CSE 416

Design Review Preparation

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Format

- 30 minutes
- Introduce your team
- Team starts with their choice of sequence diagrams
- Trace the logic one method call at a time
- Subsequent diagrams
  - Instructor requests a use case (from the master list)
  - Discuss the sequence/activity diagram as before
  - Repeat

2

3

Evaluation Criteria …

Design review is primarily for the server logic

- Sequence diagram form - use an electronic UML tool (e.g., LucidChart) and a set of notations consistent with the UML slide material and the UML components available with the tool.
- Class diagram form - Same as above
- Logic of sequence diagram - Your sequence diagrams should be logically consistent. For example, a method call from an object is only shown if there was an immediately preceding method call to that object. Another example, a method call is made to an object only if the calling object has a reference to the called object. In addition, the logic of the sequence diagram should demonstrate that it will produce the desired results.

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.. Evaluation Criteria

- Knowledge of relevant APIs - You should show an understanding of any libraries and tools used in your design (e.g., JPA/Hibernate). However, you do not need to show the messages within Spring Controller.
- Scope of design - You most likely will not have completed all your sequence diagrams at the time of your design review. However, you should have at least one sequence diagram covering each component of your design (e.g., client-server communications, access to the DB persistence layer, etc.)
- Activity diagrams for your preprocessing and SeaWulf (Python) code

4

5

Hints …

- You only need to show a method call to the persistence layer. With JPA, the persistence layer would be represented as an em:EntityManager object
- You do not need to include any Http client logic in your sequence diagrams other than the user action (e.g., click), and the call to the XMLHttpRequest object (or fetch API of the Window object).
- For Http client-server communication, you can show the message to the server with the Http method (e.g., POST), followed by the data being passed in parentheses (e.g., POST(state)).
- Be sure to specify the HTTP method in capital letters. This is a convention that helps identify it as an HTTP method. Directly below that message, show a message to your controller object.

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… Hints

- The emphasis of your design review will be on your sequence diagrams. Your class diagram will be used only if there is a need to understand something we see in your sequence diagrams.
- If any of your sequence diagrams is too large, you might consider decomposing it into separate sequence diagrams, with one diagram sending a message to the second diagram.
- Be careful about showing loops in your sequence diagrams. In some cases, a nested loop might be better represented as a call to some method (that contains the loop).
- Include at least one UML activity diagram for preprocessing and one for the MGGG algorithm

6