

UNIFIED Smart Watch

Kevin Chiu, Vansh Gambhir, Sean Ker, Daniel Hoang, Jeff Ma, Anirudh Ramanathan, Alison Wong & Shang Yang

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Design Language

From the very beginning, our design language has been simple. We wanted to create an amazing smart watch experience that we don't see today.

Adaptable

We wanted our users to be able to use their watch in various settings, so we enabled them to interact with it using voice as well as their finger..

Easy to Use

This means that the learning curve is gradual and the interface is intuitive, enabling users to navigate throughout the watch after only interacting with it once or twice.

Fast

This means that any objective for the user, when using the watch, can be completed in the minimum amount of taps or interactions as possible.

Beautiful

This means that our screens are inviting, using UI patterns consistent in modern devices today so that the transition from a phone or computer to our watch is seamless and smooth.

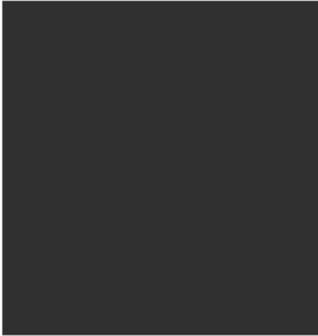
Challenges

We recognize the challenge we took upon ourselves when we chose to design an operating system for a watchface - a screen that is both small also circular. The majority of us do not own or use a smartwatch. The design process has been a learning experience for all of us. We've attempted many designs to solve the problems each application has and you will see our final designs in this document.

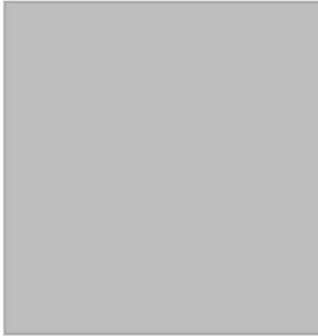
Style Guide (Colors)

