

**Minnesota State University Moorhead
2006-2007 Assessment Plan Cover Sheet**

(An electronic version of this form can be accessed at <http://www.mnstate.edu/assess>)

Note: All programs will complete this form.

Degree Program: Computer Information Systems

Department: CSIS

College: CBI

Date: 11/9/2006

Is this assessment plan your existing plan, a new assessment plan or a revision of an existing plan?

Existing New Revision

1. Name(s) of Department Assessment Coordinator and/or Assessment Committee Members

Andrew Chen

2. List of All Student Learning Outcomes. (List and number all outcomes, placing an asterisk (*) by the outcomes you are assessing this year.)

Students will be able to competently develop computer software. (*)

Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech.

Students will possess competitive and comprehensive discipline-specific content knowledge. (*)

Students will be able to solve problems in their careers.

3. Explain how the student learning outcomes are appropriate to department or program goals, as identified in your most recent Quality Improvement Plan. Please note if the program is accredited by an external agency.

Our program is not accredited by an external agency, however, we are preparing for accreditation within the next few years. The most recent statement of program goals can be found in the 5-year report which was done 7 years ago, and many of them are further clarifications of what is found in that third student learning outcome. One of them maps directly to the first and fourth student learning outcome. One of them is more specialized than our second student learning outcome.

4. Signatures

Department Chair or Program Director

Dean or Director

Required Attachments:

1. Assessment Planning Forms
2. Records of department meetings when Assessment Plan was discussed and approved.

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Academic Program: Computer Information Systems

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to competently develop computer software. (1)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input checked="" type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

In this major, many courses which involve the development of computer software are required. Those are the courses which address this outcome.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

Selected project reports from the course "Design, Implementation and Support of Information Systems". A rubric sheet should be found submitted with this document.

5. Who is assessed? When are they assessed?

A representative sample (to be determined by the instructor) of such work will be collected from students in the "Design, Implementation and Support of Information Systems" class when those students take that course when it is taught.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

The individual faculty member teaching that class is responsible for collecting data. The results will be discussed by the faculty members once a semester at a meeting that is designated for the discussion of those results.

7. What is level of student performance is expected for this outcome?

The first time this is done, faculty members will establish a baseline against which we can compare this. Future revisions to this assessment plan will be revised accordingly.

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Academic Program: Computer Information Systems

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech. (2)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input checked="" type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input checked="" type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

In various courses required for the major, papers, projects, and presentations involving written and oral communication are required. Additionally, relevant courses from other disciplines are required for purposes of ensuring that this outcome is properly addressed.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

Samples of written work will be collected. Faculty will observe and document the performance of presentations.

5. Who is assessed? When are they assessed?

Students in required courses involving written or oral communication are assessed. They are assessed when they take such courses.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

The faculty teaching such courses are responsible for collecting the data. The results will be discussed by faculty members during a meeting especially set aside for purposes of discussing such things.

7. What is level of student performance is expected for this outcome?

The first time this is done, a baseline standard against which we can compare will be documented. After that, we will strive for improvement.

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Academic Program: Computer Information Systems

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will possess competitive and comprehensive discipline-specific content knowledge. (3)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input checked="" type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

The knowledge that students should possess is covered in the courses required for the program. All required courses participate in this.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

A special assessment test created by the faculty that teach upper-level required courses for the Computer Information Systems major. An example such test should be found accompanying this document. Feedback on the test welcome.

5. Who is assessed? When are they assessed?

The students taking the capstone class are assessed. They are to take this assessment test as part of that class and are to be required to do so. At present, it is not determined to what extent it will contribute to their grade. They will be assessed every year.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

The instructor of the appropriate course will ensure the students take the test and proper procedures are followed recording the test results. The assessment coordinator will prepare a small report summarizing the results, and will bring this report to a department meeting which will be designated for purposes of discussing the results.

7. What is level of student performance is expected for this outcome?

The first year in which we do this will establish a baseline. Each year after that, we will expect improvement.

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Academic Program: Computer Information Systems

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to solve problems in their careers. (4)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input checked="" type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input checked="" type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

Students are required to take many courses in this program in which the solving of problems is expected. Those such courses are courses that address this outcome.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

An alumni survey. A draft of this survey should be found submitted with this document. Note that that is just a draft. Note that some questions on the survey are forms of direct assessment.

