|  |
| --- |
|  |

**Soccer Club Application**

Final Project Design Document

Prepared by: Ryan Forrester

Date Submitted: June 2, 2014

# Document Change Control

|  |  |  |
| --- | --- | --- |
| **Date** | **Authors** | **Summary of Changes** |
| June 2, 2014 | Ryan Forrester | Started the project design. Added the basic interfaces as well as elaborated on the primary functions of the project. |
| June 6, 2014 | BJ MacLean | Comments |
| June 24, 2014 |  | Adjusted the design document to better fit the project. Added classes and web service. Added J-Unit testing information. |
|  |  |  |
|  |  |  |
|  |  |  |

# Document Sign-Off

The following people have reviewed and approved the entire content of this document.

|  |  |  |  |
| --- | --- | --- | --- |
| **Position** | **Name** | **Signature** | **Date** |
| CEO | Ryan Forrester |  | June 2, 2014 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 

# 

[Document Change Control](#h.dnjw1qqb8319)

[Document Sign-Off](#h.ru3wgtt08e7)

[1.1 Project Team members](#h.ofwt0a8cgl7h)

[1.2 Project Description](#h.11mi08bq90q9)

[1.3 Primary Functions](#h.szd3pq7f5yi6)

[1.3.1 Guest View](#h.pzz05iyduw9n)

[1.3.2 Login](#h.ap1wz8st30yg)

[1.3.3 Field reservation](#h.24c5606cwfx1)

[1.4 Secondary Functions](#h.mrp77he9hdw7)

[2.1 Class Design](#h.23qw7otel7j6)

[2.2 Interface Design](#h.jsctzc546e47)

[2.2.1 Main Menu](#h.jhzb9v1uaxr)

[2.2.2 The Schedule (Day View)](#h.d3rdgey81c0m)

[2.2.3 Field Booking](#h.avw6yxg1kj5e)

[2.2.4 Week View](#h.lndthbd1ol3d)

[2.2.5 Booking Overview](#h.u7xdrta0caep)

[2.2.6 User Booked Fields](#h.bpd5jgr7601b)

[2.2.7 User Creation](#h.soohn8gwdv2)

# 

# 1.1 Project Team members

Ryan Forrester

## 

# 1.2 Project Description

This project will be used to keep track of the field usage of a soccer club and will provide the functionality of letting a coach book a field with a certain time slot.

This project could help organize the day-to-day activities of a soccer complex by providing a convenient booking system. Coaches will be able to book a field by signing into the system and selecting a field. The fields will have specific time slots for booking.

# 1.3 Primary Functions

### 1.3.1 View Booked Fields

This view will allow users to see when a field is booked. It will display the field name, date booked, time booked, and which coach booked the field. This view lets users see only booked fields on the current day and after.

### 1.3.2 Login

Users will have a user name and password which will be used to login to the system. Users are stored in a database.

### 1.3.3 Field reservation

The person logged in can only book a field for himself. They can book a field within the next 7 days. If the field is already booked a message will be displayed and the field will not be booked.

### 1.3.5 Add Coach

Create a user that is allowed to book fields. This page will prompt the user for a username and a password that the new user will have. The user ID does not have to be entered, the database takes care of assigning it.

# 1.4 Secondary Functions

### 1.4.1 Profile View

This view allows the user to see all the fields that are booked by them. It does not show fields before the current date.

# 2.1 Class Design

The following classes will be used to provide the functionality of the system. These classes will correspond to the database tables which will be used to store the information. More classes may be added as the project grows.

LoginForm Class - This class will store the users information (user name, password, user ID).

BookingForm Class – This class stores all the information that is needed to be shown for a booked field (Field number, user ID, date, time number).

CheckLogin - This class will check the login information that is given to it to and validate whether or not the user has entered the information properly.

AddCoach – This class will add a coach to the database that can be used to login and book fields. It will validate whether someone has the same name or not before entering them to the database.

