| Role | Context | Durtion |
|------|---------|---------|
| Product Designer | Smart Watch Operating System | (00:00:00) |

This project consisted of researching, designing and prototyping to createmarketing landing pages.

**Research**

**Interaction design**

**Visual design**

_____ **CLIENT DETAILS**

# Understanding the company.

**About**

It's a watch first and foremost. Cronologics enables high-quality, brand specific, customizable wearable products within a scalable Android-based architecture.

**Design challenge**

What if your smart watch software worked on the hardware of the biggest watch brands like Rolex, Breitling, Omega, Cartier, Fossil etc.? The Cronologics operating system aimed to partner with watch brands to bring technology to raditional watches.
The lack of innovation in traditional watch brand hardware should not limit today's modern day watch user.
How might I improve the way that people know and trust their smart watch?

How might I improve the way that people know and trust their smart watch?

**PROJECT TAGS**

| Wearable | tech | iOS | Android | Bluetooth | IFTTT | Amazon Alexa |

**1**
Product Manager

**2**
Product designer

**3**
Software Engineer

**5**
QA

*01 /CHAPTER*
## *RESEARCH*

# Asking the right questions.

**Research goals**

We made an effort to speak to a large audience of traditional watch enthusiasts & iWatch, Android wear, Fitbit etc. more technical individuals, to see how i will be able to bridge the gap of old fashioned look and feel with the modern day connected world. Being able to bring the best of both worlds together was an interesting exploration task.

## Fashion design

Let's face it, if a watch's interface and industrial design do not look great or are not versatile enough to match different outfits and scenarios, they will most likely end up in a drawer for weeks at a time. While looking around me at
the different accessories that people had on, it struck me that people express themselves through the things that they wear,
yet not every operating system or hardware device accommodates to every user

## Industrial design

Through some user research, i find out that the traditional watch hardware was still very much appealing to the average
 person. However, with the recent saturation of smart watches in the marketplace, people also wanted their smartwatch to
connect to their social media channels, emails, calendars, fitness trackers and more. Maintaining the authentic watch look
and feel was key to a healthy balance between hardware and software.

"

## What would compel you to want to wear the same watch on a daily basis?

"

## How long do you expect the battery to last on a smart watch?

"

## What are the apps that you use on your phone that would be better suited on a watch?

"

## How do you feel about being able to receive notifications based on your environment via your watch

"

## How often would you customize your watch face if you had infinite selections to pick from?

# Question areas

COffee shops,resturaunts etc

_____ **PERSONA DETAILS**

# synthesizing user reasesarch

# Jamie Richards

Friendly  |  Tech savvy  |  Educated

**Age:** 27
**Occupation:** Graphic Designer
**Status:** Single
**Location:** San Jose, CA
**tier:** mid-level

"I hope that smart watches will become smart enough to notify me of the things that are appropriate based on where I'm at and what I'm doing".

**Pain points:**

I've had issues with smart devices going off at the wrong times. At times, during important meetings while in the office and other times while hanging out with friends.

Goals:

I hope to keep my work/life balance at a healthy level. This means, not being bothered by work emails while I'm out and about with family and friends.

# Efrain E. Vargas

Active  |  Foodie  |  Self taught

**Age:** 42
**Occupation:** Barber
**Status:** Married
**Location:** Brooklyn, NY
**Tier:** Senior

"Being able to glance at my watch while cutting hair is key to being efficient, while staying up to date with my client appointments".

Pain points:

Managing my schedule can be hectic while being at work. I need to manage clients, quickly reply to messages and rear-range appointments on the fly. But I don't have
an iPhone so I cannot get the iWatch.

Goals:

**I hope to find a stylish watch that is versatile enough to match my active lifestyle outside of work, while also being useful with long battery life**

# Jonathan Ibarra





Backpacker   |   Tech savvy   |   Motivated

**Age:** 19
**Occupation:** Salesman
**Status:** Married
**Location:** Bowling Green, KY
**Tier:** Junior

"I love my Breitling watch. Although, it's a shame that they don't have a smart watch version with the same industrial design".

