



Project Plan

Version 4.0

Tuesday May 7, 2013



Revision Sign-Off

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

Name	Signature	Date
Alex Anduss		
Baer Bradford		
Greg Kolesar		

Revision History

The following is a history of document revisions.

Version	Date Revised	Comments
0.1	Oct. 2, 2012	Initial draft.
0.2	Oct. 3, 2012	Added content to Introduction, Resource Specification, and Project Management sections.
0.3	Oct. 3, 2012	Added content to Purpose, Hardware, Contacts, Meetings, Communication, Requirements Control, and Glossary of Terms. Added Overview and Appendix B sections.
0.4	Oct. 3, 2012	Added additional content.
0.5	Oct. 3, 2012	Content completed, diagrams added.
1.0	Oct. 4, 2012	Minor corrections, marked to major revision for submission.
1.1	Oct. 14, 2012	Revisions based on faculty advisor feedback.
1.2	Oct. 23, 2012	UI Mockups removed (added to SRS).
1.3	Nov. 29, 2012	Revised dates and updated the architecture diagram.
1.4	Jan. 17, 2013	Revised dates, removed Daniel Ducic, updated Android test device
2.0	Jan. 29, 2013	Reflects state of project at end of iteration 2.
4.0	May 7, 2013	Final Project Plan

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1. Introduction

1.1 Purpose

This document will serve as an overview of the intent and basic architecture of the GoodNEWS Fort Worth system. In addition, this document will identify necessary resources for the implementation of this system. Finally, the document will outline scheduling for the project along with stating the methods of management.

1.2 Overview

This project plan shall define the GoodNEWS Fort Worth system and be an agreement between the GoodNEWS team, faculty advisor, and HealthyFROGS team. An overview of the GoodNEWS Fort Worth project, its background, and goals of the project shall be included in Section 2: Project Overview. All hardware, software, and human resources shall be covered in Section 3: Resource Specification. Finally, the project plan shall include a schedule of the project, team member roles, an overview of project monitoring, and risk analysis and mitigation in Section 4: Project Management.

2. Project Overview

2.1 Project Background

GoodNEWS is a lifestyle enhancement program developed to make the citizens of the city of Fort Worth think and practice a healthy lifestyle to prevent the development of disease. GoodNEWS is comprised of the healthcare professionals, church pastors, community organizations, and politicians who work together to influence the community. Many of the issues that affect people today such as hypertension, heart disease, obesity, and other diseases are not treatable once an individual gets them. Preventative medicine is the only way to avoid these diseases, and there are many things a person can do to prevent getting these diseases. The problem now is to get the word out to people on how to prevent these diseases. Technology available today enables communication of this nature.

Our plan is to develop a mobile application on Android and iOS devices which will enable the leaders of the GoodNEWS program to get the message to people. The app will allow them to conduct surveys to see how people are doing and what improvements the City of Fort Worth can make to enhance the living experience of the people. The app will also allow the leaders to push updates out to everyone who has the app.

2.2 Proposal

Preventable chronic diseases are a leading cause of premature death in Tarrant County. HealthyFROGS proposes to develop a system, which shall promote healthy living in Fort Worth communities serviced by GoodNEWS, a program partnering with city, congregation, and community leaders to reduce the risk of chronic disease. The proposed system shall include a multiplatform mobile application to assist residents of the Fort Worth area with living a better lifestyle according to the seven dimensions of health: physical, mental, intellectual, occupational, spiritual, social, and environmental well-being. In addition, the system shall include a web interface, which will act as a content management system allowing GoodNEWS employees to maintain up-to-date resources. Using this system, GoodNEWS will be able to disseminate information on healthy living, and interact with members of the community. Users will be able to assess their lifestyle, and track their progress toward healthier life choices. Leaders attending GoodNEWS events and seminars will be able to better interact by using the application to participate in surveys and provide feedback. The system shall be developed for UNT Health Science Center's GoodNEWS program utilizing Apple iOS and Android devices.

