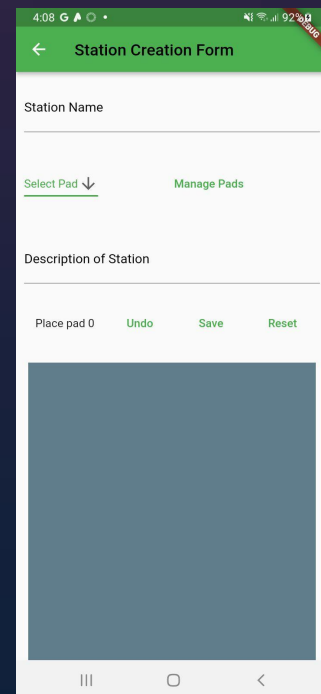


SkillCourt

PROBLEM

- During the course of the summer, the team worked on the synchronization of the service to the website as well as established the SkillCourt branding throughout the application. Currently the SkillCourt application does not communicate with the website for logging into the server. Users should be able to login with credentials.

SYSTEM DESIGN



The system which is currently being implemented is in Flutter, so that we can develop this application for Android and IOS. We also needed to make so that we can connect or disconnect the pads. Moreover, also allow in the application to position the pads we want within the field.



VERIFICATION

The Application was tested on both devices as they were being created. We were able to connect and disconnect the pads from the Servers as well as send and receive test signals to verify what pad was "hit" and at what time in order to provide feedback statistics. This allowed us to simulate a player starting the game and using the test signals run through a game in order to test all the features.

Students: Eric Segura, Victor Andrade, Michael Charran, Kevin Valdes

Mentor: *Joseph Quinn, Gudmundur Oxndal (Product Owner)*

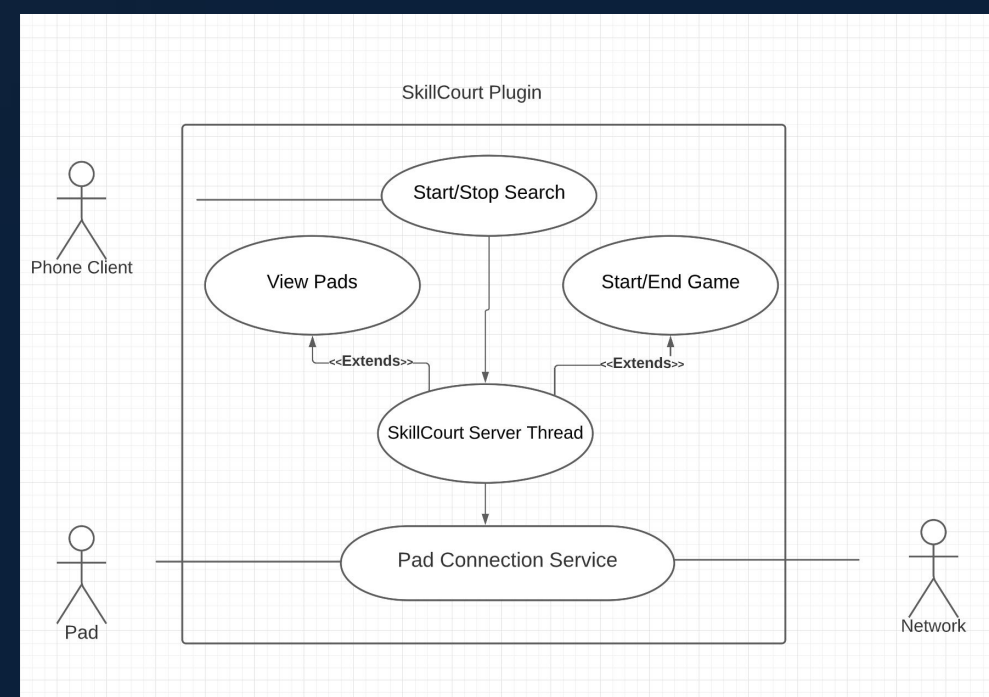
Instructor/Faculty: *Masoud Sadjadi*, Florida International University

CURRENT SYSTEM

The Current System Used for the mobile end of Skillcourt is Flutter which allows for the application to run on both Android and IOS Devices.

As for the website, it is built on reactJS using Ubuntu and Docker.

OBJECT DESIGN



SUMMARY

Through the whole semester, we have been focusing on Flutter and the pad implementation on it. Also, within the application we focused on station creation form and multi-threading for the application so that application is able to connect to the physical pads that we have.

REQUIREMENTS

To develop the system, it requires the following:

- A computer with the following software
 - Java Runtime Environment of version 1.8 or higher
- Git, with either the git-flow-avh or another plugin for the git-flow workflow.
 - The Flutter SDK
- Android Studio or XCode, depending on whether developing for iOS or Android.
 - Python 3 (for the pad emulator)
 - Docker Desktop
 - Ubuntu

To run the system in a production (or production-like) setting, it requires the following:

- An iOS device running iOS version 9 or later, or an Android device running Jelly Bean or any later version (optimized for Android 11).
- Several physical pads with embedded sensors.
- A soccer ball.

IMPLEMENTATION

This application is planned to be installed in IOS and Android devices. For the implementation in Android and IOS, we used a flutter plugin for each implementation to transfer data.



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