CIS-4721/4722 Project Documentation

Peter C. Chapin

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Documents

- Proposal
- Requirements
- Architecture
- Schedule
- Design Documentation
- Test and Deployment Plan
- User Documentation
- Web Site

Proposal

- Short: Only a few paragraphs.
- Group membership. Contact information.
- Describe the nature, scope, and purpose of the project. High level overview.
- Answers question, "Why this project?"
- Audience: Management, potential users. potential investors.
- Include comparisons with similar products.

Requirements

- Detailed description of what the project must do.
- Ideally prepared in consultation with users.
- Don't include any design. Easy to do this accidentally.
- Include absolute requirements and "nice to have" requirements... but keep them separate.

Architecture

- Overall structure of the system. Hardware and software blocks + interactions.
- Identify risks: Problems with unknown solutions.
- User Interface. Not necessarily GUI, but every product has some sort of interface.

Schedule

- Partitioning
 - Define milestones
 - Parts not necessary same as blocks
- Schedule
 - When will component tasks be complete?
- Budget
 - How much will things cost?
- Resource allocation (especially personnel)
 - Who is doing what?

Design Documentation

- Audience: Other developers.
- Elaboration of the architecture.
- Hardware blocks, schematics, etc.
- Software structure, pseudo-code, UML, etc. Raw source code for "critical" sections
- Discussion of design trade-offs.
- Future directions.

Test and Deployment Plan

- Describes how testing is done.
- Describes how the system is deployed.
- Audience:
 - Quality assurance personnel.
 - System administrators (who will setup the system).
- Here is where you can present special features of interest only to administrators.

User Documentation

- Audience: People using the product.
- Quick Start and Installation.
- Tutorial.
- Reference.
- Troubleshooting information.
- User docs can be on web site.

Quick Start

- As short as possible
- Designed for users who don't read documentation
- Contains essential facts and warnings only
- Contains installation procedure if appropriate

Tutorial

- Can be long or short, depending on product
- Provide conceptual model
- Organize to allow jumping around... yet also support orderly development
- Include exercises with solutions
- Include material for both basic and advanced users

Reference

- All features discussed exhaustively
- Organize so that specific topics can be found easily
- Okay to assume reader already has significant knowledge of the system
- Not a tutorial!

Web Site, Part 1

- Audience: Potential users and User support.
- Motivation for product.
- Comparison with other products.
- Features
- Pricing and ordering information.
- Contact information.

Web Site, Part 2

- FAQ
- Link to user documentation.
- Detailed troubleshooting guide.
- Updates/patches.
- User support forum.