**Pain points:**

The traditional watch look and feel is the main reason why I wear watches, but because of this I miss out on notification at a glance, my favorite apps,and quickly changing my watchfaces depending on my mood.

**Goals:**

For my next smart watch, I look to get the old fashioned look and feel with some technology combined. Mainly because smart watches today
are not watches, they are little computers on our wrists.

# Understanding the competition.

### Fitbit

**Alta Activity Tracker**

This watch is meant for those who have the need for only two things in a smart watch or device. It's designed for health and fitness & has a stylish look and feel for differentenvironments.

Pros
____ Great activity tracker
____ Logs your sleep
____ 5 day battery duration
____ Innovative move reminders

Cons
____ No buttons
____ No way to manually record activities on the device
____ Notifications are limited
____ Not water proof or resistant

### Apple watch

**iWatch**

Like many Apple products, the iWatch has a "unique" look and feel that is combined with innovative new technologies that help you manage your apps,calendar, health and more.

Pros
____ Pressure sensitive force touch
____ Taptic engine notifications
____ Digital crown to scroll or zoom
____ Customizable watch bands

Cons
____ Miniture phone on your wrist
____ Notification overload
____ Apps take too long to load
____ Can't download new 3rd party watch faces

### Samsang

**Gear S3 frontier**

This version of the Samsung Gear is specifically targeted toward individuals with very active lifestyles as you can gather from the raged look and silicon straps.

Pros
____ 4G LTE untethered use
____ MST Samsung paid transactions
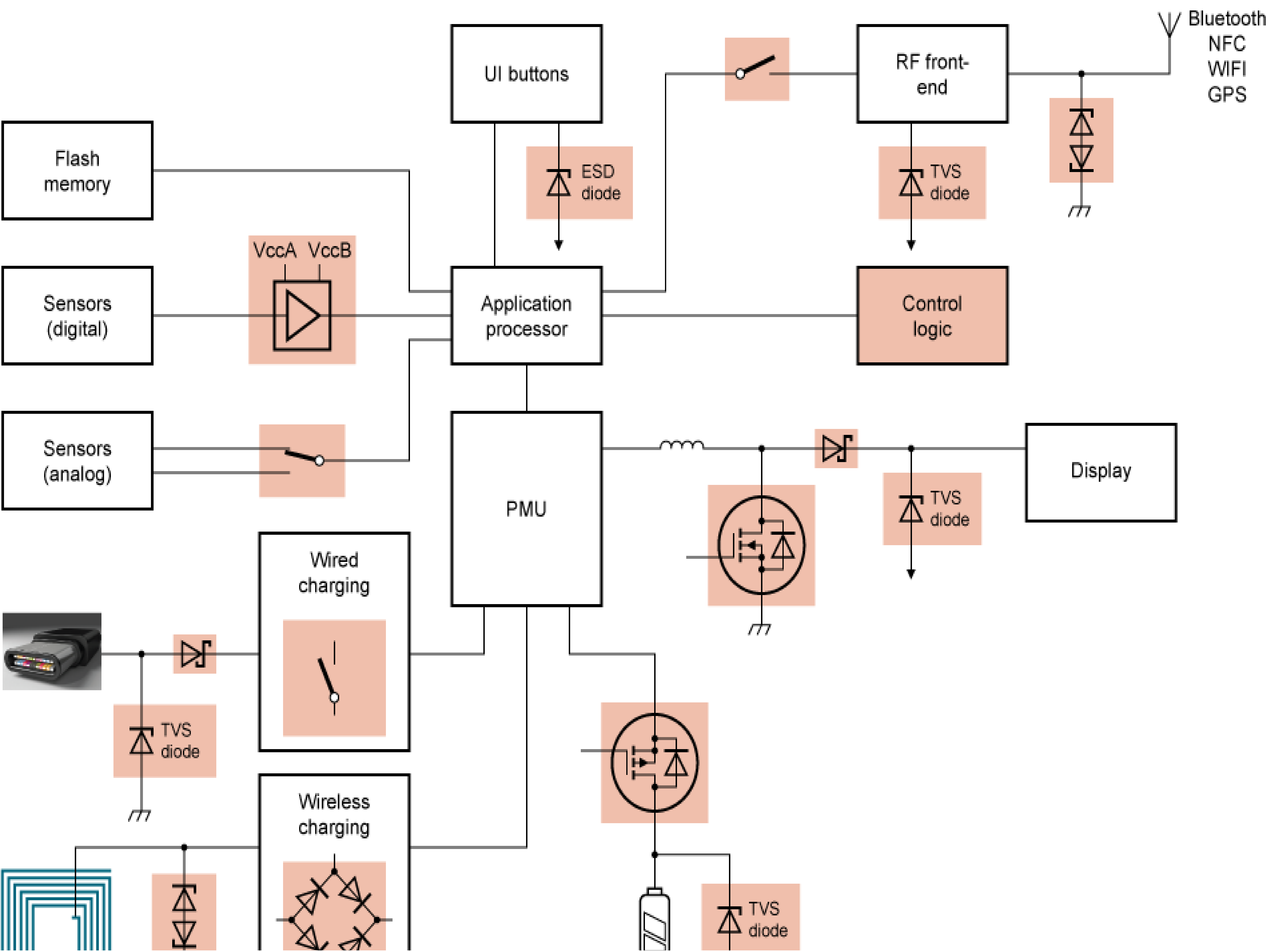____ Bezel spinner
____ 3 day battery duration