PRIMARY

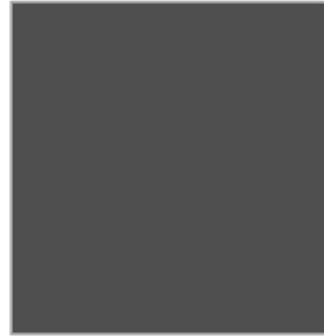
#303030



#BDBDBD



#4F4F4F



ACCENT

#0D867B



#F2C94C



#C91414



#205C57



#DAAF2D



#A51010

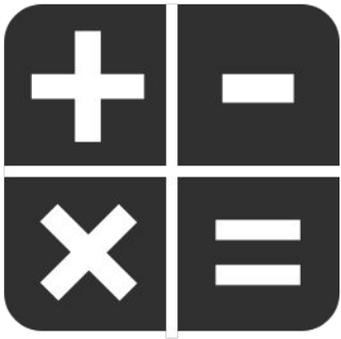


TEXT

#FFFFFF

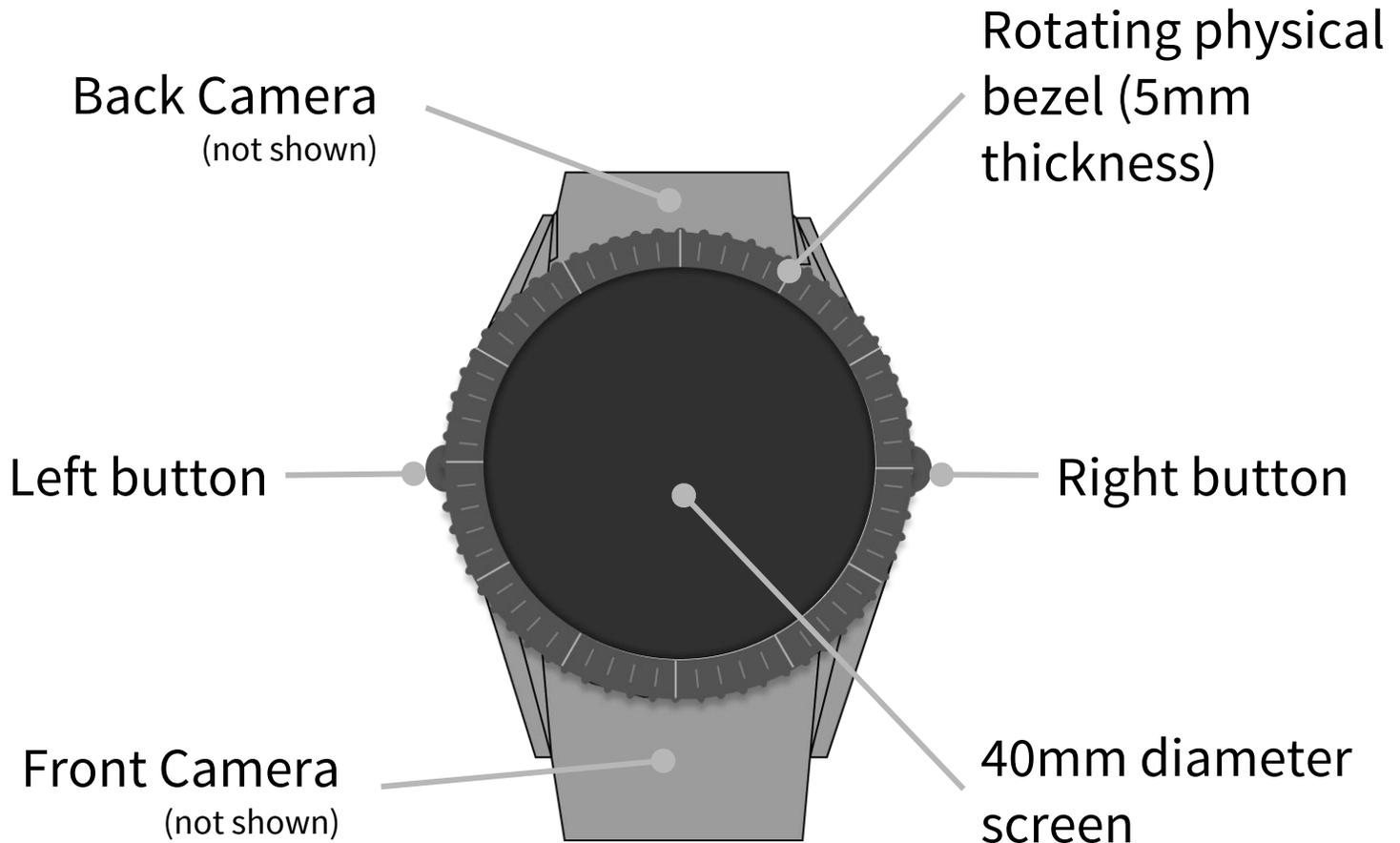


Style Guide (Icons)



Note: The phone, message, mail, map, camera, heart, tasks, music, and clock were found on FlatIcons.com. We do not claim any ownership or rights over these icons.

Hardware



Rotating Physical Bezel

Can be used for many interactions with the elements on screen, including:

- (1) Moving from one item to another
- (2) Navigating in an application
- (3) Controlling various setting options

Left Button

Tap - Used for “Go Back” to the previous screen

Hold - Brings up applications screen (shown in the System UI)

Right Button

Tap - Used for waking up and deactivating the screen, bringing up the watch face

Hold - Voice input assistant

Gestures and Interactions



Global menu

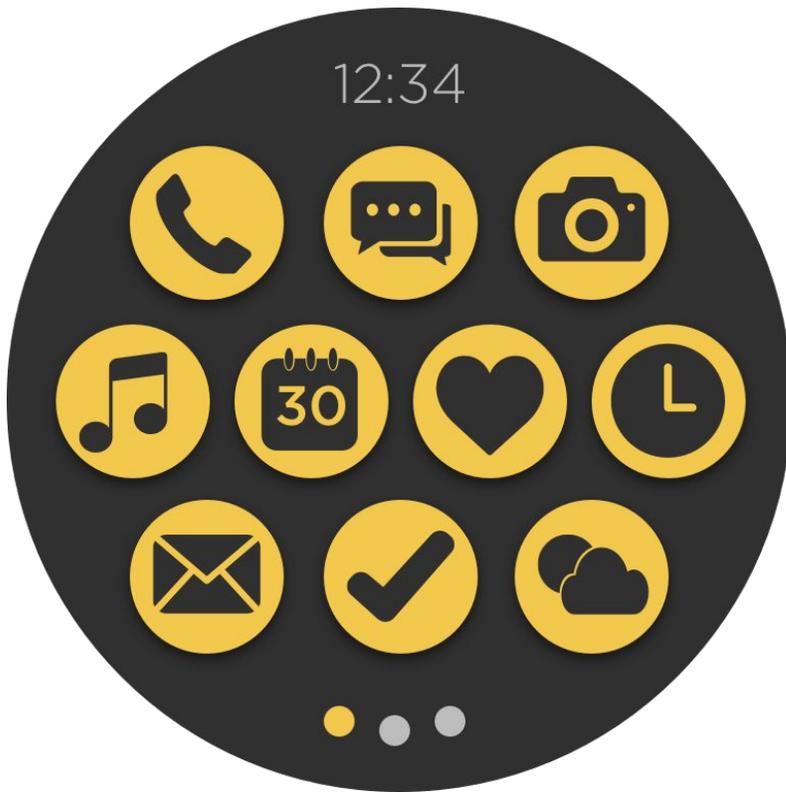
At any time, swipe from top of the screen downwards to access the system menu features



