

Web Based Remote Control

Kevin Zhang, Wenhan Albert Huang, Eddie Gillott, An Qi Angie Yu, Alexander Sokol

1 Problem Statement

With the variety of applications one can use on a desktop PC such as watching movies from a couch, or gaming, it can be cumbersome to just use a mouse and keyboard for input. We are going to create a web app that is accessible on mobile devices which acts as a remote for actions on a desktop computer. One of our key targets is for our remote to act as a sort of companion application alongside a user's keyboard. User's can add shortcuts to key combinations, macro/hotkeys, as well as the ability to create their own set of keys such as a numpad for keyboards lacking that feature. While these are only a few features we plan to implement, we want the user to have full control over how they are able to use the app and personalize it to their needs. What makes this different from other applications on the market is that we allow for a fully customizable layout as well as the ability to share key bindings and custom layouts with other users signed up with our application.

2 Project Objectives

1. Create a server that connects a phone and a computer.
 - a. This server will send output from the phone as an input to a computer.
 - b. This server will be closed after each session to ensure security.
2. Create a web application that allows users to customize a controller.
 - a. Will allow users to drag and drop buttons to create a controller.
 - b. Will allow users to program these buttons.
 - c. Will create a token to allow users to access this controller configuration.
3. Create a backend server and database to keep track of
 - a. User account information
 - b. Saved shortcuts / macros
 - c. Saved controller layouts

3 Stakeholders

Scrum Master: Eddie Gillott

Development Managers: Project coordinator

Project Owners: Kevin Zhang, Wenhan Albert Huang, Eddie Gillott, An Qi Angie Yu, Alexander Sokol

Users/Customers: Computer Users needing advanced inputs.

4 Deliverables

1. A website that allows users to register, login, log out.
2. A website that allows users to connect to their phone

3. A website that allows users to create shortcuts / macros and use them as input from their phone or other device.
4. A website that allows users to share shortcuts / macros with other users
5. A website that allows users to make customizable controllers for different devices / applications

PlatForms and Frameworks

Platforms: Web Application

Frameworks:

Front-end: Bootstrap, HTML, CSS, JQuery, Python

Back-end: Node.js, AWS, Python, Javascript, Ajax, Express, SQL

CS 30700 Projects

Kevin Zhang: <https://github.com/phoenixxial/Classmate-Project-iOS> (private repo)

Instead of just having a giant Q & A forum like the leading social learning platforms, this iOS app will allow users to join Classes and host group study sessions, along with the ability to post questions and answers. To top it off, users will be able to form a Study Group which will show the available time for all users in the group to meet.

Anqi Yu: <https://github.com/richardjung64/CS-307-Team-25>: A severless instagram like Android mobile app powered by AWS mobile Hub and dynamoDB API. This app let users post their clothes in their clothes and like/dislike others posted clothes.

Alex Sokol: <https://github.com/sokolowski123/Let-s-Eat-> : Let's Eat is an Android application that connects users in their area to eat. It acts similar to apps like Tinder, where users can select a range to find people, as well as set preferences for people. Users can like people who are similar to them and requests times to meet. The app also shows restaurants in the area using the Yelp API and makes recommendations for users. Users can also talk to each other using the built in chat feature, making meeting up easier.

Eddie Gillott and Albert Huang: <https://github.com/brandonxia01/CS307-Team8> : Arza is an Android puzzle game where the player drops 2x1 colored blocks into a 2D playing field (similar to Tetris) and matches them based on color. It was created out of the need of a mobile version of the game Puyo Puyo.