

Tools and Technologies Plan **Shumoku 種目**

Hitarth Patel, Richard Lee, Kristen Kho

April 18, 2008
CSE 210

Introduction

Our goal is to minimize cost and production time of our product. We chose tools and languages based on our team's past experiences and their ability to mesh well together. We will be utilizing an agile software development process and wish to encourage collaboration. We have organized our technology plan in sections with risks and benefits for each.

Server-Side Programming

PHP (Server-Side Scripting)

PDT - PHP development tools for eclipse platform (IDE)

PHP SimpleTest Framework (Testing)

Apache HTTP Server

Risks:

PDT is a new technology for the team and presents a learning curve. Due to our experience with IDE's like Eclipse, we feel the learning curve will be short.

PHP provides source code line numbers to all users, including those viewing our site. This is a security risk. Rigorous code review and testing will be needed to combat this risk.

Apache server is open source. No technical support will be provided for server bugs.

Benefits

PHP is a easy-to-learn language with a short learning curve. It is very powerful for web development.

Apache server is open source, simple and easy to use for small application prototypes.

Client-Side Programming

Google Maps API

JavaScript

HTML

CSS

Risks:

Google Maps API license requires being open to the public. This is an acceptable risk because we will display events to the public.

Google Maps is hosted by Google, which could go down unexpectedly. According to Google, this rarely happens. If our site experiences high traffic, we can ask Google for more server bandwidth.

Google Maps reserves the right to add its own advertising to your map.

Benefits:

Google Maps is hosted by Google, so there is no CPU impact on our system.

Google Maps API will be free if our site is open to the public.

All team developers have prior experience with web development (HTML/CSS/JavaScript).

Database

MySQL

DBVisualizer 6.0.8 (client tool)

Risk:

MySQL lacks the support system of commercial databases like Oracle.

It also does not come with commercial client tools used to access and manipulate the database directly. However, we will be utilizing free tools like DBVisualizer.

Benefits:

MySQL comes as part of our GoDaddy account along with web-based client tools.

Repository

SVN - Source Control

Google Docs- Design Documents

Risk:

Google Groups and Documents are hosted by Google, so it could go down unexpectedly.

SVN is hosted by UCSD and can also go down. Hitarth and Richard will need to apply for temporary accounts to access the SVN server.

Benefits:

SVN will allow us to collaborate on source code. Source code changes do not have to be checked in until the team tests and code reviews it. This will encourage our agile/XP development process.

SVN hosting is provided by UCSD accounts.

Google Groups and Documents provide ample storage and ways for us to collaborate remotely on design documents. These resources are free to use.

Optional Technology

This is a list of technology we may use for extensions of our product. Since the development period is short and the small size of our team, we will postpone these extensions for future deliveries.

Facebook Application API

AJAX

Flash/ActionScript

Silverlight -MS

RAR - deployment/delivery

Notepad++