



Project Plan

V4.0

5/4/2015

JUDGE FROG

Revision History

Version	Changes	Edited
1.0	<ul style="list-style-type: none"> Initial Draft 	October 15, 2014
1.1	<ul style="list-style-type: none"> Revised formatting of document Minor grammatical and spelling errors resolved. 	November 4, 2014
1.2	<ul style="list-style-type: none"> Revised formatting of document to match all other documents Typographical errors resolved. Updated Resource Specification More in-depth project management section 	December 9, 2014
2.0	<ul style="list-style-type: none"> Updated Schedule Updated Resource Specification 	February 15, 2014
2.1	<ul style="list-style-type: none"> Updated Iteration Descriptions Updated Schedule Updated Glossary of Terms 	February 16, 2014
3.0	<ul style="list-style-type: none"> Updated Scope and Objectives Updated Glossary Updated Software 	April 26, 2015
3.1	<ul style="list-style-type: none"> Updated Project Iterations Updated Weekly Activity Report link 	May 3, 2015
4	<ul style="list-style-type: none"> Updated Scope and Objectives Updated Client Contacts Updated Iterations 	May 4, 2015

Revision Sign-Off

By signing the following, the team member is stating that he has read the entire document and has verified that the information contained within this document is accurate, relevant to the project, and void of errors.

Name	Signature	Date Signed
Brice Boula		
Collin Duncan		
David Tomlinson		
Landon Westrom		

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1. Introduction

1.1 Purpose

This document is intended to provide an overview of the project plan for Judge Frog. It shall include an overview of the project itself, resources necessary for the project, a schedule for milestones as well as project deliverables, team roles and responsibilities, and risk management techniques.

1.2 Section Overview

Section 2 – This section contains the background for the project and its intent.

Section 3 – This section specifies resource requirements, both hardware and software, for the project.

Section 4 – This section details the management strategies for the project.

Section 5 – This section contains a glossary of terms useful for understanding this document.

2. Project Overview

2.1 Project Background

Every year, there are thousands of cases involving human trafficking in dozens of courts across the United States. With data from the cases scattered across different judicial districts, it can be difficult to analyze a large amount of cases. Our supporting clients have received a grant from the National Institute of Justice to help fulfill the analysis needed of the vast amount of human trafficking crime in the United States. This grant was awarded due to the amount of interest sparked by the Federal Bureau of Investigation, the National Institute of Justice, the United Nations, researchers, and the private sector.

2.2 Scope and Objectives

Judge Frog is a senior design capstone project that originated from the need for database and web application support for a NIJ funded project. The Judge Frog team is focused to create a well-structured and efficient database to store human trafficking data. The Judge Frog team will design and develop a web application that will be linked to the database and allow the data to be publicly accessible. The web application will provide analysis of the data and editing of the database.

3. Resource Specification

3.1 Software

Development Environment

- MySQLWorkbench 6.2 CE
- PHP 5.5
- CakePHP 2.5.1
- GitHub
- phpMyAdmin 4.0.4.2
- MySQL 5.6.14
- Apache 2.2
- Bootstrap 3.1.1
- Google Charts
- JavaScript / JQuery 1.10.2

General Utilities

- Microsoft Word
- Microsoft PowerPoint
- Google Drive
- Notepad++ 6.7.4
- Sublime Text Editor 2
- CoreFTP 2.2
- Camtasia 8.0

3.2 Hardware

The project shall be hosted on a Linux plan purchased from Arvix. The plan does not include a dedicated server. No detailed hardware specifications are provided.

3.3 Client Contacts

TCU Faculty Advisors

- Dr. Donnell Payne – d.payne@tcu.edu
- Dr. Lisa Ball – l.ball@tcu.edu

TCU Professor

- Dr. Vanessa Bouché – vanessa.bouche@tcu.edu

4. Project Management

4.1 Milestones and Deliverables

<u>Milestone</u>	<u>Date</u>
Project Plan v1.0	October 16, 2014
Website Skeleton	October 16, 2014
Project Requirements v1.0	October 21, 2014
Initial Database Test	November 14, 2014
Detailed Design Document v1.0	November 15, 2014
Data Input Into Database	November 21, 2014
Iteration 1	December 15, 2014
Testing Phase 1	December 22, 2014
Iteration 2	February 8, 2015
Testing Phase 2	February 12, 2015
Iteration 3	March 8, 2015
User Manual v1.0	March 8, 2015
Developer Guide v1.0	March 8, 2015
Testing Phase 3	March 12, 2015
SRS Abstract Submission	March 19, 2015
NTASC Abstract Submission	April 1, 2015
Iteration 4	April 8, 2015
SRS Poster Submission	April 9, 2015
Finalized Project Documentation	April 10, 2015
Testing Phase 4	April 12, 2015
Student Research Symposium	April 17, 2015
NTASC Presentation	April 18, 2015
Final Presentation	April 30, 2015
Final Delivery of Project	May 4, 2015

4.2 Iteration Descriptions

Iteration 1

December 15, 2014

- Project database design completed
- Database is able to have data uploaded to it via web application prototype
- Main website skeleton completed
- Search functionality prototype completed
- Project Plan, Project Requirements, Design Document (v1) finished.

