Nicholas LaPaglia

Masters Project Guidelines and Proposal

1) State the project Name:

The name of the project is the **Preferred Shield Management System**.

2) Discuss the scope of the project. Describe with some detail the problem you will solve:

The scope of the project includes gathering requirements, design, and implementation of a web based information system. Preferred Shield Inc. is a growing company in Illinois selling gutter protection systems to homeowners. Currently the company uses spreadsheets and hardcopy documents to record the business’s relevant data. Information needed by employees is transmitted either verbally or by email correspondence. This current system has led to lost information, wasted time, and miscommunication.

The goal of this project is to provide a single point of contact for communication, and the accessing and storage of data. The availability of data will aid in managing scheduling issues, evaluating resource allocation, providing contact information, and employee performance evaluation.

3) Describe each component in the solution of the problem. For example, if it is a programming project, the components may be functional specifications, design, coding, testing, documentation, and verbal explanation of the delivered project.

Components:

1. Requirements Document:

Gather requirements and create a software requirements document. Meet with ownership to discuss the needs of the organization.

1. Analysis and design Document:

Create an analysis and design document from the gathered requirements and design a system to meet the required functionality.

1. Implementation:

Implement the system using the Java platform and an ORM(hibernate) for persistence.

1. Testing:

Create and implement a test plan to verify accuracy of data input and access.

1. User Guide:

Create a user’s guide to present to the client describing the system functionality with visual examples.

1. Presentation:

Create a power point presentation and a demonstration of the system’s functionality to show how it solves the company’s problem.

4) Describe in detail what you will learn by completing this project:

This project will provide a practical application of the accumulated knowledge acquired during my studies at the university. I will gain a better understanding of the software development life cycle, writing software documentation, the application of object oriented analysis and design principles, and the java web development platform.

Other topics which will be explored include: The Hibernate ORM, design patterns, UML, the java persistence API, Application security, and concurrency.

5) State where you will work on the project and what resources you will use:

I will be working on the project from my home office. I plan on implementing the system using the Eclipse IDE and MySQL database. The resources I plan on using include my software reference library, my personal computer and the internet.

6) Provide a detailed timetable for completion of each component:

1) Software requirements document:

To be completed by the end of week 4 of the semester.

2) Analysis and design document:

To be completed by the end of week 6 of the semester.

3) Implementation:

To be completed by the end of week 12 of the semester.

4) Test plan and testing:

To be completed by the end of week 14 of the semester.

5) User’s guide:

To be completed by the end of week 14 of the semester.

1. Presentation:

To be ready for presentation after week 14 of the semester.

8) Describe at least 3 review points that will be used by your adviser to judge the quality of your completed project:

1) The documentation:

Does the documentation accurately communicate the functional requirements and design of the system.

2) The accuracy of the Project:

Does the system meet the user’s functional requirements.

3) The presentation:

Was the presentation able to describe the problem the system solves, the evolution of the solution of the problem, and a demonstration to prove the software meets requirements.