FORUM: TITLE OF THE DOCUMENT

STUDENT 1 STUDENT 2 STUDENT 3 STUDENT 4

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1. ACTIVITIES

Forum 1

Develop the following work products based on the document "Motivation in software engineering industrial practice: a cross-case analysis of two software organizations"

- A pre-conceptual schema with at least 15 concepts, ten structural relationships, and five dynamic relationships. Such a schema must also have five implications and two events/conditionals. Additionally, you must include ten achievement relationships attached to concepts/dynamic-relationships/structural-relationships. Finally, you must add at least ten elements denoting problems (nouns, verbs, negations, adverbs, or adjectives). The pre-conceptual schema must be referenced by using a document traceability table with the page/paragraph of the text fragments.
- A goal diagram consistent with the pre-conceptual schema by following the rules of the book *UNC-Method revisited*.
- A cause-and-effect diagram consistent with the pre-conceptual schema by following the rules defined in the Fabio Vargas' PhD Thesis.

Forum 2

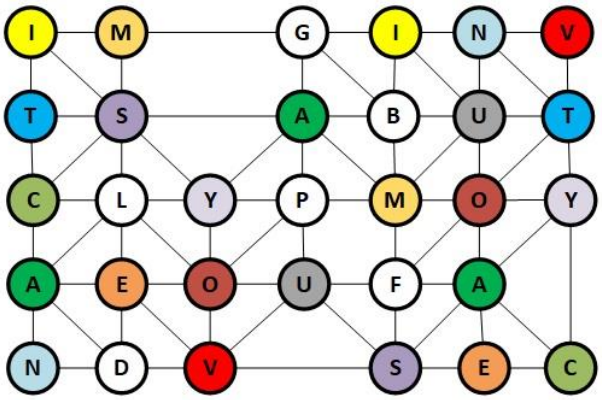
Based on the document "The organization of software teams in the quest for continuous delivery: a grounded theory approach," develop the following activities:

ACTIVITY 1
Design four rectangular letter bridges (see an example in the Figure) with the following features:

- Select one sentence in English from the document. Send—as soon as possible and at least 72 hours prior to the class session—an email message to cmzapata@unal.edu.co for requesting authorization for the sentences. Sentences must be self-contained—complete sense in isolation—, linked to the forum topic, and verb-centered. Acronyms must be replaced by the representing words, *e.g.*, UML by unified modeling language. Be advised that the longer the sentence, the lesser the possibilities to be represented.
- You can put a circle in each vertex of a 4x6 matrix (see the Figure). Each circle has a letter. Letters can be connected with horizontal, vertical, and diagonal bridges. One bridge cannot be crossed with another one. You can follow the letters in order to read the entire sentence. One letter can be used as many times as you can. Each letter can appear one or two times in the letter bridge, but two of them can appear three times. The maximum length of horizontal/vertical bridges is two squares, but diagonal bridges just can be traced from one letter to another adjacent one. Choose a color code for repeated letters. Single letters can be uncolored.
- All of the letters must have an associated concept in English—a noun, since noun phrases are not allowed—with a definition taken from the Essence standard, the UML specification, or from any software engineering glossary. You must establish the document, page, and paragraph from where you extracted the definition. Definitions can be reused in several letter bridges. For example, if you associate the concept *Phase* with the letter *P*, you can reuse it in all of the letter bridges. You cannot use the concept you are defining or any variation of the concept inside the definition, *e.g.*, you cannot define *USER* as *someone who USES the software system.* Instead, you should define it as *someone who applies software systems in a daily manner.* Also, the concept definitions must be adjusted to the context of software engineering. For example, you cannot define *phase* as *a homogeneous,*

physically distinct, and mechanically separable portion of matter present in a nonhomogeneous physicochemical system. Instead, you can define it as *a distinguishable part of a software development process.*

- The file with letter bridges and definitions must be sent at least 72 hours before the class session by email to cmzapata@unal.edu.co in order to gain feedback



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ACTIVITY 2

Based on the same document, design a 6-player board game for understanding the roles of software teams in continuous delivery. Fill in the template for designing games (see Gomez's MSc Thesis, page 44) both for the original game (*e.g.*, monopoly, snakes & ladders, poker, etc.) and the game you are designing. In addition, you must attach the files required for playing the game—*e.g.*, Word®, Excel®, Power Point®, Flash®, etc. Such files must run in a centralized way—a single board visible for all players all time. The game design must contain a metaphor linked to software engineering. Consequently, if you want to talk about players/tokens you must use names of actors like analyst or project manager; if you want to talk about board, you must use something like requirements set or development stages, depending on the game you are designing. The game must be friendly for people outside the scope of software engineering. Therefore, a question answering game is unsuitable in this case, since it privileges the participation of people who know the answers to the questions. The game design must be sent at least 72 hours before the class session by email to cmzapata@unal.edu.co in order to gain feedback.

2. REFERENCES

Search and include pdf files of at least two additional documents (research papers with ISSN or research chapters with ISBN) related to the topic of the forum. Such documents must be referenced as follows in either case:

LAST NAME, NAME. *Title of the paper*. Journal, ISSN, Volume (if applied), number (if applied), page range, year.

LAST NAME, NAME. "Title of the chapter". Name, Last Name (Editors), *Title of the book*, Publisher, city, page range, year.

You must relate the documents you include to the document of the forum by selecting two fragments of the document of the forum, designing the complete pre-conceptual schema of each fragment, and then finding a fragment in each additional document related to each one of the pre-conceptual schemas. Finally, you must design the conceptual schema of the additional fragments. Each pair of related pre-conceptual schemas should share at least a triad and an additional concept. Consequently, you must present four pre-conceptual schemas: two from the document of the forum and one from each one of the additional documents. You must also fill in the document traceability table for all of the pre-conceptual schemas, locating the identified information with page and paragraph. Authorization to the additional documents should be requested by email to cmzapata@unal.edu.co (until 72 hours before the deadline), since each document can be used by only one team.