System design document for ...

authors

date version

1 Introduction

General info. What is this? What does it describe?

1.1 Definitions, acronyms, and abbreviations

Some definitions etc. probably same as in RAD

2 System architecture

The most overall, top level description of the system. Which (how many) machines are involved? What are the system components, and what are they responsible for? Show the dependency between the different system components. If there are more computing entities (machines) involved: show dow they communicate. Describe the high level overall flow of some use stories. Describe how to start and stop the system. Any general principles in application? Flow, creations, ...

2.1 Subsystem decomposition

Describe in this section each identified system component (that you have implemented).

2.2 'first component'

What is this component responsible for and what does it do.

Divide the component into subsystems (packages) and describe their responsibilities. Draw an UML package diagram for the top level. Describe the interface and dependencies between the packages. Try to identify abstraction layers. Think about concurrency issues.

If your application is a standalone then:

- Describe how MVC is implemented
- Describe your design model (which should be in one package and build on the domain model)
- Give a class diagram for the design model.

otherwise:

MVC and domain model described at System Architecture

Diagrams

- Dependencies (STAN or similar)
- UML sequence diagrams for flow.

Quality

- List of tests (or description where to find the test)
- Quality tool reports, like PMD (known issues listed here)

NOTE: Each Java, XML, etc. file should have a header comment: Author, responsibility, used by ..., uses ..., etc.

2.3 'next component'

As above, and continue for all components.

3 Persistent data management

How does the application store data (handle resources, icons, images, audio, ...). When? How? URLs, pathes, ... data formats... naming..

4 Access control and security

Different roles using the application (admin, user, ...)? How is this handled?

5 References