5. Who is assessed? When are they assessed?

Alumni are assessed when they take the survey and the results are returned.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

Responsibility for the alumni survey has not been fully determined yet. Close coordination with the alumni affairs office is anticipated and the exact result of this will be dependent upon yet-to-be initiated talks with alumni affairs. The results will be discussed by the faculty at a meeting designated for the discussion of such data.

7. What is level of student performance is expected for this outcome?

The first time this is done, a baseline will be established. We will be able to use that to determine what is a reasonable level of student performance to expect, and we will strive for continual improvement in the future.

Please take a few minutes to help the CSIS Department from your alma mater by completing this short survey. The information you provide is very important for us in our plan for assessing student learning outcomes. While you may choose to remain anonymous, we would appreciate it if you would identify yourself so that success in your career can be compared to your performance while you were here getting your major from us. This includes exit testing starting in spring semester 2007. Your personal information will be used in no way other than in our assessing of student learning outcomes, and will not be published in any reports. For a more detailed description of how this information will be used, please see the endnote at the end of this survey.¹

Name (OPTIONAL)	
Company (OPTIONAL)	
Position (OPTIONAL)	
Gender (OPTIONAL)	

Please feel free to attach additional sheets as necessary.

Question 1: To what extent do you feel your time at MSUM helped you become more able to solve problems in your career?

Question 2: Please describe a time in your career in which you solved a problem.

Question 3: With regard to the above time which you described, please indicate how well you feel you solved that problem.

Question 4: Which parts of your education at MSUM do you feel helped you become more able to solve that problem?

CIS Content Knowledge Assessment Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. The problem domain is the part of systems development that refers to the _____.
- a. problems associated with the computing environment
 - b. area of the user's business for which a system is being developed
 - c. problems of the organization of the company
 - d. area of the industry that results in more intense competition
2. That portion of the new information system that satisfies the user's business needs in the problem domain is referred to as the _____.
- a. system procedure
 - b. network
 - c. application
 - d. user interface
3. The help desk idea is primarily associated with which project activity?
- a. Verification and testing
 - b. End-user support
 - c. Prototyping
 - d. Analysis of work patterns
4. The first official activity of the project team as it initiates the project planning phase is to _____.
- a. define the business problem
 - b. develop a cost/benefit analysis
 - c. staff the project team
 - d. write a project proposal
5. The term "_____" describes a planned undertaking that produces a new information system.
- a. systems development project
 - b. systems development life cycle (SDLC)
 - c. phase
 - d. design phase
6. The term _____ refers to an approach that completes parts of a system in one or more iterations and puts them into operation for users.
- a. incremental development
 - b. Unified Process (UP)
 - c. information engineering (IE)
 - d. structured design
7. A(n) _____ in system development is a collection of guidelines that help an analyst complete a system development activity or task.
- a. iteration
 - b. technique
 - c. model
 - d. tool
8. A(n) _____ program is one that has one beginning and one ending.
- a. iterative
 - b. incremental
 - c. structured
 - d. object-oriented
9. The key graphical model of the systems requirements used with structured analysis is the _____.
- a. flowchart
 - b. data flow diagram (DFD)
 - c. class diagram
 - d. project evaluation and review technique (PERT) chart
10. The objective of the _____ phase is to keep the system running productively during the years following its initial installation.
- a. support
 - b. planning
 - c. design
 - d. analysis
11. Which of the following best describes the reason why projects fail?
- a. Clear objectives
 - b. User involvement
 - c. Changing system requirements
 - d. Executive support
12. By showing which tasks can be done concurrently, a _____ assists in assigning staff.
- a. data flow diagram (DFD)
 - b. project evaluation and review technique (PERT) chart
 - c. Gantt chart
 - d. work breakdown structure (WBS)
13. _____ are the expected annual savings or increases in revenue derived from the installation of a new system.
- a. Financial benefits
 - b. Salaries
 - c. Return on investment (ROI)
 - d.

Intangible benefits

14. _____ are normally described in terms of the influences that can change the financial statements, either by decreasing costs or increasing revenues.

- a. Work breakdown structures
- c. Scope documents
- b. Intangible benefits
- d. Business benefits

15. The objective of _____ is to determine a specific value based on a predetermined discount rate.

- a. project evaluation and review technique (PERT)
- b. return on investment (ROI)
- c. cost/benefit analysis
- d. net present value (NPV)

16. The _____ is a widely accepted foundation of information that every project manager should know.

- a. PMBOK
- c. PMI
- b. PMBOOK
- d. UPBK

17. Structured English or pseudocode is an example of a _____ model.

- a. concrete
- c. mathematical
- b. descriptive
- d. graphical

18. The _____ states that events should be included during analysis only if the system would be required to respond under perfect conditions.