Cons
____ Not accurate fitness tracker
____ Higher heart rate readings
____ Limited app selection
____ Suggested top apps are not great
____ Does not work on iPhones

_____ **WIREFRAMES**

# Low fidelity interactions.

Flash memory

Sensors (digital)

Sensors (analog)

UI buttons

ESD diode

Application processor

PMU

Wired charging

Wireless charging

VccA   VccB

TVS diode

TVS diode

RF front-end

Bluetooth
NFC
WIFI
GPS

Control logic

Display

TVS diode

TVS diode

TVS diode

# Gestures

Minimizing the amount of steps to get a job done requires deep understanding of user behavior, market research and operating system limitation. While selecting the primary, secondary and tertiary gestures on the OS, we looked for easy ways to delight the users, with battery limitations in mind. No micro-interactions meant the users get bored, and too much animation meant sacrificing battery power.

| | | |
|---|---|---|
| Rotate clock wise | Rotate counter clockwise | |
| swipe up and down | tap up | tap down |
| tap right | tap left | tap + hold for 2 sec |
| tap + hold for 3 sec | tap + hold for 4 sec | tap + hold for 5 sec |

# Primary watchface interactions

While other competitors pride themselves on how deep into numerous actions a user is able to go, the Cronologics OS is built on top of a minimalistic foundation. Getting the user from point A to point B, could not be any easier as you can see from the user flow below. Doing so allows the user to not only access their apps quickly, but also allows the watch tobe what it's mean to be, a watch.
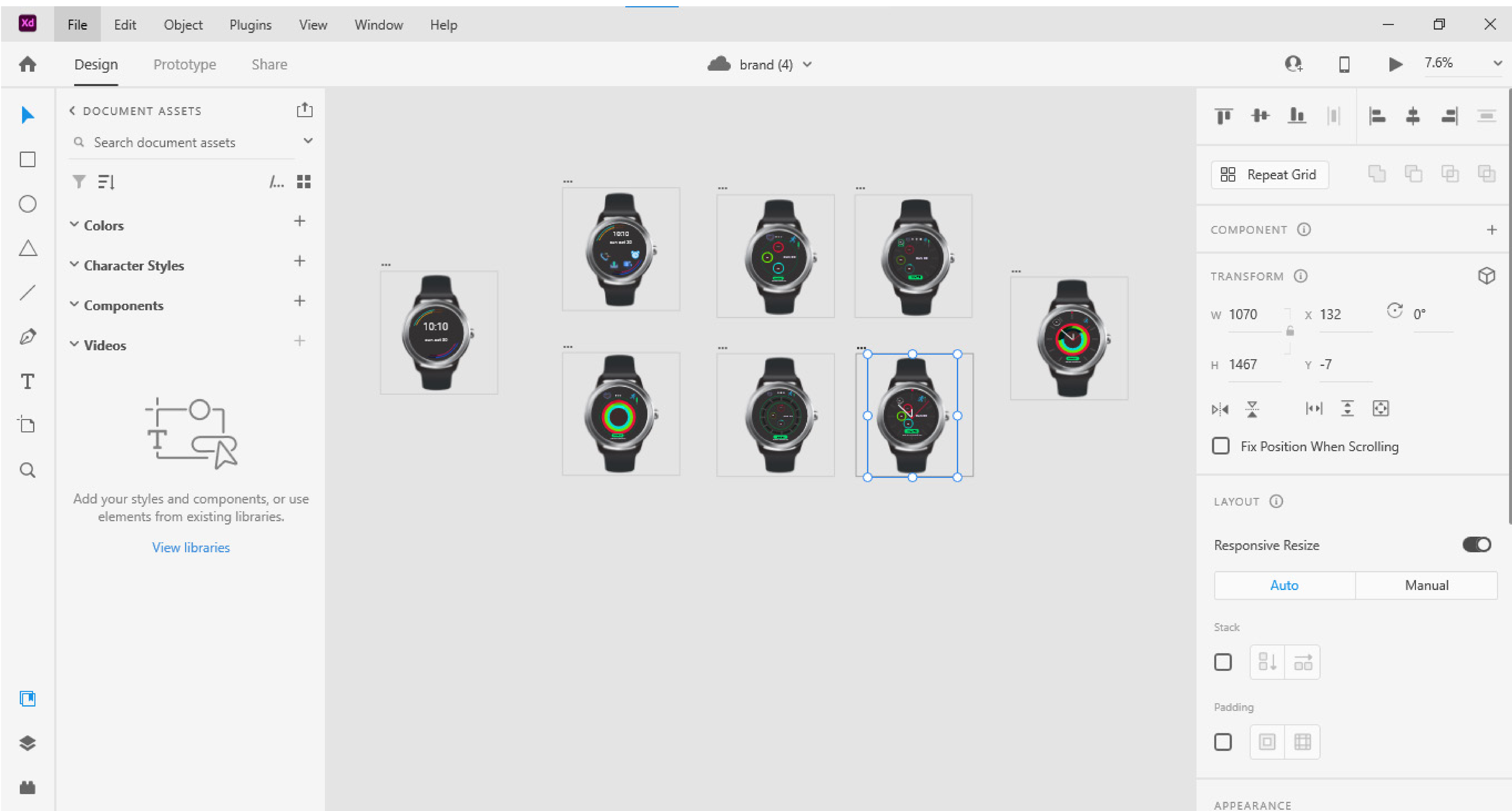
# Micro applications

The apps on the OS are called "containers". A user can easily access their containers by swiping left or right from the screen launcher (watch faces) or they can access all of their containers through the app drawer. Container also have their respective settings, which allows the users to customize notification settings, customizations etc. Some of these settings can also be edited on the companion applications for iOS & Android

