

# FrogFit

**Version 4.1**



## PROJECT PLAN

Texas Christian University

May 5, 2015

## Revision History

The following is a history of document revisions.

<b>Version</b>	<b>Changes</b>	<b>Edited</b>
<b>Version 1.0</b>	Initial Draft	October 23, 2014
<b>Version 1.1</b>	Fixed Formatting, section and page numbering, Fixed wording in multiple sections,	November 14, 2014
<b>Version 1.2</b>	Table of contents, introduction, project overview, milestones and deliverables, risk management, and Glossary	December 7, 2014
<b>Version 1.3</b>	Revised Schedule, Software Resources, Added terms to glossary	January 21, 2015
<b>Version 2.0</b>	Revised Schedule	February 16, 2015
<b>Version 2.1</b>	Revised glossary and calendar	February 25, 2015
<b>Version 2.2</b>	Fixed Revision Numbering, Updated calendar, iteration text, and walk-throughs	March 17, 2015
<b>Version 4.0</b>	Formatting fixes	April 26, 2015
<b>Version 4.1</b>	Remove .0 and grammar fixes	May 5, 2015

## Revision Sign Off

By signing the following, the team member asserts that he has read the entire document and has, to the best of knowledge, found the information contained herein to be accurate, relevant, and free of typographical errors.

Name	Signature	Date
<b>Bryan Kribbs</b>		
<b>Geoffrey Adams</b>		
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# 1 Introduction

## 1.1 Purpose

The purpose of this document is to provide a plan for the completion of the FrogFit application. This includes an overview of the project, tentative schedule, resources required, and deliverables that will be produced. It will also identify the roles and contributions of each team member, group communication channels, and a risk analysis and mitigation plan.

## 1.2 Section Overview

**Section 2 Project Overview** – Provides the background and primary objectives of the FrogFit system.

**Section 3 Resource Specification** – Lists resources needed for project production.

**Section 4 Project Management** – Lists team members and their tasks, along with the ways communication and risk management will be approached.

**Section 5 Glossary of Terms** – Defines all the project-specific terms that are included in this document.

## 2 Project Overview

### 2.1 Objectives

The primary objective of this project is to create an Android app and administrative web portal that will allow athletes and coaches to enter, modify and track workout data. The project will enable athletes and coaches to identify and capitalize on the athletes' strengths and weaknesses. The application provides categorical fitness scores as well as an overall fit score. The categorical fit scores and workout data entered by the athletes can also be viewed over time.

### 2.2 Project Background

Living a healthy lifestyle has become a major focus in today's society due to the rising number of Americans with conditions linked to obesity, over eating, and living an inactive lifestyle. There are many thoughts and products on the market that are used to help with this so-called epidemic. One such workout routine is called Crossfit. According to their site, "The aim of Crossfit is to forge a broad, general and inclusive fitness."

For the growing number of people participating in Crossfit, there are plenty of systems that can show athletes where they are excelling; however, there is not a single system specifically designed for Crossfit that can identify the area of fitness that an athlete is deficient and provide a single, comprehensive fitness score.

FrogFit is designed to fill this gap in the market by allowing athletes and coaches to collect workout data, compare it to individual benchmarks, and provide them with a fitness score. This fitness score coupled with a confidence rating, will help define the strengths and weaknesses of each athlete.

## 3 Resource Specification

### 3.1 Software

#### Programming

- Microsoft SQL Server 2012
- Microsoft SQL Server 2012 Management Studio
- Microsoft Visual Studio 2013
- ASP.NET MVC 5
- Android device running Jelly Bean or above
- Eclipse Luna with GIT plugin
- Android SDK Tools

#### Server Connection and File Transfer

- CoreFTP / WinSCP
- CoRD / Putty
- Remote Desktop Connection

#### Productivity

- Camtasia
- Google Drive
- Google Mail
- Microsoft Office 2013

### 3.2 Hardware

- Microsoft Windows Server 2012 R2 Standard 64 Bit (Chalkbucket Provided)
- Android device running Jelly Bean or above
- Internet capable device

### 3.3 Contacts

Dr. Donnell Payne – [D.Payne@tcu.edu](mailto:D.Payne@tcu.edu)

Steve Johnston – [Steve@chalkbucketlabs.com](mailto:Steve@chalkbucketlabs.com)

## 4 Project Management

### 4.1 Milestones and Deliverables

October 10, 2014 – Website Skeleton  
October 18, 2014 – Project Plan (Version 1.0)  
October 26, 2014 – Requirements Document (Version 1.0)  
December 5, 2014 – Design Document (Version 1.0)  
December 12, 2014 – Iteration 1 Testing  
December 19, 2014 – Iteration 1  
February 06, 2015 – Iteration 2 Testing  
February 13, 2015 – Iteration 2  
March 17, 2015 – SRS Abstract Due  
March 20, 2015 – Iteration 3 Testing  
March 27, 2015 – Iteration 3  
April 1, 2015 – NTASC Abstract Submission  
April 10, 2015 – SRS Poster Due  
April 17, 2015 – Student Research Symposium  
April 17, 2015 – Iteration 4 Testing  
April 18, 2015 – North Texas Area Student Conference  
April 20, 2015 – Iteration 4  
April 24, 2015 – Final Testing  
April 29, 2015 – Final Due with DVD  
April 30, 2015 – User Manual & Developer Guide  
April 30, 2015 – Final Presentation

#### Iteration 1

Website template created. App basic layout/wireframes completed. Database server created. Connectivity between all components established.