Quick menu

When using an app, swipe from bottom of screen upwards to the top of screen to access the app's quick menu features

System UI



Applications Screen

This is the apps screen that you can use either the bezel to navigate, or your finger to select directly.

Global Quick Menu

When swiping from the top of the screen downwards, you can access global settings like volume, brightness, airplane mode, bluetooth, and Do Not Disturb.



Watchfaces

Like any other well designed smartwatch, we are allowing open source watch faces! The users can download watch faces from an open market according to their preferences.



www.androidwatchface.com/userfiles/watchfaces/169ec26a-3283-4033-a4dd-a5d6eed9253c.png

www.acerepo.com/app/faces/details/flat-landscape-154b564f518

assets.facerepo.com/app/image/preview/spongebob-flat-tire-155aefc943a.png?v=155a812c023

www.facerepo.com/app/faces/details/whale-watching-round-151175e6261

play.google.com/store/apps/details?id=com.shameronstudios.christmas

play.google.com/store/apps/details?id=net.genggao.spaceandtime

assets.facerepo.com/app/image/preview/pip-boy-fallout-designed-for-moto-360-14bf5bd36aa.png?v=14bf5bd36a5

www.facerepo.com/app/faces/details/flat-yellow-14ab86491d9

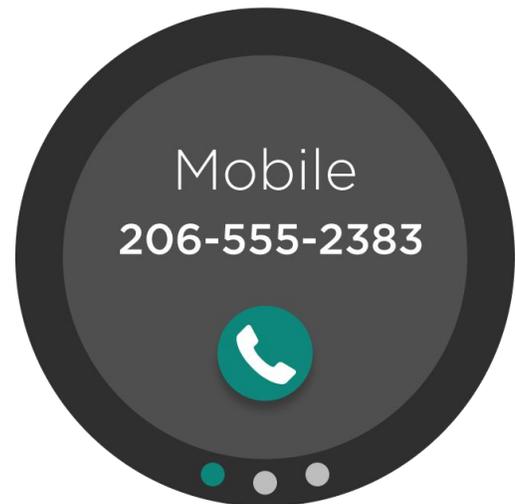
www.facerepo.com/app/faces/details/textpop-red-14a83e6872e

Dialer & Contacts



Initial Screen

Upon opening, the app shows a list of contacts in alphabetical order. There are options to either call or send text message to each person.



Phone List

Clicking on the phone icon will bring up a view of all phone numbers associated with the contact. Turning the bezel allows you to select the correct number to dial.



Fast Scrolling

To look through contacts quicker, turn the bezel faster. The speed at which you turn the bezel is how fast you will actually be scrolling through the contacts.



Dialer

We have a radial dialer that allows users to select a number by rotating the bezel and pushing the bezel to select it.

Dialer & Contacts



Active Call

During an active call, users can hang up, mute, access the keypad, or add more people to the call. Users can also send a text message if they are unable to answer the call.



Incoming Call

When a user receives an incoming call turning the bezel left or right will dictate whether they answer or decline the call. A message can be sent if the user is unavailable for calling.



Multiple Calls

When receiving a call while already in a conversation, users can hold the current call, message the new caller, or add the new caller to the current call.



Quick Menu

Quick menu allows the user to go between contacts, the keypad, and recent call history which includes missed calls, incoming calls, and outgoing calls.