_____ **HIGH FIDELITY DESIGNS (FULL SCREEN CONTAINERS & NATIVE APP**
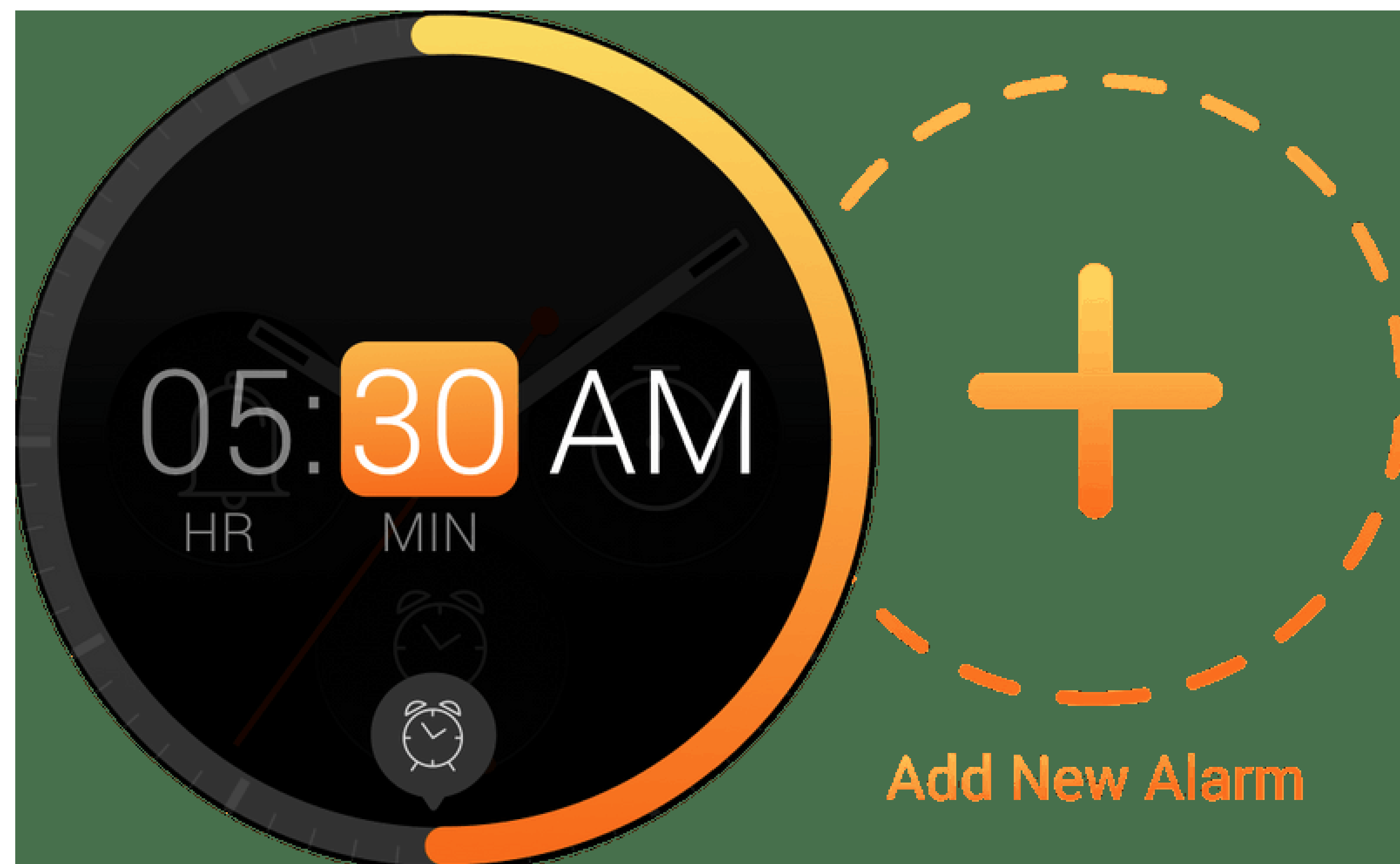