

# ***WebPM*** Project Management System

Project Plan  
Version 1.0 (DRAFT)

Prepared for

State Farm Insurance

by

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on

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## **WebPM Project Plan**

### **Introduction**

The purpose of this document is to provide a detailed description of the plan that will be followed during the design and implementation phases of the WebPM software. As such, this document includes the following sections:

- *A statement of work*, which describes the specific tasks, activities, and deliverables which the WebPM development team will provide to State Farm Insurance;
- *A list of resources* that will be required by the WebPM team to fully implement the project;
- A description of the *risks* involved in carrying out the project and specific actions that will taken to mitigate those risks; and
- A clearly defined set of *roles* and associated *responsibilities* that project team members will assume during the course of the project.

## **Statement of Work**

State Farm Insurance has requested a software solution to the problem of tracking the status of multiple projects and associated resources across different internal business cases within their organization. In order to fulfill this request, we will develop a web-based application which will enable business analysts to both track projects in their domain and to generate meaningful reports.

The final software product will consist of three interconnected components. The first component will consist of a website with which the user will directly interact. This will provide the interface that will accept user queries and display results. This web "front-end" will request the services of a middle-tier component ("server") which will manage transactions and communicate data to/from a database, which constitutes the third component. The function of the database is to provide secure and reliable storage of project data.

We are bound by customer requirements to develop the server part of the system in Java, either by way of Servlets or Java Server Pages. Furthermore, the RDBMS ("database") we use must support SQL.

## **Task Breakdown**

The WebPM software will be developed in several phases. The first phase of the project will consist of the building and installing the test environment and project database. This will be followed by a 12-week development cycle, consisting of 6 2-week iterations. A variable number of tasks will be implemented using test-driven development and pair programming techniques during each 2-week iteration. The final phase of the project will consist of finalizing documentation, packaging the application for deployment, and presenting the finished product to the customer.

## **Deliverables**

A deliverable version of the application, packaged with documentation and unit tests, will be made available to the customer at the culmination of each iteration for evaluation, as necessary.

## **Resources Requirements**

The following briefly describes some basic resource requirements for the WebPM project.

### **Development Workstations**

Any campus computer or similarly configured PC will be suitable for use during the development of WebPM. Development workstations should network accessible, USB-capable, and have sufficient resources to run a modern operating system, Java applications, and common development tools without major performance problems.

### **Development Tools**

A Subversion VCS server has been setup to manage electronic resources. Due to the confidential nature of the project, this SVN server is only accessible via SSH tunnel (i.e., accessed via a “svn+ssh://” URL). A read-only view of the repository will be made available via WebSVN, which is accessible via the project homepage. Both repositories will house source code and documents related to the WebPM project.

### **Collaboration Tools**

Access to Internet Relay Chat (IRC) will be required to attend on-line project meetings. A multitude of client software packages exist to access an IRC network. Links to “XChat” (multi-platform) and “mIRC” (Windows) are provided:

XChat: <http://www.xhcat.org>

mIRC: <http://www.mirc.com>

In addition to real-time collaboration, a website will be used to provide off-line communication between project team members. This website includes access to an RSS feed which authorized stakeholders can use to track project progress. For the duration of the project, a static export of this website will be generated once per month and transferred to the “WebPM Project Homepage” on the SIUC CS dept. web-server via a secure channel.

## **Resources Required (cont'd.)**

### **Test Environment**

#### *Server*

The WebPM server test environment will consist of a basic “XAMP” installation with Tomcat. Specifically, it will consist of a host running Apache.org Webserver software (with Tomcat), MySQL Database Management System, and PHP. Furthermore, phpMyAdmin will be used to ease database administration tasks.

#### *Client*

In order to thoroughly test client connectivity, multiple browsers (FF, IE, OP) and client operating systems (Linux, Mac, Windows) will be required. These resources are readily available on campus.

## Risks

<b>Risk</b>	<b>Impact</b>	<b>Action</b>	<b>Probability</b>
Team cooperation and availability	Lack of communication between team members or lack of team member effort can severely impact the success and time table of the project.	Each team member must appropriately budget time and effort to complete their assigned tasks, maintain documentation, and attend all team meetings (on-line and otherwise).	Low
Inexperience with required technologies	Team members lacking experience with the technologies we are required us to use will inhibit the speed at which assigned tasks may be completed.	Members must do preliminary research to better prepare themselves for using the requisite technologies.	Moderate
Limited time-frame	We only have a single semester to complete this project. This rigidly imposed time-line implies that any delay could render the project incomplete by the end of SPR 10.	Proper planning and being as prepared as possible will limit the chances of a delay and increase our chances of success.	Low
Lack of communication with stakeholders	The stakeholders in this project have limited time to devote to it, and therefore a lack of communication and review with stakeholders could introduce problems.	The project team must adhere to the project plan, and convey any uncertainties to the stakeholders.	Moderate

## Roles and Responsibilities

<b>Role</b>	<b>Team Leader</b>
Responsibilities	The person in this role is responsible for managing the team, maintaining contact with the client, making any crucial decisions that have a major impact on the project, maintaining the team website, and managing all important documents.
Designated Team Member(s)	Michael Harris

<b>Role</b>	<b>Web Developer</b>
Responsibilities	The person in this role is responsible for designing the components of the application with which the end users will interact. Responsibilities of this roll include the design and coding of all web pages, and the development/acquisition of graphics and logos (if necessary). This person must also assist the server component developer (below) in interfacing the front- and middle-tier systems.
Designated Team Member(s)	Everyone

<b>Role</b>	<b>Server Component Developer</b>
Responsibilities	The person in this role is responsible for developing the middle-tier component which will provide communication between the database system and the front-end. This person must also assist the front-end and back-end developers in integrating their components into the overall application.
Designated Team Member(s)	Everyone



<b>Role</b>	<b>Back-End (Database) Developer</b>
Responsibilities	The person in this role is responsible for designing and implementing database elements that will support the WebPM application. This person will also be responsible for basic database administration tasks.
Designated Team Member(s)	Everyone

## Contact Information

The WebPM Project Team is:

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WebPM Project Homepage

<http://www.cs.siu.edu/~webpm/>