# BookFieldAction – This class populates the drop down boxes on the book a field page with values. The values are taken from the database.

CheckBooking – This class will check that the information entered to book a field is valid and if it is will add the booked field to the database.

Logout – This class is used to delete the user’s information from the session so that their credentials cannot be used again without signing back in.

ViewBookedFields – This class is used to get all the fields that are booked. It rules out the fields that have happened in the past.

ViewProfile - This class is used to display only the fields booked by the current user. It only shows fields that are past the current date.

The field package – The field package contains classes that are used as general objects for program. (DateBook, Field, Time)

# 2.2 Interface Design

Provide a mockup of the screens that you expect to use in your project. Also provide a brief description (paragraph of two) describing each of the screens to be used in your program.

\*\*Please Note\*\*

The following designs do not include the tiles that will be used for almost every page. There will be a menu on the left side and a footer at the bottom of every page.

### 2.2.1 Main Menu

The main menu screen will have two options on it. There will be a normal login, but also an option to enter the site as a guest.

|  |
| --- |
| Soccer Complex  Main Menu  Member Id  Password:  Submit Cancel  or  Sign in as Guest |

### 2.2.2 The Schedule (Day View)

The schedule displays when the fields are booked in a clean ordered fashion. It provides a way to see when the field are booked and also an option to click on an empty time slot to take you to the book a field screen. fields that are “open” do not have anyone booked for that time. fields that are booked display the userName (or the team name, not sure yet). This schedule appears roughly the same for the users that are logged in as well as the guest login. This is the view after selecting the day out of the week.

Some of this functionality (although user friendly) may be difficult to implement. If so, can adjust the design to match (if required).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Soccer Complex  Schedule   |  |  |  |  | | --- | --- | --- | --- | | Time | Field 1 | Field 2 | Field 3 | | 3:00-4:00 | open | open | booked by: userName | | 4:00-5:00 | booked by: userName | open | open | | 5:00-6:00 | open | booked by : userName | open | | 6:00-7:00 | booked by: userName | open | booked by: userName | |

### 

### 2.2.3 Field Booking

This page is only displayed for the user that logs in. It provides the simple task of asking for the team name that the field is booked.

|  |
| --- |
| Soccer Complex  Field Booking  You are about to book field 1 from 5:00 to 6:00.  What is the team name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Submit |

### 2.2.4 Week View

This could be moved to a secondary function if necessary.

In this view, the user selects a day out of the week so that they can see the field booking for that day. current day would be highlighted. Another option for this would be to just display the next 7 days instead of just displaying the current week.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Soccer Complex  Week Schedule   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Sunday  June 1 | Monday  June 2 | Tuesday  June 3 | Wednesday  June 4 | Thursday  June 5 | Friday  June 6 | Saturday  June 7 |   Previous Next |

### 

### 2.2.5 Booking Overview

This could also be secondary functionality if needed. The ‘core’ functionality seems to be the ability to see the schedule and to book fields/bags.

This page will display all the users that have booked fields. Clicking on a user will display a list of the fields and the time that the user has booked them.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Soccer Complex  User Overview   |  |  | | --- | --- | | User | Fields Booked | | Ryan | 5 | | Evan | 3 | | George | 3 | | Bill | 1 | |

### 2.2.6 User Booked Fields

This view displays all the fields that are booked by an individual user.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Soccer Complex  User Overview   |  | | --- | | Ryan | | Field 1, 1:00pm, June 3rd | | Field 3, 6:00pm, June 4th | | Field 1, 4:00pm, June 6th | | Field 4, 5:00pm, June 20th | |

### 2.2.7 User Creation

This page is used to create a user that will be aloud to book fields.

|  |
| --- |
| Soccer Complex  User Creation  User PIN (*Provided by the complex*):  First Name:  Last Name:  Phone Number:  E-Mail Address:  Password:  Confirm Password:  Submit |