Software Architecture Document

Architectural Representation

Architectural factors are described using a factor table

- Includes the following:
 - o Factor
 - Measures and quality scenarios
 - Variability (current flexibility and future evolution)
 - o Impact of factor (and its variability) on stakeholders, architecture, and other factors
 - o Priority for success
 - o Difficulty or risk

Architectural decisions are described using a technical memo

- Includes the following:
 - o Issue
 - Solution summary
 - Factors resolved
 - Solution
 - Motivation
 - o Unresolved issues
 - Alternatives considered

Architectural views are used to provide perspectives that emphasize key and noteworthy information, ideas, and motivations

- Use Case View
- Logical View
- Data View
- Implementation View
- Deployment View

Layers pattern is used to produce a logical layered architecture

- User Interface layer
- Domain layer
- Technical Services layer

BAIS3130 Software Engineering I: Product Research Concepts

Architectural Factors

• See Supplementary Specification

Architectural Decisions

Technical Memo
Issue:
Solution Summary:
<u>Factors</u>
<u>Solution</u>
<u>Motivation</u>
<u>Unresolved Issues</u>
<u>Alternatives Considered</u>

Use Case View

- Architecturally significant use cases
- Discussion and Motivation

Logical View

- Layers
- Architecturally significant design classes
- Discussion and Motivation

Data View

- Architecturally significant data elements
- Discussion and Motivation

Implementation View

- Architecturally significant components
- Discussion and Motivation

Deployment View

- Architecturally significant nodes and physical configuration between nodes
- Discussion and Motivation