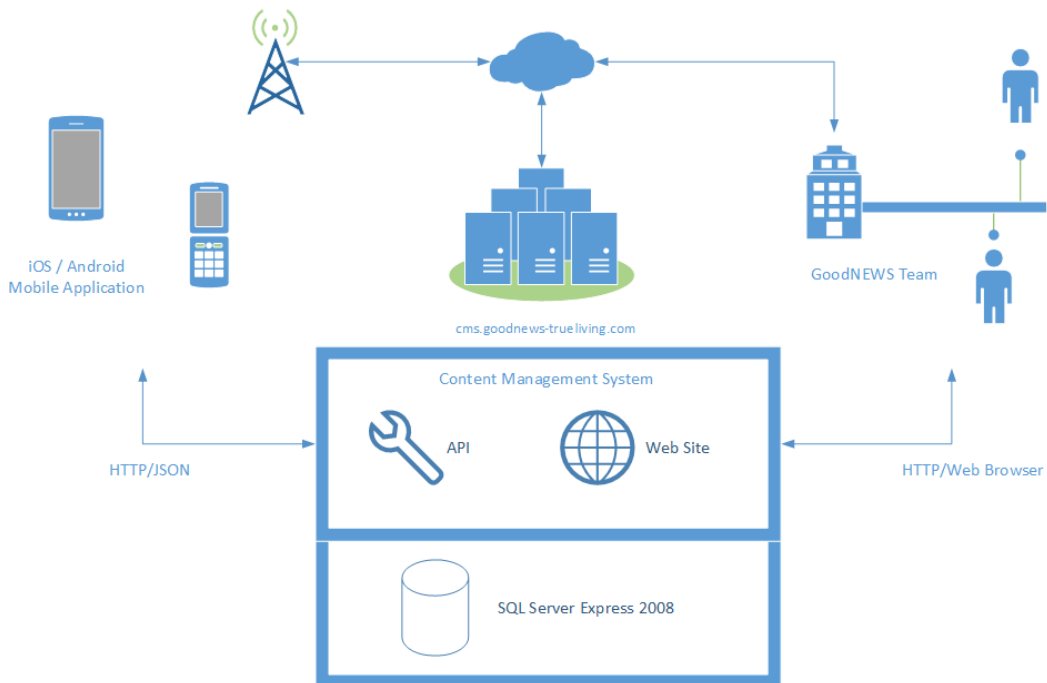
2.3 Scope and Objectives

The objective of the GoodNEWS Fort Worth project is to create a system which promotes healthy living for members of the Fort Worth community in addition to enabling better

communication between GoodNEWS and community leaders. The project shall consist of a multiplatform mobile application and a content management system.

2.4 Overview

The GoodNEWS Fort Worth system will be composed of a multiplatform mobile application, a web service, a content management system, and a database. GoodNEWS employees will use the CMS to maintain up-to-date resources on healthy living, publish surveys, and review user statistics. All of this information will be maintained in a relational database accessible from a web service. The mobile application will utilize the web service to display current resources to the user.



The mobile application, to be available on iOS and Android platforms, shall provide a user with research, news, and other resources to educate on healthy living. Users will be able to use the application for self-assessments of their own lifestyle. In addition, the application will enable users to track their progress toward living a healthy lifestyle. An example of this would be a calorie tracker. The application shall include a Fort Worth Healthy Lifestyle section, which will provide users with localized resources promoting healthy living in one of the seven dimensions of health. An example of this would be presenting the Fort Worth Water Gardens to a user interested in improving his or her environmental health. Finally, the application would provide improved interaction between GoodNEWS and individuals attending GoodNEWS events or seminars. Users associated with seminars would be provided with event-specific information, announcements, or surveys. Finally, the application would enable users to provide feedback to the GoodNEWS team. See Appendix B for a preliminary sketch of the mobile application user interface.

3. Resource Specification

3.1 Software

The following software will be required for this project:

- App Store Accounts
 - Apple Developer Program Account
 - \$99/Year
 - To be provided by GoodNEWS
 - Google Play Developer Profile
 - \$25 Registration Fee
 - To be provided by GoodNEWS
- Development
 - Android 2.3 SDK
 - Eclipse Juno
 - iOS 6 SDK
 - Microsoft SQL Server 2008 R2
 - Visual Studio 2010/2012
 - Xcode 4.5.1
- File Sharing and Team Collaboration
 - Box
 - FileZilla 3.5
 - GroupMe
 - Subversion
 - TortoiseSVN 1.7
- General
 - Adobe Creative Suite 5/6
 - Camtasia Studio 7
 - Google Calendar
 - Microsoft Office 2010
- Operating Systems
 - Microsoft Windows 7
 - Microsoft Windows Server 2008 (with IIS)
 - OS X 10.8

3.2 Hardware

The following hardware will be required for this project:

- Android Device
 - Samsung Galaxy Note II
- Development Workstations
 - Personal PCs

- TCU Lab PCs
- iOS Device
 - Apple iPad (provided by TCU)
 - Apple iPod Touch (provided by TCU)
- Team Collaboration and Planning
 - Quartet IdeaShare
- Server
 - TCU's Brazos Server

3.3 Contacts

The following contacts will be involved in this project:

- GoodNEWS
 - Anissa Carbajal-Diaz – Project Coordinator
 - Dr. Mark DeHaven – Co-Director
 - Dr. Jenny Lee – Developer and Co-Director
 - Leilani Ogan – Health Education Coordinator
- HealthyFROGS
 - Alex Anduss
 - Baer Bradford
 - Greg Kolesar
- TCU Faculty Advisor
 - Dr. Donnell Payne

For telephone and email information, please see privately distributed contact list.