#### Iteration 2

Ability to navigate the mobile app and website with limited data passing. Database schema created and Web API functioning.

#### Iteration 3

Majority functionality of mobile app and website screens with FitScore calculation and majority of data retrieval. Limited graphing capability.



## Iteration 4

Full app, site, database, calculations, and web API functionality.

### 4.2 Team Member Roles and Responsibilities

Geoff Adams – Tech Lead, Android Developer, Testing Lead

Bryan Kribbs – DBA, Document Lead, Admin Site Architect

Matt Ratliff – Project Lead, Android Developer, Brazos Site Architect

### 4.3 Monitoring and Reporting Mechanisms

#### 4.3.1 Meetings

Group Meetings will be held at 5pm every Monday in the senior design lab at Tucker Technology Center and will be conducted in order for the group members to discuss issues, ideas and communicate project progress. Additional meetings can be scheduled as needed.

#### 4.3.2 Communication

Communication within the group will primarily be conducted through text message, email, or face-to-face. Communication with our client will be conducted via email or phone calls. To share documents and files we will use email, Google drive, or upload them to our internal website.

#### 4.3.3 Requirements Control

Project requirements will be monitored throughout development and testing phases. Any proposed changes will be discussed with all group members, the client, and Dr. Payne. Once deemed necessary, the requirements document and all other relevant documentation will be amended to reflect the current state of the project.

#### 4.3.4 Weekly Activity Reports

Weekly Activity Reports will be created throughout the project and finalized on Thursday, either during or after class. The reports will consist of the tasks that each team member is assigned for the week. This will help monitor the progress of each member and ensuring project milestones will be met on time.

#### 4.3.5 Walk-Throughs

Requirements Document version 1 – 10/28/2014

Project Plan and Requirements document walk through - 11/14/2014

Project Plan and Requirements document walk through - 12/7/2014

Iteration 1 Walk through – 12/16/2014

Design Document Review – 01/17/2015

DB Design & Function Review – 03/05/2015

## 4.4 Risk Management

### 4.4.1 Risk Analysis and Planning

Contingency	Probability/Severity	Mitigation Strategy
Illness/Ebola	Low/Critical	Google Hangout
Achieving Deadlines	High/Critical	Keeping to Schedule Frequent Updates, Intergroup Communication
Loss of Communication with Server	Low/High	Communicate with Steve to resolve issue.
Application Latency	Medium/Low	Refactoring Code.
Loss of Contact with Client	Low/High	Contact Dr. Payne and Co-Founder of Chalkbucket Labs
Inexperience with development tools	High/Medium	Tutorials and outside aid from experienced persons
Inability to access required data	High/Low	Wait or leverage faculty members for support

## 5 Glossary of Terms

**Administrative Web Portal** - Internet web page that gym owners/managers use to update the content on their FrogFit site.

**Android** - An open-source operating system used on mobile devices.

**ASP.NET MVC** – Open source web application framework used to create applications.

**Benchmark Workout** – Workout designed to measure and benchmark an athlete’s performance and improvements through repeated and irregular appearances in a workout of the day. Benchmark workouts can be in one of the categories; Girls, Heroes, Notables.

**Categories** – There are eight fitness categories that are considered when creating an overall fitness score.

- Body Weight
- Endurance
- Heavy Weight
- Light Weight
- Long
- Olympic Lift
- Power Lift
- Speed

**Class** – Classification system for athletes. The classifications include Beginner, Intermediate, Advanced, and Master.

**CoRD** – A remote desktop application used on Macs.

**Crossfit** - Strength and conditioning program that is by design broad, general, and inclusive.

**Microsoft SQL Server** - A relational database system designed for business or enterprise environments.

**Remote Desktop Connection** – is one of the components of Microsoft Windows that allows users to take control of a remote computer or virtual device over a network connection.

**Rx** – When a workout is completed “as prescribed” by the coach. This includes doing the correct movements, weight, and rounds. Also known as, Rx’d.

**Web API** – An application programming interface for both the webserver and web browser that allows retrieval of structured data.

**WinSCP** – is a secure FTP client for Windows with features that include FTP, SSL/TLS, SFTP via SSH, and HTTP/HTTPS support.

**WOD** – (Workout of the Day) A set of movements that athletes will complete for a given day.