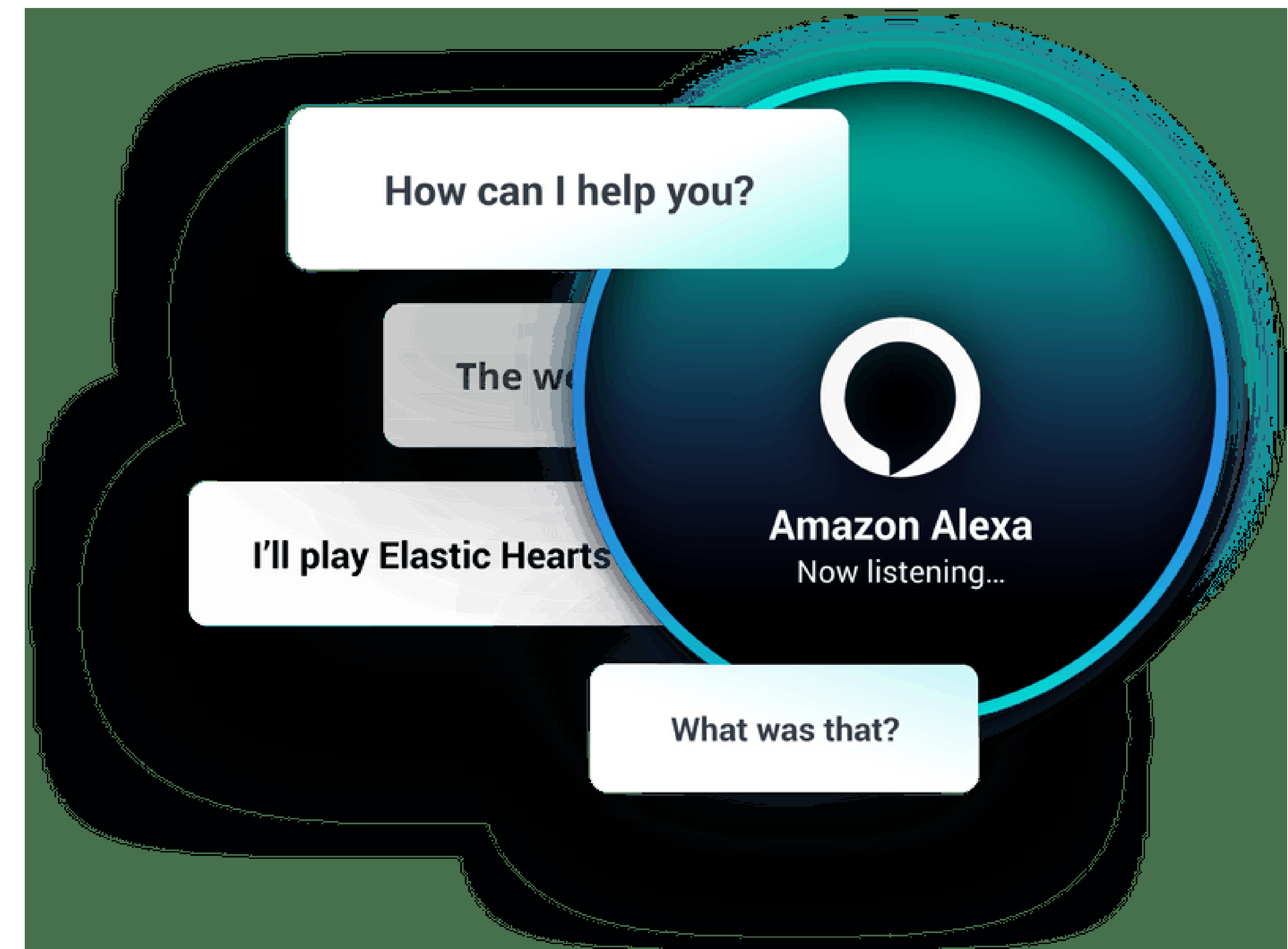
# Finalizing visual designs.

