SFWR ENG 3A04 Summary

Author: Kemal Ahmed
Instructor: Dr. Ridha Khedri
Date: Fall 2014

Math objects made using MathType; graphs made using Winplot.

Please join GitHub and contribute to this document. There is a guide on how to do this on my GitHub.

Table of Contents

Lecture 2

Hierarchy of Requirement Specifications

Pre Requirements:

- Requirements:
  - Requirements Document
    - System Specifications
    - Other Documents
      - Legal
      - Security
      - Privacy
  - Architectural Design
    - Types:
      - Dynamic
      - Stable
      - Determined by:
        - Elements
        - Connectors
    - Detailed Design

Traceability Matrix

Traceability Matrix: a method of showing how each of the elements satisfies a requirement. You can use this to determine if a feature is necessary or if you are missing a feature.

Elements (E_i) \ Requirements (R_i)	R_1	R_2	R_n
E_1		P	P
E_2	T		
E_n			

Early Assignment Details

- The assignment can be submitted to a contest
- 2014-15 connect
- dx.org/connect
- Deadline: April 1st, 2015
- Prize: $2000

Requirements Cont.

Business Event (BE): input to a system

Environment / system interactions:

- *I/O between system and user*
- look at the system as a black box
- the last output occurs when the "business has been carried

Viewpoints (VP):

- *A target set of requirements*
- Think of it as different perspectives of how someone would want the system to be designed
- Includes things like who is using your product, but also who will be affected, such as economic perspective, i.e. cost

The more viewpoints you have, the better the representation of the system because you get a better overall perspective.

e.g. 1)

For a BE_1, you have a list of VPs from VP_1 to VP_n, and for BE_2 you have a list of VPs from VP_1 to VP_m.

If you have 2 viewpoints that have little relevance, you don't get rid of it. Instead, you mark them as void. This is because you may need it for the next BE(s)

Functional Requirements:
Non-functional Requirements: