Skillcourt Backend

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## Legal Notices

## Abstract

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## **Introduction**

### 1.1 Problem Definition

### Background

Very few platforms that offer a similar experience to what SkillCourt will offer are in existence day. Most of our research for the system comes from our Product Owner who is also a soccer coach.

### Definitions, Acronyms, and Abbreviations

#### 1.3.1 Acronyms

#### 1.3.2 Definitions

### 1.4. Overview of Document

## **Feasibility Study**

### 2.1. Description of the Current System

Currently, soccer training involves a lot of on-field practice, but offers no physical way to track progress. In fact, most sports do not offer a guided methodology for tracking progress or attempts to offer skill specific training. This lack of guidance and visuals for improvement creates an environment which makes it hard to progress without professional help.

### 2.2. Purpose of New System

SkillCourt attempts to overhaul this outdated method by creating an environment which will monitor your progress and offer an arena for furthering your capabilities as a soccer player. By adding features such as personalized progress analysis and specialized skill training along with the ease of access and the portability that SkillCourt pads offer, SkillCourt brings a whole new level of training for Soccer, and possibly even more sports.

SkillCourt saves data from a player’s interaction with the system and analyzes it to present a visual representation of a player’s strengths, weaknesses, and progress throughout their training. These allow a player to be able to focus on what they need to learn conditioning the player to become better overall.

SkillCourt’s specialized skill training will offer users access to routines designed to train specific skills for soccer. Along with the analyzed data, a player can choose skills they feel they need to work on. Ranging from Accuracy to Speed, a player will find a plethora of cognitive skills related to soccer being offered by SkillCourt.

### 2.3. High Level Definition of User Requirements

### 2.4. Alternative Solutions

#### 2.4.1. Description of Alternatives

#### 2.4.2. Selection Criteria

#### 2.4.3. Analysis of Alternatives

### 2.5. Recommendations

This project will consist of creating the back-end for SkillCourt, an activity which uses pressure sensitive pads to help create a measurement and a guide for soccer training. This includes developing an interface for accessing SkillCourt, creating programs that SkillCourt players will use for training, and parsing data from games to create visuals for player review. Also, since the pressure sensitive pads for SkillCourt are still in development, we will need to create a pad-simulator which will simulate the pads for testing and showcasing purposes.

## **Project Plan**

As part of our project’s development process, we have created a detailed plan to organize our work throughout the semester. By following it, we will be able to keep track of both the project’s progress and our performance according to our requirements. This plan includes our individual roles, the personnel organization, and the hardware and software resources needed. It also includes a description of our tasks, milestones and deliverables.

### Project Organization

This section discusses the roles of all team members as well as the technologies that will be used to develop the Skillcourt system.

#### 3.1.1 Project Personnel Organization

This section lists the main role of each of the 2 team members working on the project.

#### 3.1.2 Hardware and Software Resources

This section describes the hardware and software resources that will be used during this project

### Identification of Tasks, Milestones and Deliverables

|  |  |
| --- | --- |
| Tasks | Task Dependencies |
| 1. Collect User Stories |  |
| 1. Requirement Analysis |  |
| 1. Create Product Backlog |  |
| 1. Setup Development Environment |  |
| 1. Initial Feasibility Study |  |
| 1. Initial Project Plan |  |
| 1. Initial System Design |  |
| 1. Initial Object Design |  |
| Milestone: Feasibility Study and Project Plan Document |  |

(Not complete)

## **Appendix**

### Appendix A - Project schedule

### Appendix B – Feasibility Matrix

### Appendix C – Cost Matrix

### Appendix D - Diary of Meetings

## **References**