Messages

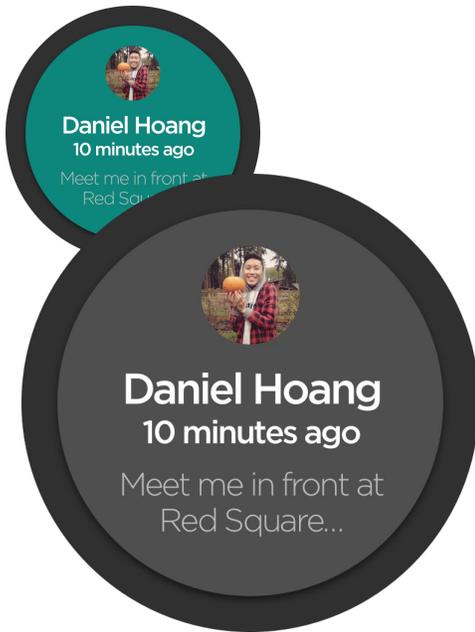
Navigating your Text Message Inbox

The message inbox is ordered by how recent it has been sent or received. You can scroll through each sender using the bezel. To view the message, tap the sender or push on the bezel to open up the conversation. The most recent message will be shown in the conversation.

To reply, users will scroll down the page either by dragging on the screen or pushing down and turning the bezel until they reach the bottom. The user will find 3 buttons containing the UNIFIED watch input methods (scribble and voice). The last button is a garbage can, for when the user wants to delete the message.



Messages



New and old message

The messages change colors depending on whether or not the user has read the message.

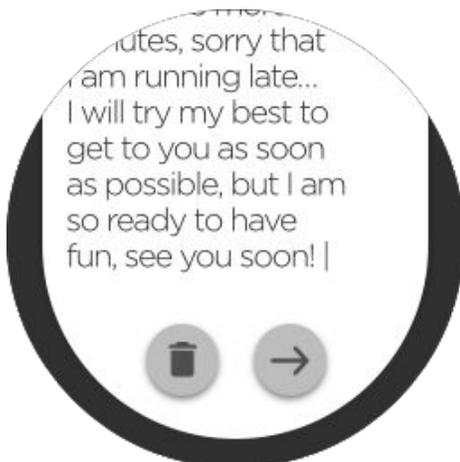
Teal denotes that the user has not seen the message, gray denotes that the user has seen the message.



Composing new messages

From the sender screen, users are able to access new messages via the bezel or swiping all the way to the left.

They will be given the option to compose messages with the UNIFIED watch input methods and also have the option the send a video message.



Composing and replying

After a user has selected their input method and finished their composition, they will have the choice to send their message (the send icon) or trash it (the garbage can icon).

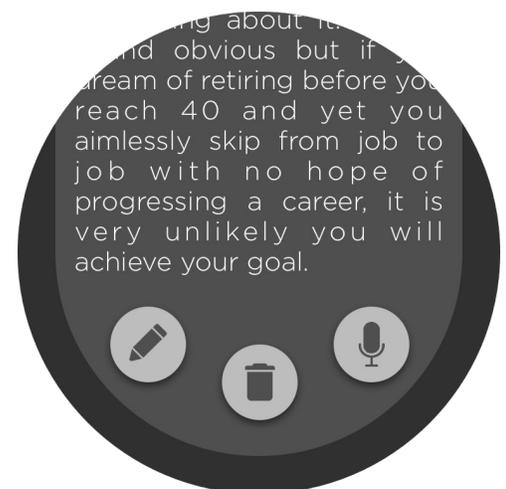
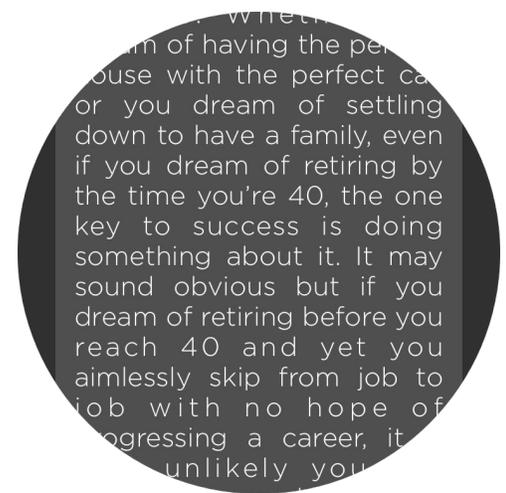
Mail



Navigating your Mailbox

Once you have added a mailbox, you can scroll through your email using the bezel. Unread emails will be highlighted in the theme color (teal in this example).