- a. perfect technology assumption
- c. system control
- b. risk control assumption
- d. technology control

19. An output, produced by the system, that goes to a destination is called a(n) _____.

- a. source
- c. activity
- b. response
- d. trigger

20. An external agent or actor that receives data from the system is called a(n) _____.

- a. source
- c. destination
- b. activity
- d. trigger

21. A(n) _____ is a naturally occurring association among specific things.

- a. relationship
- c. attribute
- b. cardinality
- d. entity

22. An attribute that uniquely identifies a thing is called a(n) _____.

- a. class
- c. compound attribute
- b. key
- d. attribute

23. A concept that allows subclasses to share the characteristics of their superclasses is called _____.

- a. aggregation
- c. multiplicity
- b. encapsulation
- d. inheritance

24. Which of the following exists only to allow subclasses to inherit its attributes, methods, and associations?

- a. domain classes
- c. concrete classes
- b. abstract classes
- d. association classes

25. _____ define data storage requirements that are included in data flow diagrams (DFDs).

- a. Entity-relationship diagrams (ERD)
- c. Domain 0
- b. Use cases
- d. Context diagrams

26. The technique used to identify use cases based on external, temporal, and state events is the _____.

- a. user goals technique
- c. event decomposition technique
- b. list nouns technique
- d. CRUD technique

27. The procedure for identifying domain classes or data entities is to list all of the _____ found when discussing system requirements with users.

- a. events
- c. actors

- b. verbs
- d. nouns

28. Fact-finding activities are also referred to as _____.

- a. discovery activities
- c. interaction activities
- b. sequence activities
- d. messaging

29. Which of the following compares the identified use cases with the domain model class diagram?

- a. Systems analysis
- c. Object-oriented modeling (OOM)
- b. Unified Modeling Language (UML)
- d. CRUD analysis

30. Which of the following shows the classes that are part of the problem domain of the user?

- a. Activity diagram
- c. Use case diagram
- b. State machine diagram
- d. System sequence diagram (SSD)

31. The purpose of the use case diagram is to identify the _____.

- a. users of the system
- c. messages in the system
- b. system boundary
- d. uses of the system

32. A use case diagram can be derived from a(n) _____.

- a. class diagram
- c. event table
- b. sequence diagram
- d. context diagram

33. A class diagram represents the classifications of _____.

- a. users of the system
- c. events of the system
- b. messages in the system
- d. objects in the system

34. An actor is a(n) _____.

- a. fictitious person
- b. role played by someone using the system
- c. person defining a system use
- d. external file that communicates with the system

35. One way to begin the development of a use case diagram is to identify the _____.

- a. system boundary
- c. classes
- b. flows of information
- d. actors

36. It is common to define a single use case to support multiple business events if _____.

- a. the processing occurring inside the automated system is different
- b. an event table has not been created
- c. essentially the same information is being updated
- d. different information is input and output from the events

37. Which of the following can be used to describe processes that include manual and automated system activities?

- a. Sequence diagrams
- c. Entity-relationship diagrams (ERDs)
- b. Context diagrams
- d. Activity diagrams

38. _____ on a systems sequence diagram indicates guard condition where the message is sent if true.

- a. []
- c. ()
- b. { }
- d. *

39. A(n) _____ provides an overview of all the use cases for a system.

- a. use case description
- c. activity diagram
- b. use case diagram
- d. system sequence

40. An intermediate use case description will typically include a list of _____.

- a. preconditions and postconditions
- c. related use cases
- b. actors
- d. exception conditions

41. _____ architecture refers to a group of dissimilar computers that share processing load through specialization of function.

- a. Clustered
- c. Multitier
- b.

