

IS446 – Systems Analysis and Design

Instructor: Kevin Trainor

Assignment: Use Case Specification and Activity Diagram Practice Assignment

Course Component: Skills Practice Assignments

Grading Rubric

Base Point Allocation

Base Points (23 available points)

Requirements

Assignment submitted on-time or within the allowable late period.

Percent Credit	Description
100	Meets all expectations.
0	Not submitted or submitted too late.

Submission

Timeliness (16 available points)

Requirements

Must be submitted by date and time indicated in the weekly schedule.

Percent Credit	Description
100	On Time
0	Late
0	Not submitted or submitted too late

Physical Submission (10 available points)

Requirements

One (and only one) submission should be made to the Canvas submission activity.

The file submitted must be of type .ZIP

The .ZIP file must be named according the conventions described in the instructions.

The .ZIP file must contain a directory that is named according the conventions described in the instructions.

The directory must contain files named according to the conventions described in the instructions.

The files submitted must be of type .PDF

Percent Credit	Description
100	Meets all expectations.
50	Meets nearly all expectations.
0	Does not meet expectations.
0	Not submitted or submitted too late.

Exercise 1 (Regular) - Use Case Specification

Completeness (18 available content points)

Requirements

The document submitted must be recognizable as a use case specification as demonstrated in this course during lectures and tutorials.

The specification should include sufficient action to accomplish the work necessary to meet the requirements as expressed in the case scenario.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Technique (18 available content points)

Requirements

The use case name must match exactly the use case name specified in the use case diagram. It should be included in all places required by the use case specification template.

The number and names of actors mentioned in the narrative flows within the use case specification must match exactly the actors shown on the use case diagram.

Metadata fields in the use case specification forms must be completely and accurately populated.

The Brief Description must be descriptive and brief.

There must be a Basic Flow narrative that describes the normal or most frequent course of action (the Happy Day scenario).

There must be an alternative flow for each possible deviation from the basic flow.

All flows (basic and alternative) must state exactly how they begin.

All flows (basic and alternative) must state exactly how they end.

Within a flow narrative, action should alternate between actors and System.

If requirements are shown in the Special Requirements section, they must be non-functional rather than functional requirements. All functional requirements must be expressed in either the Basic Flow or Alternative Flows.

All pre-conditions for the use case must be explicitly stated (typically as other use cases that must be completed before this use case can be run).

Pre-conditions should not include functional or non-functional requirements that should be expressed elsewhere in the document.

Post-conditions must be provided for both successful completion and unsuccessful completion of the use case.

Post-conditions must only address the system state and must not include functional or non-functional requirements that should be addressed elsewhere in the document.

An Extension Points section should not be included.

At least one Key Scenario must be provided.

Key scenarios must only refer to a combination of actions that occur as the use case flows through the basic flow and the alternative flows. Details of those flow actions should not be repeated when describing the key scenario.

Key scenario descriptions should include a reference to any activity diagrams available to further illustrate the scenario.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Exercise 1 (Regular) - Activity Diagram

Completeness (5 available content points)

Requirements

Diagram must describe the intended use case scenario (and not some other scenario).

Diagram must include all activities that are part of the scenario as described in the use case specification.

Diagram must NOT include any activities that are NOT part of the scenario as described in the use case specification.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Technique (5 available content points)

Requirements

Diagram must correspond to a scenario identified in the Key Scenarios section of the use case specification.

The logic flow of the activity diagram must match the logic flow presented in the use case specification narratives.

Swim lanes should be provided for System and for each actor that participates in the scenario.

Swim lanes should be provided ONLY for System and for each actor that participates in the scenario.

The name System and Actor names should be capitalized.

The text inside of each activity box need not name the actor or System explicitly since that information is implied by the swim lane.

When decisions symbols are included, each path exiting the decision symbol must have a guard condition.

Guard conditions must appear in square brackets.

When alternative flow paths are created by a decision symbol, flow must be reunited later in the diagram with a merge symbol.

When parallel paths are created by a fork symbol, the parallel paths must subsequently meet at a join symbol.

Each diagram should have only one start symbol and one stop symbol.

Each activity symbol on the diagram must be part of a path that connects continuously from the start symbol to the stop symbol. Isolated activity symbols are not allowed on the diagram.

Flow arrows may not be used to represent activities even if they are labeled with names that sound like activity names.

Activity symbols may not be used to represent decisions even if they contain text that indicates a decision is being made.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Exercise 2 (Challenge) - Activity Diagram

Completeness (3 available content points)

Requirements

Diagram must describe the intended use case scenario (and not some other scenario).

Diagram must include all activities that are part of the scenario as described in the use case specification.

Diagram must NOT include any activities that are NOT part of the scenario as described in the use case specification.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Technique (2 available content points)

Requirements

Diagram must correspond to a scenario identified in the Key Scenarios section of the use case specification.

The logic flow of the activity diagram must match the logic flow presented in the use case specification narratives.

Swim lanes should be provided for System and for each actor that participates in the scenario.

Swim lanes should be provided ONLY for System and for each actor that participates in the scenario.

The name System and Actor names should be capitalized.

The text inside of each activity box need not name the actor or System explicitly since that information is implied by the swim lane.

When decisions symbols are included, each path exiting the decision symbol must have a guard condition.

Guard conditions must appear in square brackets.

When alternative flow paths are created by a decision symbol, flow must be reunited later in the diagram with a merge symbol.

When parallel paths are created by a fork symbol, the parallel paths must subsequently meet at a join symbol.

Each diagram should have only one start symbol and one stop symbol.

Each activity symbol on the diagram must be part of a path that connects continuously from the start symbol to the stop symbol. Isolated activity symbols are not allowed on the diagram.

Flow arrows may not be used to represent activities even if they are labeled with names that sound like activity names.

Activity symbols may not be used to represent decisions even if they contain text that indicates a decision is being made.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

Total Available Points = 100

Please Note: This grading rubric allows for adjustments to be made to your content point score. The total number of content points available to be awarded on this assignment is 51. An adjustment of up to 36 content points may be made for submissions that have a low content point score and yet meet the following criteria: Assignment must be submitted on time. Work submitted must show good faith effort on all REGULAR EXERCISES. It is possible to qualify for the points adjustment without having submitted work on the CHALLENGE EXERCISE.