To navigate into an email, you can either press on the bezel onto the watch face, or click on the circle. You can then use the bezel to scroll through your email. At the bottom, you will be able to have the options to reply using Scribble or Microphone as well as delete to remove the email.



Camera



Initial Screen

The camera opens up to a clean, minimalistic view of the watch's camera. The bezel can be tapped to take the picture



Zoomed In View

The zoomed in mode expands the camera view to fill the screen. A focus ring is also present for more precise shots or focusing on subject.



Zoomed Out View

The zoomed out view allows users to see their whole photo composition and also the mode they are currently in.



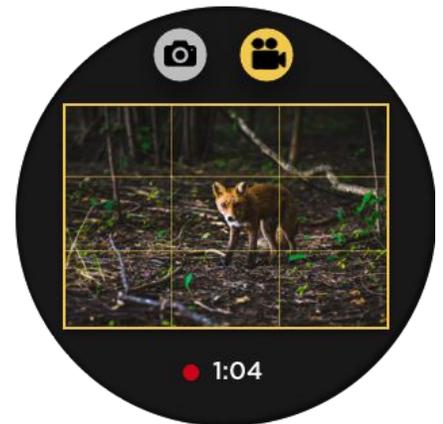
Grid Mode

Allowing the user to line up their shot, our camera app has grid mode. This is especially useful for precision shots, like taking photos of documents



Video Recording

This is the screen that users will see as they record video.



Zoomed Out Video

This view shows zoomed-out view the user can utilize in the video mode.

Gallery

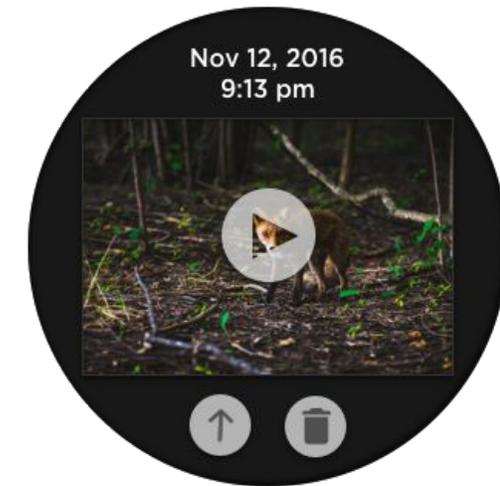
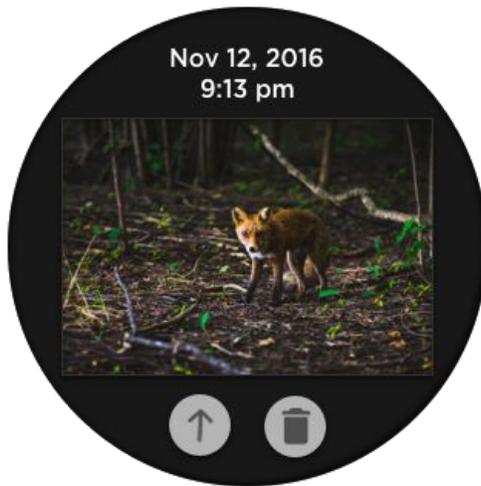
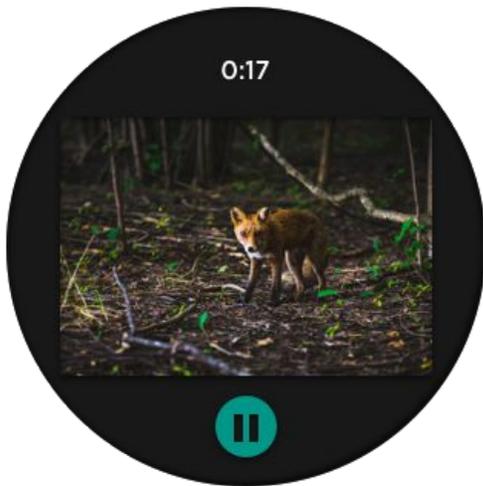


Photo Gallery

A user will see circles indicating each of the photos they've taken. They can select each one to view. They can also view their videos and play them. They also have the ability to share or delete the items in their gallery.

Gallery



Sorting

From the gallery app's submenu, the users can sort through albums they have made, by video, by photos, or by date.