Centralized d. Multicomputer
42. A(n) _____ is a private network that uses Internet protocols but is accessible by a limited set of internal users.
a. intranet c. server b. virtual private network (VPN) d. extranet
43. A _____ manages one or more information system resources or provides a well-defined service.
a. virtual organization c. distributed architecture b. client d. server server
44. Which of the following is the part of the three-layer architecture that contains the user interface?
a. Data layer c. User layer b. Business logic layer d. View layer
45. Information from the _____ is the starting point for estimating communication capacity requirements for the various wide area network (WAN), local area network (LAN), and Internet connections.
a. activity data matrices c. router b. network diagram d. server
46. _____ are programs that send requests to servers using one or more of the standard Web resource request protocols.
a. Virtual private networks (VPNs) c. Clients b. Activity data matrices d. Ethernets
47. Which of the following is an advantage of implementing applications via the Web?
a. Security c. Reliability b. Accessibility d. Throughput
48. Which of the following is an example of an interaction diagram?
a. Design class diagram c. Package diagram b. Data access diagram d. Communication diagram
49. In software development, the detailed design specifications are primarily done by _____.
a. business analysts c. software designers b. project managers d. users of the system
50. Which of the following is NOT part of a multilayer object-oriented design (OOD)?
a. Database access layer c. User interface b. Problem domain object d. Function module
51. Developing a(n) _____ diagram is a multistep process of determining which objects work together and how they work together.
a. design class c. state machine b. interaction d. package
52. The domain layer of a multilayer design can also be referred to as the _____ layer.
a. business logic c. user interface b. database access d. program logic
53. In Unified Modeling Language (UML) notation, a stereotype is indicated by _____.
a. parentheses c. guillemets b. brackets d. underline
54. An input window class is an example of a(n) _____ design class type.
a. boundary c. entity b. control d. persistent
55. Which of the following is included in the top compartment of a design class?
a. Attributes c.

Type-expression b. Parameter list d. Stereotype name
56. Which of the following is valid Unified Modeling Language (UML) notation for a method signature? a. visibility name:type-expression {parameter list} b. name Class Name (parameter list) c. visibility name type-expression (parameter list) d. visibility Class Name name:type-expression {parameter list}
57. When a method has the same name, but different parameter lists, it is called a(n) ____ method. a. overloaded c. constructor b. control d. duplicate
58. Which of the following is true of class-level methods? a. They depend on the existence of a particular object. b. They cannot access data across all objects. c. They are executed by the class instead of a specific object of the class. d. There can only be one class method per class.
59. ____ refers to the ability of one object to be able to view and interact with another object. a. Information hiding c. Object reuse b. Navigation visibility d. Encapsulation
60. In a design class diagram, navigation visibility is identified by ____. a. a solid arrow between the classes, pointing to the visible class b. a solid arrow between the classes, initiating from the visible class c. a dashed arrow between the classes, pointing to the visible class d. a solid line between the classes
61. The realization of a use case—determining what objects collaborate by sending messages to each other to carry out the use case—is done through the development of a(n) ____ diagram. a. design class c. interaction b. package d. deployment
62. A(n) ____ is a class invented by a system designer to handle a needed system function. a. function c. control class b. artifact d. stereotype
63. What is the least cohesive approach in creating use case controllers in a system? a. Define a single use case controller for all use cases. b. Define several use case controllers, each with a specific set of responsibilities. c. Create a single use case controller for all the use case controllers in a single subsystem. d. Create one use case controllers per use case.
64. User interface objects in a sequence diagram often are labeled with the stereotype ____. a. entity c. control b. view or boundary d. persistent
65. When a use case controller receives the initial request for an inquiry when the data access layer is added, it first ____. a. begins the process to initialize the necessary objects in memory b. sends a message to the database to see if it is available c. sends a message to the appropriate data access object to retrieve the data d. creates a Structured Query Language (SQL) statement to send to the data access object
66. Integrated development environment (IDE) tools have ____. a. increased the complexity of building a graphical user interface (GUI) b. made code easier to maintain c. allowed programmers to build an entire system with only windows classes d. forced programmers to develop good programming habits
67. A(n) ____ describes the structure, content, and access controls of a physical data store or database. a. hybrid database management system c. schema b. relation d. attribute
68. ObjectStore is an example of a(n) ____. a. complex data type b. data warehouse c. Object Definition Language (ODL) d. object database management system (ODBMS)
69. Data elements in a relational database are organized into ____.

