**CS4473B/CS9551B**

**Requirements Engineering**

**GROUP TEMPLATE**

**Reading Summary and Questions and Answers**

**Rules – please note these carefully:**

● Submission filename MUST be: **“Group”<id>\_”Chapter” (or reading) <id> (e.g., Group 3\_Chapter 2)**

● This template is similar in style to the Individual template.

o However, there is a new section (Part 3) on capturing concepts, entities, relationships, etc., which would be handy for creating a domain model.

● Group deliberates over the Individual Templates from the group members and creates a Group Template that is the shared view of the group members. Source material can be from one or more Individual Templates, adapted, or entirely newly created by the group.

● Pay particular attention to the “Comment” section as this records the group’s thinking.

● **Submission to be done on OWL as announced.**

● Group Template will be assessed.

**Part 1: Summary**

| **Group No:** |
| --- |
| **List here the Group Members actually present in the class (absentees will be penalised):**  **Group Member** Name: Sihui He  **Group Member** Name: Chun Yang  **Group Member** Name: Yulun Feng  **Group Member** Name: Yuhan Zhang  **Group Member** Name: Yifei Zhang |
| Please write the **full reference** of the reading in the WHITE box below.  o Chapter #, Chapter title (or article title if appropriate).  o Book title  o Author(s)  o Publisher  o Book edition, Year of publication  (Example shown below; overwrite on that space.) |
| Chapter 30 – Tools for requirements engineering  Software Requirements  Wiegers and Beatty  Microsoft  3rd Ed., 2013 |
| Please write in the WHITE box below an abstract of the reading in **50-75 words**. |
| **Chapter 30 discusses the limitations of traditional document-based requirements management and introduces requirements development and management tools (RD and RM tools) that provide solutions to these limitations. It outlines the benefits of RM tools for handling changes, tracking requirements status, managing multiple versions, and facilitating stakeholder communication. This chapter also provides practical advice on selecting, implementing, and ensuring user adoption of these tools, emphasizing the importance of aligning tool selection with organizational processes and culture.** |

**Part 2: Questions, Answers and Comments**

| Please create **ONE** important **Question-Answer-Comment set**  as agreed by the **group** from the given reading.  · Source can be from Individual Templates or completely new.  · The key is in discussing the individual templates and agreeing upon a shared view by the group. Prioritise what your group considers as a key issue to put forward. |
| --- |
|  |
| For staff use only:  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **QUESTION (state your question such that the answer is what you captured from the source):**  **How important is it for a requirements management tool to integrate with other software tools used in a project, and what are the implications for requirements engineering and project management?**      **ANSWER (as-is): <***Select one***: Hardcopy/ebook><Location in the book> …….**  When you are selecting an RM product determine whether the tool will be able to exchange data with the other tools you use. Think about how you’ll take advantage of these product integrations as you perform your requirements engineering testing project tracking and other processes. For example, consider how you would define trace links between functional requirements and specific design or code elements and how you would verify that all tests linked back to specific functional requirements have been successfully executed.  **YOUR COMMENT (also include where possible: an \*example\*, citation, justification, etc. -- to support your comment):**  **The integration capabilities of a Requirements Management (RM) tool are critical, as they ensure seamless data exchange and consistency across the various tools used in a project. This connectivity enables a more holistic and efficient approach to project management by linking requirements directly to design, code, and testing elements. It facilitates impact analysis and ensures that tests are aligned with the requirements they are meant to verify. Efficient integration saves time, reduces errors, and streamlines the overall development process, ultimately contributing to the project's success. In my own experience, the development team typically uses tools like Jira, approval applications, Kanban and ServiceNow to keep the software on track.**  **Sharing real-world examples where the absence of RM tools led to project issues can help stakeholders understand the potential risks and inefficiencies of not using such tools. This approach can encourage a more receptive attitude toward adopting new technologies. To convince a manager, a client using the RM tool will be efficient is a big progress.**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  |

**Part 3: Elements of the Architectural Domain Model**

| Please list below, in bullet point form, ideas that capture noteworthy information regarding artefacts, operations, conditions, relationships (e.g., produced-by, used-in, acts-on, etc.) from the assigned reading (and possible other sources – identify these). This could then be a source of information for creating your domain model. |
| --- |
|  |
| * Requirements development tools   + Elicitation tools   + Prototyping tools   + Modeling tools * Requirements management tools   + Benefits of using an RM tool     - Manage versions and changes     - Store requirements attributes     - Facilitate impact analysis     - Identify missing and extraneous requirements     - Track requirements status     - Control access     - Communicate with stakeholders     - Reuse requirements     - Track issue status     - Generate tailored subsets   + RM tool capabilities * Selecting and implementing a requirements tool   + Selecting a tool     - Identify your organization’s requirements for the tool to serve as evaluation criteria     - Prioritize and weight the criteria according to what capabilities or other factors matter most to your organization     - Set up demos or acquire evaluation copies of the tools you want to consider     - Score each tool against the criteria in a consistent manner     - Calculate a total score for each tool by using your criteria scores and the weights you assigned to them     - For each tool that scored well, use it on an actual project to see if it behaves as you anticipated from the objective scores     - To make a final selection, combine the scores, licensing costs, and ongoing costs with information on vendor support, input from current users, and your team’s subjective impressions of the products.   + Setting up the tool and processes   + Facilitating user adoption |
|  |