Calculator

Performs all the functions of a basic calculator using an intuitive scrolling interface or voice control



Main Menu

This initial screen brings the user to choose between voice input and using the bezel to make calculations. Navigating with the bezel will change the icon color of the selected item, and then pressing in will take the user to a different screen.



Voice Control

After tapping the microphone symbol, a red flashing ball will appear growing and shrinking as the user is speaking out the calculation they desire. After the user stops speaking out the calculation the calculator processes and returns the result. Quick and easy.



Operations Screen

Upon tapping the calculator icon. The user is presented with a radial dial interface, they can scroll through using the bezel selecting the numbers. If selected the number is darkened. When they move over the operations icon, it also becomes darker. Selecting into the operations sub-menu moves you to a new screen. By tapping in the center the user can compute their calculation and by pressing AC they clear once and by holding AC for 2 seconds they clear all.



Numbers Screen

If the user scrolls with the bezel and moves into the operations icon. The user will be presented with this screen which has all the operations. Whenever they move the bezel the item they are focusing on will be darkened. The yellow # sign indicates that moving the bezel over and selecting that function will return it back to the numbers screen.

Calendar



No Events



Events Set

Upon startup, the app presents the current date to users. A green background around the date indicates that there exists an event set.



Month Navigation



Add

Tapping on the date or pressing down the bezel displays one of two screens. If no events are set, there will be a plus sign indicating that the creation of an event is possible. If there are already events set, the app will display the event information along with the number of events at the bottom of the screen.



Event



Quick Menu

Users can turn the bezel at a faster speed to navigate through months of a year. In the quick menu, users can delete or add an event on the currently selected date. The quick menu also allows the user to return to the current date.

Music Player

Main menu

Tap on a button or rotate bezel and push down to select a group.

Use the quick menu to change a music source.

Navigate lists by sliding a finger up or down over the screen or by rotating bezel. Make a selection by tapping on the screen or by pushing down with bezel. For fast scrolling rotate the bezel rapidly to activate.

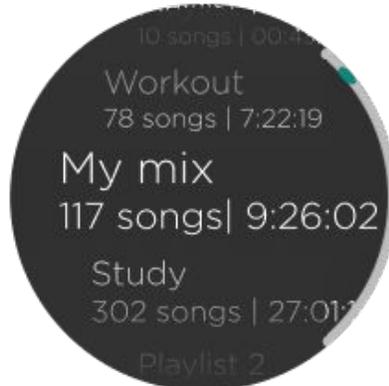


Player

Tap on buttons to use the music player. Rotate the bezel to fast forward or rewind the song. Push down the bezel to toggle between playing or pausing a song. A highlighted red ring visually indicates the position of the song.



Main menu



Playlists



Songs



Player



Music source (Quick menu for main menu)



Play modes (Quick menu for player)



Volume

Tasks



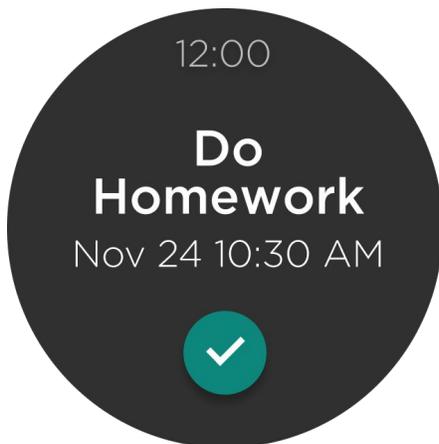
Initial Screen

When the Task app is first initiated, the user will see a “+” sign at the center to indicate that there is no current task. The user can click on the “+” to start adding a new task.



Add a New Task

When the user taps to add a new task, a task dialog will pop up and offers the user two options, Scribble and Voice Input, to add the task name and details.



Task Screen (Task completed)

After the user completes the task, the check button will turn to teal. The user can undo the action by tapping on it again.



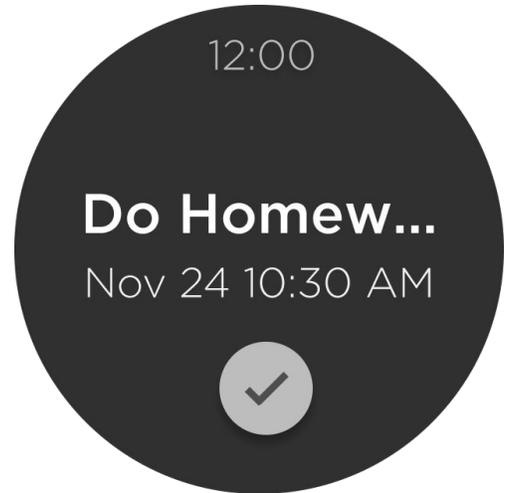
Task Screen (Task completed)

The user can view the detail of the task by tapping on the task name. The task “coin” will do a coin and show the detail on the backside.

