

Assignment 4: Analysis to Design Joint Assignment with CSS502

In this assignment you will transition from requirements to design and then to code in CSS502. Thus, you will create robustness diagrams, a sequence diagram, and a class diagram. Please refer to the CSS502 course website for the project description.

Checklist:

The following list defines the minimum requirements for the analysis models. All diagrams must be drawn with a CASE tool (e.g. MS Visio, Rational Rose, ArgoUML) except where explicitly noted otherwise.

| Deliverable | Minimum |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <p>Robustness Diagram</p> <ol style="list-style-type: none"> 1. Shows entity objects, boundary objects, controllers 2. One robustness diagram for each use case description | <p>2 Use Case descriptions + 2 robustness diagram</p> |
| <p>Sequence Diagram</p> <ol style="list-style-type: none"> 1. Shows the interacting objects and messages between the objects 2. One sequence diagram for each use case description | <p>2 Sequence diagrams</p> |
| <p>Class Diagram</p> <ol style="list-style-type: none"> 1. Shows the objects within your system, their relationships (e.g., aggregate and generalization), their attributes and operations | <p>1 diagram</p> |

Evaluation Criteria

| Criteria | Evaluation |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Robustness Diagram</p> | <ul style="list-style-type: none"> • Is syntax correct? Are at least two different use cases documented? • Are the alternate courses included and color coded? • Is all of the interaction between interfaces, processing, and data complete? Are the classes identified meaningful objects that appropriately |

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|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | partition the task? |
| Sequence Diagram | <ul style="list-style-type: none"> • Is the syntax correct? Are at least two sequence diagrams provided? • Does the sequence accurately reflect the use case in time and in actions? Are the actions/methods meaningful and enough detail to carry the expected task if implemented? • Are the objects classes in the domain data model if appropriate? Are enough object classes defined to carry out the functionality expected or too general "do-it" functionality? |
| Class Diagram | <ul style="list-style-type: none"> • Is the syntax correct? • Are the classes carefully selected from the Sequence Diagrams? • Is the relationship between objects specified? Multiplicities specified? • Are the attributes and methods specified for the classes? |
| Summary and Effort | <p>Does the document appear professional in nature?</p> <p>Are the diagrams easy to understand? Were CASE tools used to create diagrams?</p> <p>Did the models meet and exceed the minimum requirements?</p> |

Points: 60