# Amazon Alexa Container

## Platform Voice Service

A digital assistant that can respond to a variety of queries and can respond to commands via voice or text depending on if a speaker is available.
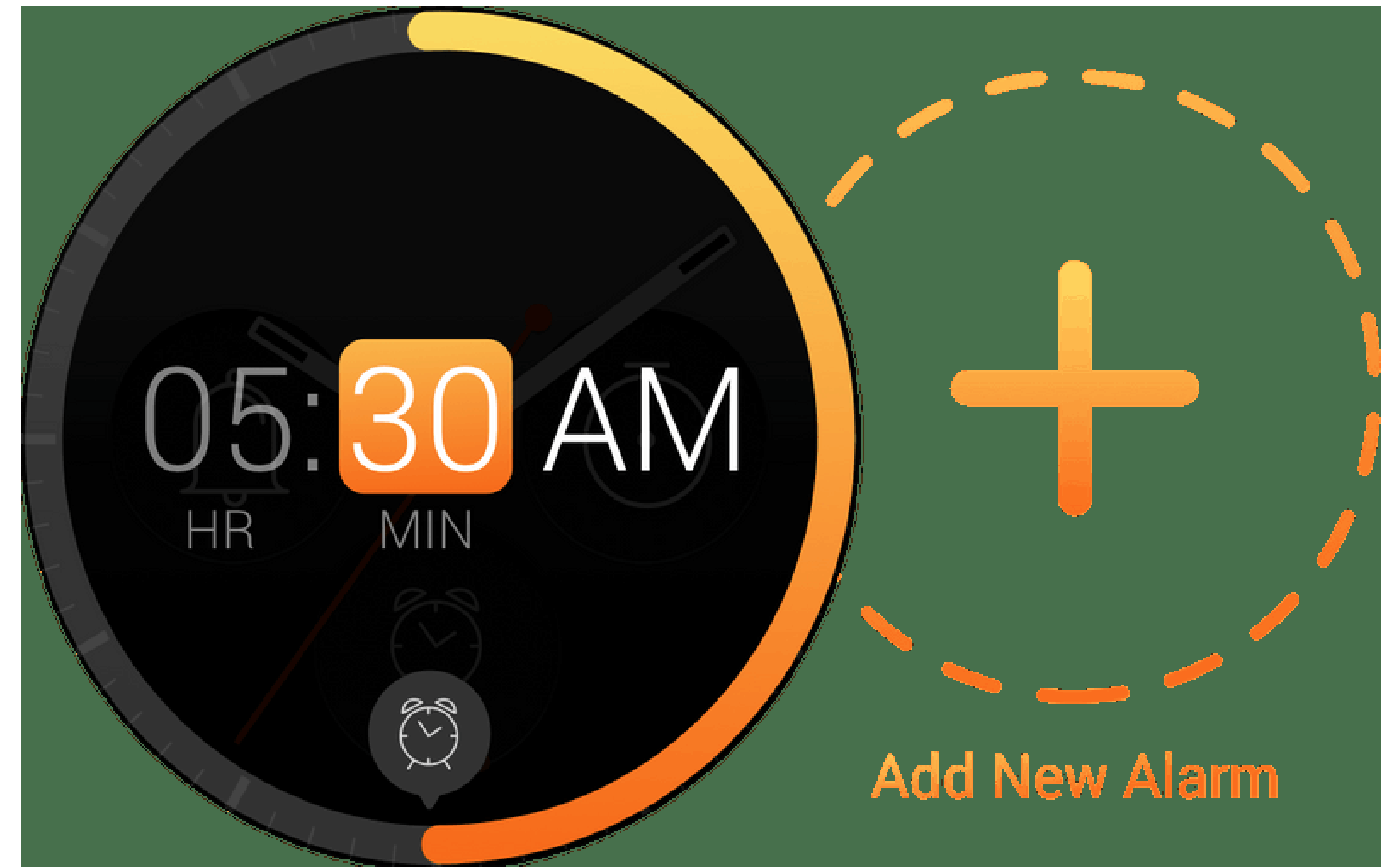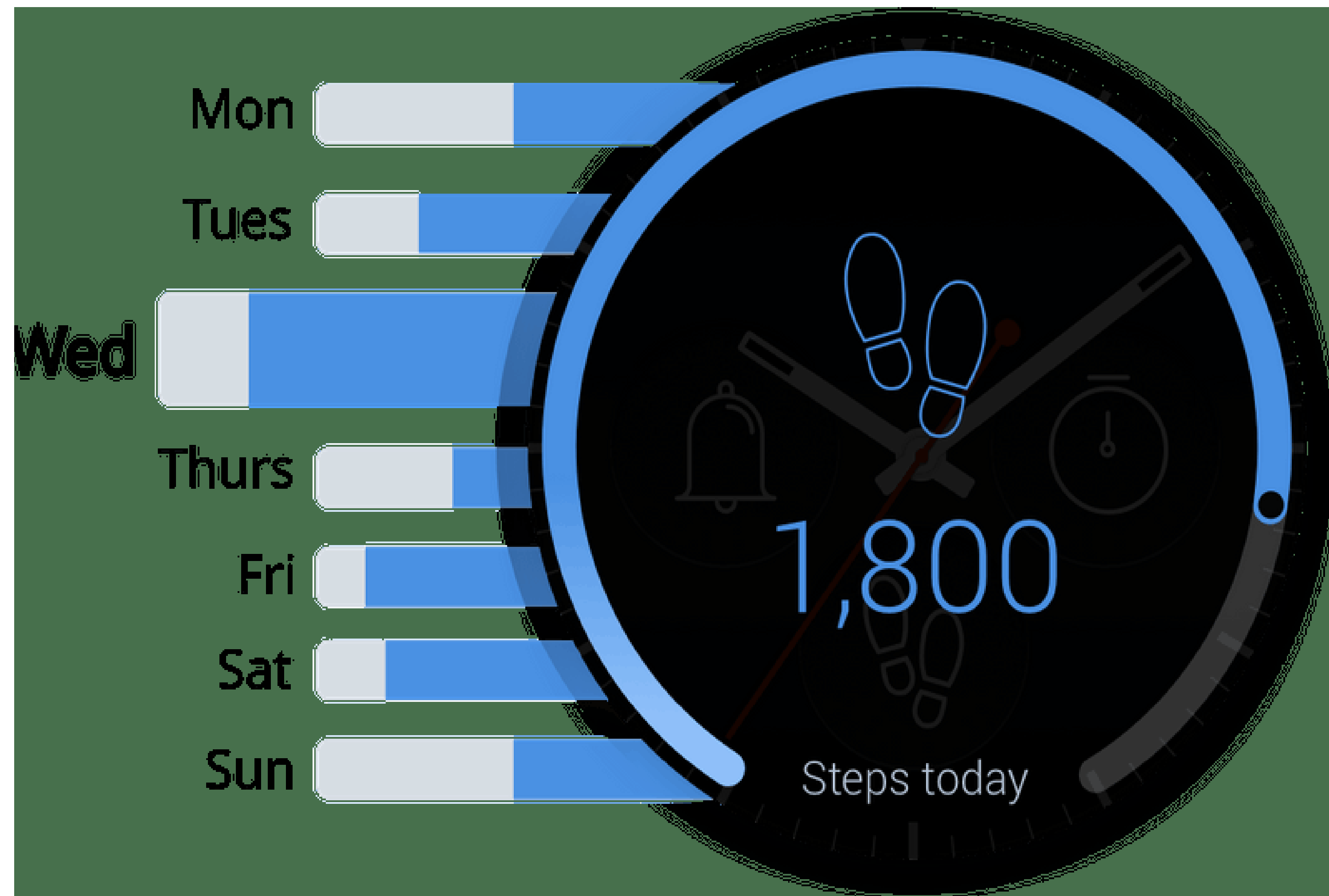
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# Notification System UI

## Drop down notifications from launcher

There are many types of notifications across iOS and Android. In general, they will be laid in a similar paradim with the main difference being whether actions are shown at the end of notification. Notifications recieved recently will be displayed full screen  first  in the  UI, followed by the list of all available notification.

# Alarm container

## Manage alarms from watch ui

Set local alarms on the watch. Eventually, it will allow for customization for if the alarm is vibrate only or sound as well if a speaker is available.



Add New Alarm

## Step Counter Container

### Activity monitor

Display the current number of steps for the day. End User can configuer their target number of steps per day in the settings.



**KEY FINDINGS**

Measuring success.
the founder cultivated  cultures that allowed to try new ideas,even if it means potential failure