

CSC340S Asst3 - Information System Design

Detailed Marking Scheme

Marker:

Team: _____

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Total Marks: _____/101

Marks for this assignment depend on the factors listed below.

A: Global Architecture (20%). Description and justification of the hardware, networking and software platform selected for the design; also, description and justification of the software architecture adopted.

Value 20

marks: _____

- Specification of the computer network (existing or new)
() insufficient () partially sufficient () adequate
- Specification of the hardware (existing or new)
() insufficient () partially sufficient () adequate
- Specification of the software platform (operating system and other commercial software you will be using for your system)
() insufficient () partially sufficient () adequate
- Specification of the software architecture, for example, client-server, MVC, layered, etc
() insufficient () partially sufficient () adequate
- Identification of sub-systems and major components
() insufficient () partially sufficient () adequate
- Justification that the overall design meets all requirements
() insufficient () partially sufficient () adequate

B: Program Design (21%). A description of the detailed design of the application component of the system, given in terms of class, sequence, and state diagrams.

Value: 21

marks: _____

B1. Class Diagrams (7%)

Value: 7

marks: _____

- (Informal) Description of class diagrams.
() insufficient () partially sufficient () adequate
- A description derived from the data dictionary was included.
() yes () no
- Quality of the diagrams
() Little understanding of class diagrams.
() Some understanding, but there are serious flaws or omissions.
() Reasonable diagrams, but not enough to capture the design of the application and/or there is missing information from some diagrams, e.g., attributes, operations, multiplicities
() Good and complete diagrams, cover pretty well the design
() Excellent work
- Justification that the design meets relevant requirements
() insufficient () partially sufficient () adequate

B2. Sequence Diagrams (7%)

Value: 7

marks: _____

- (Informal) Description of sequence diagrams.
() insufficient () partially sufficient () adequate
- A description derived from the data dictionary was included.
() yes () no
- Quality of the diagrams
() Little understanding of sequence diagrams.
() Some understanding, but there are serious flaws or omissions.

() Reasonable diagrams, but not enough to capture the design of the application and/or there is missing information from some diagrams, e.g., conditional branching or terminations

() Good and complete diagrams, cover pretty well the design

() Excellent work

- Justification that the design meets relevant requirements

() insufficient () partially sufficient () adequate

B3. Statechart Diagrams (7%)

Value: 7 **marks:** _____

- (Informal) Description of statechart diagrams.

() insufficient () partially sufficient () adequate

- A description derived from the data dictionary was included.

() yes () no

- Quality of the diagrams

() Little understanding of statechart diagrams.

() Some understanding, but there are serious flaws or omissions.

() Reasonable diagrams, but not enough to capture the design of the application and/or there is missing information from some diagrams, e.g., events, conditions and actions for various transitions

() Good and complete diagrams, cover pretty well the design

() Excellent work

- Justification that the design meets relevant requirements

() insufficient () partially sufficient () adequate

C. Database Diagrams (20%)

Value: 20 **marks:** _____

- Class and ER diagrams describing all data to be stored in the database, along with identifiers and other constraints

() insufficient () partially sufficient () adequate

- Workload data (expected number of instances for different classes, frequency of most important operations)

() insufficient () partially sufficient () adequate

- Restructuring of the class diagram

() insufficient () partially sufficient () adequate

- Generation of the relational schema

() insufficient () partially sufficient () adequate

- Normalization of the schema

() insufficient () partially sufficient () adequate

- Justification that the design meets relevant requirements

() insufficient () partially sufficient () adequate

D. User Interface Design (20%). Covers the design of all user interfaces to be supported by your system.

Value: 20% **marks:** _____

- Clear description of the different user groups

() insufficient () partially sufficient () adequate

- State diagrams describing the dialogues supported by the interface

() insufficient () partially sufficient () adequate

- Mockups of windows

() insufficient () partially sufficient () adequate

- Website design (if relevant)

() insufficient () partially sufficient () adequate

- Input/Output design

() insufficient () partially sufficient () adequate

- Justification that the interface design meets relevant requirements

() insufficient () partially sufficient () adequate

E. Supporting Documentation (10%). Supporting documentation for the selections you made for hardware, software and networking (eg, prices, configurations, vendors considered,...), meetings with your customer (if any), meeting among team members, supporting evidence for some of your design decisions,...

Value: 10 **marks:**

F. Presentation (10%): The style of your presentation, including language, grammar, clarity, organization of appendices, etc.

Value: 10 **marks:** _____

F1. Language: Deduction of marks for each spelling or grammatical error.

Value: 5 **marks:** _____

F2. Style and clarity: Deduction of marks for each unlabeled figure or point of confusion, or missing style requirement (e.g., table of contents, proper title page, page numbers, introduction, conclusion, etc.).

Value: 5 **marks:** _____