Tasks



Task Screen
(Fully displayed)



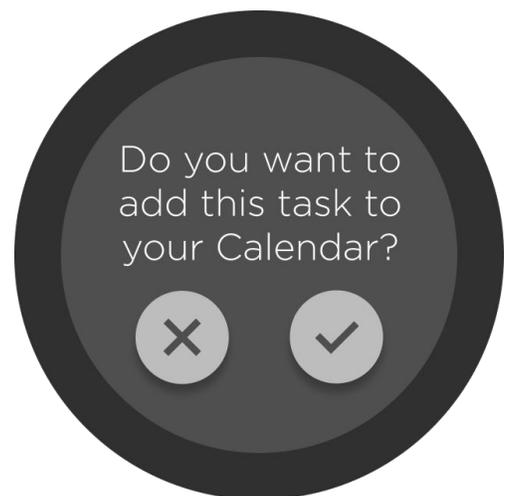
Task Screen
(Scrolling Name)

The task screen shows a list of tasks, with the most recent task displayed up front. The user can move from one task to the next by scrolling the bezel.

Upon completing the task, the user can tap on the check button to “complete” the task.



Quick Menu



Add to Calendar

The quick menu has 4 options:

- (1) Add a new task
- (2) Edit the current task
- (3) Add to calendar, which allows the user to add the task to the Calendar app to be viewed there
- (4) Delete the current task

Weather



Initial Screen

The first screen that appears upon opening the app is the current temperature at the user's location. To keep the screen minimal, icons were used in place of text whenever possible.



Hourly Forecast

Turning the bezel will display the hourly forecast for the user's current location. This will display up to 12 hours.



Information

Only the most pertinent information is displayed: temperature, weather type, and chance of rain.



Coin Flip

On the other side of the coin, the high and low temperatures for the day is displayed first.



Weekly Forecast

Rotating the bezel will display the weather type and high/low for days in the upcoming week.



Quick Menu

The quick menu allows for a user to toggle the degree to display fahrenheit or celsius.

Clock (World Clock)



Initial Screen

The first screen that comes up when the clock app is launched is the current time. The symbol at the bottom indicates roughly the time of the day in the city.



World Clock

The bezel can then be rotated to look at times from other pre-selected cities. The text under the city name indicates the time difference with the current city.



Add city

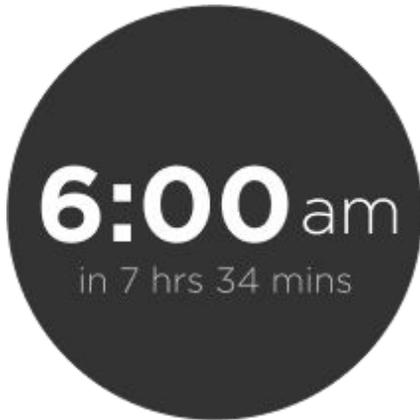
When the list of cities ends while rotating, a new city can be added.



Quick Menu

The quick menu can be used to go to other features of the clock, namely, alarm, timer, stopwatch and world clock.

Clock (Alarm)



Alarm Overview

Upon selecting alarm from the quick menu, the list of set alarms can be scrolled through.



Coin Flip

On the other side of the coin, there are more details about the alarm and the days when it should ring can be toggled.



Hour set

By tapping on the time the user can change the alarm time. The bezel can be rotated to go through the hours and tapped to select.



Minute set

After tapping to select the hours, the minutes can be toggled in the same way. Usually the time increments in 5 around the circle but scrolling slowly increments it by 1.



AM/PM set

Similarly, the time of the day can be changed as well.



Quick Menu

Scrolling through all the coins of alarms, a new alarm can be added.

Clock (Timer)



Timer Open

Upon selecting timer from the quick menu, the user can set their timer for the desired timer by rotating the dial.



Timer Start

After setting up the start time, the play button can be pressed to start it.



Timer Pause

The play button changes to a pause button which allows the timer to be paused mid-way.



