Software Requirements

- **Object Oriented Design (OOP).** The application will be programmed in PHP 5 utilizing the Zend Framework, custom, and third party classes and will incorporate a high level of OOP design practices.

- **Using standards-compliant HTML and CSS.** This allows sites to work across many platforms and helps with accessibility. This includes the use of micro-formats to generate friendly HTML that can be used across a variety of platforms.

- **Using Ajax to provide a rich user interface.** Performing operations in the background using XMLHttpRequest, web pages can be more functional and intuitive.

- **Sharing data using web feeds and web services.** Users like to aggregate many feeds to easily receive content updates from their favorite sites using web feeds (such as RSS or Atom). Additionally, web services can enable one site to use data from other sites (for instance, we will display maps on the site using Google Maps).

- **Social Networking Tools.** Use some common social networking API's to promote users to communicate with each other.

- **Database Setup.** Using Zend to handle the database abstraction for the Mysql database.

- **Design Patterns.** The application will be built using the Model-View-Controller (MVC) design pattern which will separate *application logic* from *display logic.* The Smarty Template Engine will become the 'view' part of MVC.

Features

Main Home Page
- will display blog posts from all users in a single journal
- registered users will be able to decide whether or not their posts are public and therefore are displayed on the home page.

User Home Page
- a public home page that will display all of a registered users blog posts in a single listing.

User Registration
- new user sign-up
- use CAPTCHA
- create account in database
- new user confirmation email
- create a blog
- validate details

Account Login and Management
- manage users blog
- update account details
- logout from account

User Blogs
- add, edit, and delete blog posts
- tag posts
- upload images to blog posts, and display an image gallery for the users account
- tie geographic data maps to the blogs.

Web Site Search
- users can search for any content on the entire site
- auto-completing search box

Application Management
- will provide basic functionality

SEO Search Engine Optimization
- user friendly URL's
- correct usage of HTML markup
- correct usage of HTTP status codes and content types

Code Commenting
- classes will be commented using PHPDoc
- correct usage of HTML markup
- correct usage of HTTP status codes and content types

Security
- protect application from SQL injection attacks
- protect application from cross-site scripting exploitation (XSS)
- protect application from cross-site request forgeries (CSRF)

Logging
- record all unsuccessful login attempts

Maintainability and Extensibility
- smarty template engine
- database abstraction
- oop programming with php (Object Oriented Design)

Version Control
- project will be stored in a software management version control system, subversion