CSE 3001

SOFTWARE ENGINEERING

Digital Assignment – 1

D2 | SJT710

WINTER SEMESTER 2020-21

by

SHARADINDU ADHIKARI

19BCE2105

Prob:

Draw a Concept Map for the Requirement Engineering Process

Rubrics	1. Clarity 2. Content 3. Presentation	
	NB: NO specific guidelines for preparing the concept map- Online tools or u can draw.in hand	

Sol:

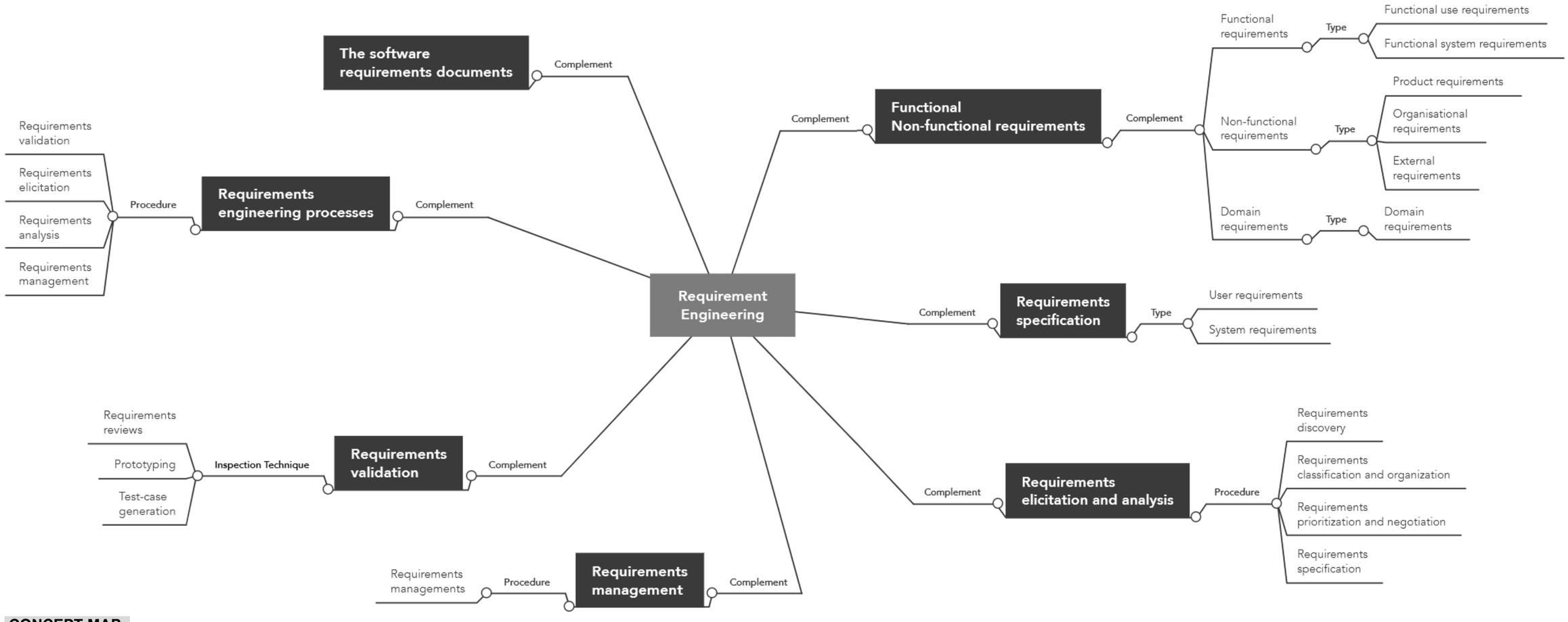
Requirements play an important role in software engineering, but their perceived usefulness means that they often fail to be properly maintained. Traceability is often considered a means for motivating and maintaining requirements, but this is difficult without a better understanding of the requirements themselves.

Requirements engineering is the discipline that involves establishing and documenting requirements. The various activities associated with requirements engineering are elicitation, specification, analysis, verification and validation, and management.

High quality requirements are critical to the success of a software project, because all other development activities depend on them. Consequently, it is of utmost importance that requirements are clear and usable, so that stakeholder needs are readily found and understood, and mistakes and misunderstandings are avoided.

An important limiting factor on the clarity of requirements documents is the clarity of requirements specification formats. While properties such as expressibility, analyzbility, and completeness are generally accepted as desirable, clarity has been little studied in the context of requirements documents or requirements specification formats.

Clarity is underappreciated as a requirements specification quality attribute. Different use cases include clarity of requirements forms, operationalized as ease of problem detection, least obstructive to understanding, and understandability by stakeholders.


Requirement Engineering
The software requirements documents
Complement
Requirements engineering processes
Complement
Procedure
Requirements validation
Requirements elicitation
Requirements analysis
Requirements management
Functional Non-functional requirements
Complement
Complement
Functional requirements
Type
Functional use requirements
Functional system requirements
Non-functional requirements
Type
Product requirements
Organisational requirements
External requirements
Domain requirements
Type
Domain requirements
Requirements specification
Complement
Type
User requirements
System requirements
Requirements elicitation and analysis
Complement
Procedure
Requirements discovery
Requirements classification and organization
Requirements prioritization and negotiation
Requirements specification
Requirements validation
Complement
Inspection Technique
Requirements reviews
Prototyping
Test-case generation
Requirements management
Complement
Procedure
Requirements managements

CONCEPT MAP .

References:

[1]. Shamal Faily, John Lyle, Andre Paul, Andrea Atzeni, Dieter Blomme, Heiko Desruelle, and Krishna Bangalore. "Requirements Sensemaking Using Concept Maps". Fraunhofer FOKUS, Berlin. October 2012.

[2]. Zhi Jin. "Requirements Engineering Methodologies". ScienceDirect. 2018.

[3]. Thomas A. Alspaugh, Susan Elliott, Sim Kristina, Winbladh Mamadou H., Diallo Leila, Naslavsky Hadar, and Ziv Debra J. Richardson. "The Importance of Clarity in Usable Requirements Specification Formats". ISR Technical Report. September 2006.

[4]. mindmeister.com for designing the Concept Map.

[5]. Roger S. Pressman, and Bruce R. Maxim. "Software Engineering: 8th Edition – A Practitioner's Approach".