This document contains the shortcomings of SkillCourt and a wishlist of features to be implemented in the future version

SkillCourt

Shortcomings & Wishlist

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# Introduction

The following document will detail SkillCourt’s shortcomings. These include factors that negatively affect SkillCourt reaching its goal to service the technological void in the area of athletic training. The team behind SkillCourt acknowledges these shortcomings and hopes to correct them in the upcoming versions.

Included is also a wishlist of features that will further help SkillCourt reach its goal. These features have not been included due to time constraints and because their inclusion into the current system was not as much a priority as the existing features.

# Shortcomings

## SkillCourt Pads

Currently SkillCourt’s single shortcoming is the nonexistence of the SkillCourt Pad Hardware. Due to this, SkillCourt must rely on a desktop simulator, in order to demonstrate what a training session would seem like. Although it manages to convey the concept behind SkillCourt, the desktop simulator requires that a user have an Android device, SkillCourt Mobile Application, and an Arduino Microcontroller with the SkillCourt pad software as well. This inconvenience is remedied by the online simulator accessible to any with access to the internet and an HTML5 compatible browser. However, SkillCourt’s goal is to revolutionize athletic training and until SkillCourt pads are a reality, player will not be able to physically take advantage of what SkillCourt offers.

# Wishlist: SkillCourt Mobile Application

## Statistical Feedback during Routine

Currently, SkillCourt offers statistical feedback only the online simulator. A wishlist feature would be to also have the Android Application display similar feedback while a routine is being played. As of now, the desktop simulator does keep track of the player’s statistical performance but it does not send this information to the Android Device and the mobile application has no way of displaying it.

## Connect Mobile Application to Parse

Currently, the mobile application is still connect to the older MySQL database. After migrating to website to AWS hosting and changing the UI, it was decided that Parse would be used as a back-end solution. The mobile application did not receive an update. A wishlist feature would be to update the database interaction classes in the Mobile Application so that they request and update the information on the Parse SkillCourt App.

## Coach Routines

Currently, SkillCourt only offers a player to choose from the routines their coach has assigned to them on the online simulator options. A wishlist feature is to consolidate the “Coach Routines” tab and the “Custom Routines” tab into one tab that gives a player the option to play routines assigned to them. This feature is necessary so the Mobile Application and the online simulator are synchronized in their capabilities. However this feature will not be able to be implemented until the features “Connect Mobile Application to Parse” and “Custom Routines on Desktop Simulator” have been finished.

# Wishlist: Desktop Simulator

## Custom Routines on Desktop Simulator

Currently, the desktop simulator cannot run on Custom Routine Commands. The online simulator was updated with a MasterGame class that can received any routine command string and generate the appropriate game for it. A wishlist feature would be to add the MasterGame class, CustomGame class, and other appropriate structures to the desktop simulator while keeping the serial connectivity intact. This would allow the desktop simulator to receive any routine and help make other wishlist features possible.

# Wishlist: SkillCourt Website

## Compound Routines

Currently, the online simulators MasterGame class has the ability to take in any routine command string and play through it, including command strings that have sequences of varying between Custom and Default Routines. However, the SkillCourt website does not offer coaches a way to create Compound Routines. A wishlist feature would be to add a “Compound Routine Creator” that would allow a coach to make a Custom Routine from other routines they have already created and choose the order in which they would be played. These routines would then be saved into the coach’s account. Compound routines would also require a new GUI for editing purposes if editing is to be a feature as well.

## Statistics on Website

Currently, statistics are only shown to the user while a Default Routine runs. A wishlist feature would be to take advantage of the Statistics ParseObject and save the results of a routine when finished. Additionally, players should be able to view their recorded statistics and coaches would have access to view the performance of assigned routines.