main focus.

The user is offered feedback when changing the temperature in the form of a coloured gauge: orange when increasing the temperature and blue when decreasing it. The dial also indicates the current temperature and the comparative amount it is altered so that the user has a visual cue as to how much the temperature is being altered.



Turning down the temperature

Inactive state

When inactive the screen displays the current temperature without any colour so that the user knows that nothing is currently being changed.

The font within the app has been changed from 'Square Pixel' to 'Helvetica Neue'. Square Pixel will be problematic because the character width is high and there is no lowercase available. This will cause problems in information dense screens that contain tables, charts etc. Square Pixel will be use for the logotype branding only.

Design Summary

the thermostat screen has been revised from the original concept visual to be a useable, viable product whilst still keeping the sci-fi HUD theme. The rotating animation of the circular background elements described here would remain but only play once on launching the app so as not to be intrusive with repeat use. The animation can also be disabled in the preferences menu.