4. Project Management

4.1 Milestones and Deliverables

The team shall meet milestones, provide documentation, and deliver code according to the following schedule:

Milestone/Deliverable	Date
Proposal	2012-10-02
Project Plan Version 1.0	2012-10-04
Project Support Environment	2012-10-11
Software Requirements Specifications Version 1.0	2012-10-23
Design Documentation Version 1.0	2012-12-06
Iteration 1	2012-12-10
Iteration 2	2013-01-24
NTASC Abstract	2013-02-01
Test Plan	2013-02-05
Iteration 3	2013-02-19
Iteration 4	2013-03-07
Acceptance Testing	2013-03-28
SRS Poster	2013-04-12
Developer Manual	2013-04-18
User Manual	2013-04-18
SRS	2013-04-19
Final Presentation	2013-05-02
Final DVD Submission	2013-05-02

See Appendix A for a Gantt chart visualizing this timeline.

Iteration 1

- The iOS application running in alpha form.

- The web service back end to supply information and database access to the applications.

Iteration 2

- Refined version of iOS application and alpha form of the Android app.
- Alpha build of the Content Management System

Iteration 3

- Release Candidate versions of both iOS and Android Application
- Finished User Interface
- Fully Functional Content Management System

Iteration 4

- Completed Product (Code Freeze)
- All Documentation except User Manual and Developer Manual

4.2 Team Member Roles and Responsibilities

Alex Anduss

- Project Media Lead
- Website Lead
- Database Lead

Baer Bradford

- Android Lead
- Client Communication Lead
- Content Management System Lead
- Design Lead
- Web Service Lead

Greg Kolesar

- Documentation Lead
- iOS Lead
- Scheduling Lead
- Testing Lead

4.3 Monitoring and Reporting Mechanisms

4.3.1 Meetings

HealthyFROGS shall meet weekly on Sunday mornings. In addition to these scheduled meetings, HealthyFROGS meet twice weekly during scheduled class at 12:30 PM on Tuesdays and Thursday. These meetings will provide team members with the opportunity to discuss the current status of the project and plan for future tasks.

During each weekly meeting, the team shall compile a weekly activity report, which shall be published to the project website. See the Weekly Activity Reports section for more information regarding these reports.

4.3.2 Communication

Team members shall communicate primarily through email, text, and phone. Phone numbers and email addresses for this purpose are available in the Contacts section of this document. Scheduling of deadlines and meetings shall be communicated within the team using Google Calendar. Documentation, source code, and general files shall be shared amongst the team using Subversion and Box.

4.3.3 Requirements Control

GoodNEWS Fort Worth shall be developed according to the requirements defined in the Software Requirements Specification. Upon completion of each iteration, the system shall be tested to ensure requirements are being met. If project requirements must be modified, the changes must be agreed upon by the team, the clients, and the faculty advisor.

4.3.4 Weekly Activity Reports

Each week at the team's weekly meeting, members will discuss the current status of tasks. These will be recorded and documented to make up the team's Weekly Activity Reports. For each task, the team will document the current status, team members assigned to the task, estimated time to spend on the task, actual time spent working on the task, and general notes regarding the task. These reports will be published to the team's website, making them available to clients and the faculty advisor.

4.4 Risk Management

4.4.1 Risk Analysis

Risk Id	Contingency	Probability	Severity
1	Hardware Unavailability	Low	Serious
2	Illness	Moderate	Moderate
3	Server Failure	Low	Moderate
4	Performance Issues	Moderate	Moderate
5	Client Changes Requirements	Low	Serious

4.4.2 Risk Mitigation

Risk Id	Mitigation
1	Use the emulators on the computer to avoid reliance on physical hardware.
2	Assign tasks for each part of the project to everyone so that if someone is ill, the project will not come to a halt.
3	Keep a running backup of the data on the server, and have a redundant server to handle the load if the primary fails.
4	Refactor the program, and refine the code so the performance increases.
5	Construct a solid program framework that allows parts to be added and removed without destroying other parts of the program.

5. Glossary of Terms

CMS – Content Management System

HealthyFROGS – the team name for the 2012-2013 senior design team responsible for the GoodNEWS Fort Worth project

GoodNEWS – part of the TPI, a program which works to reduce chronic disease and improve quality of life for Dallas and Fort Worth communities through educating individuals and community leaders on preventative medicine

GoodNEWS Fort Worth – the name of the system to be developed by HealthyFROGS for GoodNEWS as a senior design project for the 2012-2013 academic year

NTASC – North Texas Student Area Conference, an annual event for students in the north Texas region to present projects hosted by Midwestern State University

SDK – Software Development Kit

SRS – Student Research Symposium, an annual showcase of TCU student projects hosted by TCU's College of Science and Engineering

TCU – Texas Christian University

TPI – Texas Prevention Institute, part of UNTHSC

UNT – University of North Texas

UNTHSC – University of North Texas Health Science Center

Appendix A. Gantt Chart

The Gantt chart below shows provides a visualization of milestones and deliverables the team will reach throughout the year.

