

#### ZenQuest CALIFORNIA STATE UNIVERSITY BAKERSFIELD Irene Chavez, Jesus Quinonez, Irvin Neri Zavala Instructor: Dr. Nick Toothman, Contact: zenquest@cs.csub.edu

## What is ZenQuest

ZenQuest is an IOS meditation app that connects to the user's apple watch. By connecting to the watch, we can read the users heart rate and calories to determine whether the user is meditating by comparing it to the user's previous average rates.

## What is the problem?

Many people find it difficult to make meditation into a habit. Many may even say it is boring. Even when a person begins to meditate it is very common for the user to fall asleep while meditating or get distracted and break out of the zone.

### Solution

We have designed a way to make sure a user is meditating by using the user's apple watch to track their heart rate and calories burned while they are meditating. The user's heart and calorie burn rate will be compared to the users previously recorded averages to validate the integrity of the meditation session. To make people more excited about meditating, we give the users points after each meditation session completed which after a certain number of points you move up a level. This allows users to compete with their friends by comparing levels and encourages users to do more sessions to move up.

Responsibilities Irene : Database, API Irvin : Front UI Jesus : Apple Watch

## How does it work? Backend

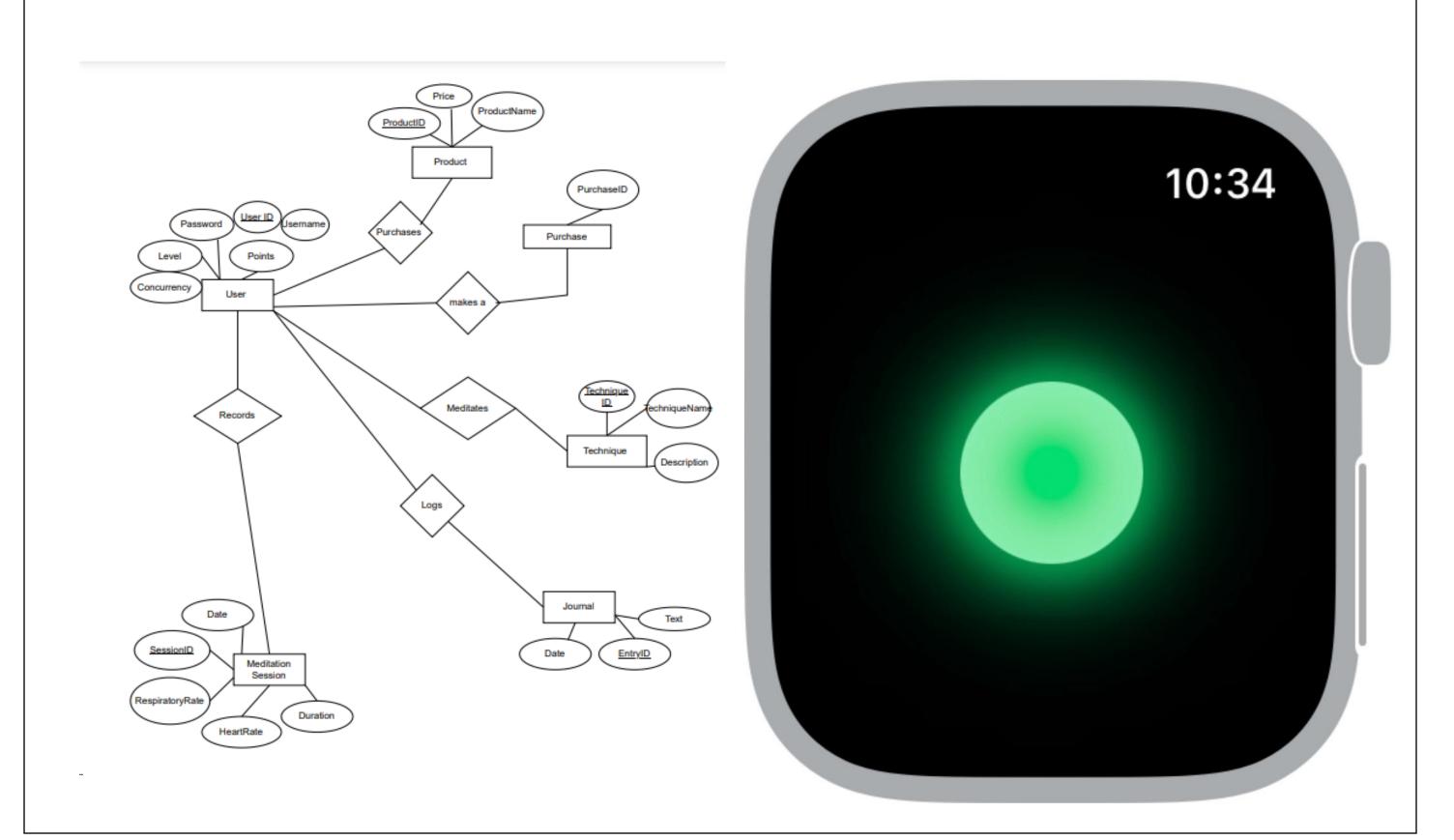
- Database built using MariaDB to hold users, store
- items, and any necessary meditation data Used php to build an API that makes function calls and parses the data into a Json file
- Queries are included in the API to update the database accordingly
- Able to use curl statements to test functionality of API without having the front end

### Frontend

- Frontend built using Swift and SwiftUI
- Contains a simple login and signup page
- When logged in user can swipe to see three screens: Home Screen, Leader Board, and Shop Screen

# **Apple Watch**

- HKWorkout Session is Started on the watch
- Session is controlled from the IOS side
- Heart and calorie rate are sampled during a session





Department of Computer and Electrical Engineering and Computer Science

### **Technology/Resources**



## **Project Features**

Apple Watch and iPhone Communication

## App in action