Iteration 2

February 8, 2015

- Web application design completed
- Analyze functionality prototype completed

Iteration 3

March 8, 2015

- Search functionality completed, beginning testing
- Batch upload and individual upload functionality completed
- Individual upload data review functionality completed
- Admin panel prototype completed

Iteration 4

April 8, 2015

- Analyze functionality completed
- Admin panel completed
- Finish unit/integration/end-to-end tests and begin complete testing
- Web application completed
- Documentation completed

4.3 Team Member Roles and Responsibilities

- Landon Westrom – Project Lead
- Collin Duncan – Technical Lead, Database Design
- David Tomlinson – Documentation Lead, Web Application Lead
- Brice Boula – Testing Lead, Website Design Lead

4.4 Monitoring and Reporting Mechanisms

4.4.1 Meetings

Meetings shall be held weekly at 2:00 PM on Sundays in Tucker Technology Center 330. Additionally, work shall be conducted during class times on Tuesdays and Thursdays. Meeting times are subject to change based on the schedules of team members and clients.

4.4.2 Communication

All team members have cell phones and can communicate through GroupMe, an app that uses MMS messaging. Documents that do not contain code shall be distributed and organized via the team's Google Drive. A GitHub repository shall act as the source control for the development of the application along with issue tracking for tracking development problems. The team shall coordinate meetings with the clients via email, phone, or physical conversations.

4.4.3 Requirements Control

The Testing Lead shall ensure that all iterations satisfy the requirements detailed in the requirements document for that iteration. He shall also ensure that the requirements document is kept up-to-date with the needs of the client. In the case of a change in requirements, a team meeting will be held immediately to update our plan and requirements documents to reflect the changes to best suit the client's needs as well as maintain as much existing material as possible.

4.4.4 Weekly Activity Reports

Weekly Activity Reports shall contain logs of the tasks assigned to each team member for a given week, and the amount of time spent on that task. The reports shall also describe the current status of the task. Weekly Activity Reports will be posted and updated each Sunday after the week at <http://brazos.cs.tcu.edu/1415JudgeFrog/war.html>.

4.4.5 Walk-Throughs

The team shall walk our Faculty Advisor and clients through aspects of the project at designated times each week. The team itself will have scheduled weekly walk-throughs on Sunday during the team's meeting to discuss progress, status, and learning points in the development of the project.

4.5 Risk Management

<u>Contingency</u>	<u>Probability</u>	<u>Severity</u>	<u>Mitigation Strategy</u>
Project not completed	Moderate	Critical	Complete work in a timely manner
Data is unavailable for entry into the database	Moderate	High	Work with client to ensure the data is available in advance
Database performance is unacceptable	Moderate	High	Meet with Dr. Lisa Ball to discuss database architecture
Illness	Moderate	Moderate	Ensure that progress is communicated properly
Server downtime	Moderate	Moderate	Continue development offline and test locally instead of over web
Extreme weather	Low	Moderate	Meeting will be cancelled and replaced with VoIP communication
Client availability and involvement	Moderate	High	Assign dates for required materials to client and emphasize importance.
Learning new technologies	Low	Critical	Dedicate time to learn and study the use of new technology and share helpful accomplishments
Development Environment Issues	High	Low	Ensure we maintain correct versions of all software on all computers used for development.

5. Glossary of Terms

Administrator – Privileged user capable of performing major changes to database.

Application – Group of programs designed to supply an end-user with expected functionality.

CakePHP – A free, open-source, rapid development framework for PHP.

Control Panel – An interface specifically designed to allow administrators to easily perform their tasks.

CRUD – Create, read, update, delete operations that query database.

Database – A structured set of data held in a computer, accessible in various ways.

Deliverable – A product, not necessarily finished, related to the project given to the client.

End-User – A person or persons who will be using the web application for the specified purpose of our project.

Foreign Key – A field in one table that uniquely identifies a row of another table.

GitHub – A Web service for software version control.

Host – A website on a server accessible over the Internet.

Milestone – A point at which project progress can be assessed.

PHP – A general-purpose scripting language that is especially suited to server-side web development.

Primary Key – Uniquely identifies each record in the table.

Prototype – Simulates only a few aspects of, and may be completely different from, the final product.

TCU – Texas Christian University

UML – Unified Modeling Language; a modeling language designed to provide a standard way to visualize the design of a system.

Walk-through – Points during the project where the team describes significant project components with clients and individuals within the team.

Web Application – Application that is accessed by visiting a specific URL.