Half the time

After half the time is done. The bar turns red indicating less remaining time. The timer can be reset when it's paused.



Less than a minute

Only the dynamic numbers are highlighted, the static ones grey out.



Timer End

The watch vibrates when the timer ends along with the ring. The timer can be set to a different time now.

Clock (Stopwatch)



Stopwatch Start

Upon selecting timer from the quick menu, the user can tap on the watch to start it quickly.



Running

While the stopwatch is running the user can either pause it or complete a lap. The time for last lap can be seen as well.



Paused

When the stopwatch is paused, the user can either resume it or restart the time.



Coin Flip

When the stopwatch is paused, the coin can be flipped and the user can see all their past lap times.

Maps



Adding New Locations

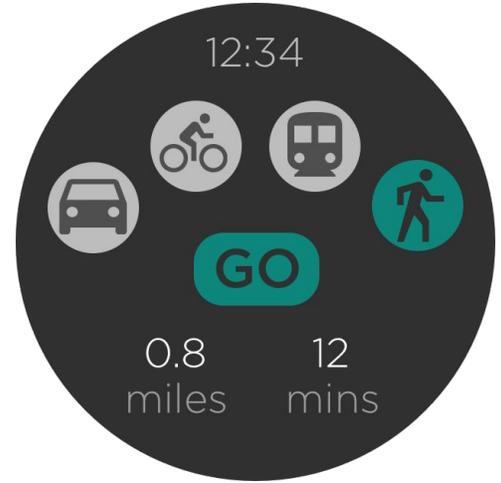
As a new user, you will be prompted by the maps application to input addresses for quick access including Home, Work, and additional favorite locations. The rationale behind this design choice comes from user research that points to users who want quick shortcuts to enable them to get where they want to go. The initial iteration on this design included a map interface that you can explore but was later abandoned due to this reason.



Saved Locations

These saved locations allow you to quickly get from your current location to Home, Work or another favorite location you have previously saved.

Maps



Trip Information

In addition to the distance to your destination from your current location, the maps application will report how long it will take based on the selected mode of transportation (bike, public transport, walking and driving)



User Journeys

1. I want to be able to quickly navigate from my current location to Home, Work, or saved locations.
2. I want step-by-step direction to get to my destination.
3. I don't want to squint to see a full map on a watch face.

Health



Overview

The health application is designed to be focused around goal setting and progress. After users set their goals, they are able to view the progress they make each day.



Daily View

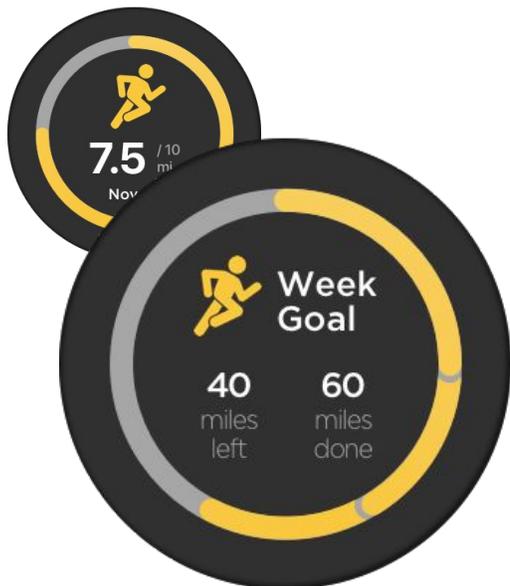
The health app allows users to view their steps walked, miles traveled, and calories burned. As they get closer to completing their goal, a goal circle fills up. They have the option to view their progress in numbers as well. The goal bar is filled daily to encourage users to meet their goal.

Health



Custom Activities

Users also have the option to track other activities that they define. They can choose their goal and set their measurements like every other activity. Because the UN1FIED watch tracks non-touch interactions, measuring reps of different activities is possible, such as push up or bicep curls.



Weekly View

By tapping on the screen or bezel, the health app will utilize the coin flip animation to show the user their progress for the week, broken down by the days it takes to ultimately complete their weekly set goal.

Health



Goal Completion

Once the user completes their weekly goal, they will be congratulated. They will then be prompted to set their goal for the following week.



Goal Setting

Users will be given the option to increase or decrease their goal by either tapping or using the bezel. Once they have confirmed their goal, the health app will begin tracking the user's progress the following day.