

CSC-382 Summer 2021
Final Exam

Assigned: 8/2/21 @ 11:59PM
Due: 8/16/21 @ 11:59PM (2 weeks)
Points Possible: 130

The Final Exam may be completed as a group assignment. All members' names must be put on each submission; however, each person is to submit a copy of the final exam on BB. The final page of the submission must have a team evaluation (1 or 2 paragraphs on the team's participation). All work must be submitted electronically, to Blackboard, and everything must be in one file (word or pdf).

Every group must work alone. IF I FIND ANY ARTIFACTS (i.e., drawings, etc.) COMMON BETWEEN TWO GROUPS THEN BOTH GROUPS GET A ZERO (0) FOR THE FINAL EXAM GRADE.

***** NO LATE SUBMISSION WILL BE ACCEPTED FOR ANY REASON! *****

Every group must work alone. IF I FIND ANY ARTIFACTS (i.e., drawings, etc.) COMMON BETWEEN TWO GROUPS THEN BOTH GROUPS GET A ZERO (0) FOR THE MIDTERM GRADE.

Team Deliverables –

1. (10 pts.) Zachman:
 - a. Fill out the first row of the Zachman Framework for the **scope** of the system. Note you do not need to create a scope statement, but you need to fill out a table for each column of this first row.
2. (20 pts.) Use Cases:
 - a. Develop the Use Case context diagram showing all the primary and secondary actors and their usages of the system.
 - b. Develop two (2) Narrative Use Case for every primary actor you have identified (have at least 5 steps and use the simplest template from class).
3. (20 pts.) Activity and Swim Lane Diagrams:
 - a. Make an Activity Diagram and a Swim Lane Diagram corresponding to one (1) of the above text Use Cases.
4. (20 pts.) Candidate Classes and CRC Cards:
 - a. Develop a list of at least twenty (20) candidate application classes (also be sure to define the Stereotype that led you to choose each of the candidates)
 - b. Develop CRC Cards for ten (10) of these classes.
5. (20 pts.) Class Relationships:
 - a. Develop a singular, or individual, class diagram(s) and include all the following relationships amongst your classes:
 - i. the associations

- ii. the inheritances
- iii. the aggregations and/or compositions
- iv. the dependencies.

6. (10 pts.) Sequence Diagram/Charts and State Diagrams:
 - a. Develop two (2) Sequence Diagrams/Charts
 - b. Develop two (2) State Diagrams
7. Components: (10 pts)
 - a. Define one (1) component and draw the classes that would be part of this component and be sure to identify the methods that would serve as the interfaces to this component.
8. Testing: Describe in detail how the application will be tested – this will include which testing scenarios will be utilized (regression and/or standard scenarios) and what will constitute successful tests and overall testing success. A complete testing plan should be at least three pages in length with no obvious gaps in the test plan and the included test scenarios. (20 pts.)