

Zuheir Chikh Al Sagha

4A Computer Engineering - University of Waterloo

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Skills

Languages Swift | Objective-C | Java/Android | C# | C++ | SQL | HTML & CSS | ASP.NET | Javascript

Design Sketch | Adobe Creative Suite | Visio

Experience

Mobile Developer

Cambridge Mobile Telematics

September 2018 - December 2018



Developed a cross platform application that uses mobile sensing data to assess driving habits and reward good drivers
Implemented handsfree actions using SiriKit and custom Intents to allow for distraction free application interaction
Created custom interactive push notifications for iOS and Android using app extensions and NotificationCompat
Used Swift to develop the main iOS application and Objective-C to develop an external SDK for customers. Used Java for Android

iOS Contractor

Cheerings Inc.

Jan 2018 - April 2018



Contracted the development of an MVP iOS application with a custom layout similar to Instagram and Bluetooth audio capabilities

iOS Developer

Rested

May 2017 - September 2017



Developer at a health startup developing an iOS application used to diagnose and treat people with sleep apnea
Implemented SiriKit and HealthKit to track sleep sessions on a custom UI created using IBDesignables and Interface Builder
Analysed user metrics using MixPanel
Designed high fidelity mockup for app redesign in Sketch

iOS/Android Developer

GymNext

September 2016 - December 2016



Developer at a fitness startup working on a cross platform application used to control a workout timer via Bluetooth LE
Developed a solution to enable multiple cross platform mobile devices to communicate as peripherals using the Core Bluetooth and Android Connectivity frameworks
Integrated AWS and FB analytics to track user metrics, this data was used to implement custom timers based on user preferences
Pitched, designed, and developed an Android Wear app to control GymNext timers via Bluetooth LE via a mobile device connection
Developed mockups for a complete application redesign and implemented new UI and back-end code to support new timer modes

Projects

WombDefender

Swift

Jan 2018 - April 2018

Designs: behance.net/zuheiralsa502f



Lead developer for a swipe based iOS game where users draw barriers to block projectiles from colliding with the center of the screen
Implemented AVAudioPlayer to play sound effects
Generated custom UIBezierPaths by recognizing touch locations and creating a barrier where the user drew a path
Implemented UIDynamicBehaviour to create custom game physics and apply them to randomly generated projectiles
Implemented custom segues and animations
Created a leaderboard using a Node server to keep track of high scores and generate a table based on highest rank

WAV Player

C

September 2017 - December 2017



Implemented a WAV audio player on the Altera Max10 FPGA
Used Quartus Prime to design, synthesize, assemble, and program the HDL into downloadable logic for the FPGA
Created a user interface using the LCD screen on the FPGA to display the current playing audio file and it's index
Implemented pause/play, previous/next track push buttons using interrupts and button debouncing to ensure consistent functionality
Read audio tracks as a bitstream from a microSD card into a buffer to minimize distortion and output audio through a headphone jack