attributes
c.
tables
b.
objects
d.
tuples
70. Every table in a relational database must have a _____.
a.
primary key
c.
functional dependency
b.
foreign key
d.
relationship
71. A(n) _____ is a field or set of fields stored in one table that also exists as a primary key in another table.
a.
primary key
c.
object identifier
b.
foreign key
d.
field value
72. Referential integrity is normally enforced by the _____.
a.
application programmer
c.
operating system
b.
database management system (DBMS)
d.
user
73. _____ is a one-to-one correspondence between two field values.
a.
First normal form (1NF)
c.
Referential integrity
b.
Second normal form (2NF)
d.
Functional dependency
74. A relational database table is in second normal form (2NF) if every non-key field is _____ dependent on the primary key.
a.
attribute
c.
functionally
b.
data
d.
referentially
75. The class and relationship declarations for an object database management system (ODBMS) are written in _____.
a.
C++
c.
Structured Query Language (SQL)
b.
Object Definition Language (ODL)
d.
Unified Modeling Language (UML)
76. In object database management systems (ODBMSs), many-to-many relationships without attributes are represented _____.
a.
with the accesses keyword
b.
as a set of key attributes
c.
with association classes
d.
as a set of object attributes in both related classes
77. Which of the following is NOT a typically used development order for program modules?
a.
Right-to-left
c.
Input, process, output (IPO)
b.
Bottom-up
d.
Top-down
78. Which of the following is a disadvantage of top-down program development order as compared to bottom-up program development order?
a.
There is always a working and testable version of the program.
b.
Programming staff are not immediately put to work.
c.
Stub modules or methods don't need to be written.
d.
Development proceeds downward.
79. Under which of the following circumstances might a direct installation be a good choice?
a.
System downtime cannot be tolerated.
b.
The new system is not replacing an older system.
c.
The system contains mission-critical applications.
d.
The system is large and complex, with relatively independent subsystems.
80. Which of the following is a disadvantage of parallel installation?
a.
The need to acquire extra space for computer equipment and personnel
b.
Maximum downtime
c.
The old system is turned off completely at first.
d.
Loss of mission-critical systems
81. The acronym SCCS is an abbreviation of _____.
a.
source code controlling system
c.
source code control system
b.
source code capture system
d.
standard coding control system
82. In applications designed to run under Windows, users typically view the version information by choosing the _____ item.
a.
View
c.
Version
b.
About
d.

Product
83. Quality assurance (QA) activities during analysis concentrate on _____.
a. testing
b. making decisions that will lead to easily implemented programs
c. satisfying stated requirements
d. identifying gaps or inconsistencies in system requirements
84. There are many participants in the testing process. Specific participants include all of the following EXCEPT _____.
a. top level management
c. programmers
b. users
d. quality assurance (QA) personnel
85. The primary disadvantage of _____ installation is increased complexity.
a. direct
c. parallel
b. phased
d. networked
86. A _____ tool can generate system models by examining source code.
a. reverse-engineering
c. visual programming
b. Visio
d. CASE
87. Complex modifications to database structure may require _____ the data after the changes.
a. testing
c. reloading
b. deleting
d. indexing
88. _____ is a driving force in technologies such as Web services, .NET, and ERP systems.
a. Modeling
c. Refactoring
b. Reuse
d. Inheritance
89. Which of the following methodologies use an adaptive approach to systems development?
a. Unified Process
c. Scrum
b. Extreme Programming
d. All of the above
90. What is the primary goal in Agile Modeling?
a. building model templates for future projects
b. building multiple models
c. focusing on representation
d. developing software
91. The basis of an XP plan is a set of _____ that users develop.
a. use cases
c. classes
b. stories
d. diagrams
92. The first XP development activity is creating _____.
a. a system metaphor
b. a development plan for a series of releases
c. a set of acceptance tests
d. user stories
93. Scrum focuses primarily on the _____ level.
a. team
c. manager
b. software
d. process
94. In Scrum, the _____ maintains the product backlog list.
a. product owner
c. Scrum team
b. Scrum master
d. project manager
95. Of the three object layers typically used in OO system development, _____ layers most commonly derive from foundation classes.
a. the view and data access
c. the business logic and view
b. the business logic and data access
d. all three
96. The _____ is a standard for software component connection and interaction developed by the OMG.
a. COM+
c. .NET
b. EJB
d.

CORBA
97. The ____ is a standard for software component connection and interaction developed by Microsoft.
a. COM+
c. .NET
b. EJB
d. CORBA
98. SOAP is an open standard that means ____.
a. simple object access protocol
c. singular operation application process
b. standard object application program
d. service or adjusted protocol
99. The UP ____ discipline develops change control procedures and manages models and software components.
a. project management
b. configuration and change management
c. deployment
d. environment
100. The UP life cycle model shows all of the following:
a. phases, activities, an artifacts
c. activities, iterations, and objects
b. phases, disciplines, and iterations
d. analysis, design, and implementation phases

Student:

Assignment:

Rubric	Number (0-100%)	Poor	Fair	Good
packaging				
documentation				
functionality				
modularity				
clarity of code				
efficiency of code				
algorithm selection				
adherence to specifications				
innovation, extra effort, added features, introduction/use of non- requisite tools				