Methodology

This project will be written in the programming language, C++98. Along with the standard libraries, we will be using the SFML(Simple and Fast Multimedia Library, version 2.5.1) and the GLEW(OpenGL Extension Wrangler Library, version 2.1.0) for graphics and audio. We will learn about these new libraries from their documentations, as well as tutorials related to these libraries. We will be using Codeblocks as our IDE and g++ (version 7.1.0) as the compiler.

We will first make the field, player and the ball objects and define the controls. Then, the interaction between the player and the ball will be defined. After that, we will include the way of choosing teams. And then the concept of formation will be implemented. Then we will implement various game modes, such as player v/s pc, player1 v/s player2 and practice mode. Then we will try to add features to improve our UI.

We will try to learn as much as we can about the use of graphics functions, basic concepts of game development, making a project as a team and effective ways of writing an efficient object oriented code.

Project Scope

Our little coding game has a wide range of opportunities for the real world application. Firstly, it will serve as a means of entertainment. Graphically, we shall make the game efficient enough to provide a clear visual means for the players to enjoy. As for the system, it will be very similar to others developed till today, with the exception of our own classes for vectors and some physics. If promoted, this game can form a basis for many kinds of games. It can be developed as an advanced program by adding better graphics and animations if the feedback will be positive and resources will be plenty.

Project Schedule

The schedule that we will adopt for our project can be summarized below:

Topic	Days Required
Discussion on topics related to our project	1
Analyzing the core concept to develop proper program	1
Initial coding for creating logic	3
Intense coding the program	7
Execution and testing the program	3-4
Debugging	5
Program Documentation	2

The above mentioned schedule has been planned approximately for providing an aid to develop our project and might get altered according to the circumstances encountered.