**MCQ**

**Chapter 17:**

[The correct answer for each question is indicated by a http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif]

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| **1** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following types of class stereotype is always found in the presentation layer? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **Boundary.** |
|  | |  | **B)** | Control. |
|  | |  | **C)** | Entity. |
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| **2** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following elements of the Model–View–Controller architecture is essentially part of the presentation layer? | |
|  | |  | **A)** | Model. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **View.** |
|  | |  | **C)** | Controller. |
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| **3** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is not a reason for separating the display of instances of business classes from the business classes themselves? | |
|  | |  | **A)** | For classes to be reusable they should not be tied to a particular way of displaying the attribute values of instances. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **The state behaviour of the interface is modelled using state machines.** |
|  | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | **C)** | There is no one standard layout for the attributes of business objects, so the display is better handled by separate classes. |
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| **4** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhat is the presentation layer concerned with? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **Presenting the attribute values of objects to the user and other systems.** |
|  | |  | **B)** | Storing the data represented by the attribute values of objects. |
|  | |  | **C)** | Acting as an interface between the tiers of the three-tier architecture. |
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| **5** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is not a kind of prototype? | |
|  | |  | **A)** | Horizontal. |
|  | |  | **B)** | Vertical. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **C)** | **Lateral.** |
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| **6** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following best describes a horizontal prototype? | |
|  | |  | **A)** | A horizontal prototype deals only with the user interface. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **A horizontal prototype deals with a single layer of a layered architecture.** |
|  | |  | **C)** | A horizontal prototype takes one subsystem and develops it across all the layers. |
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| **7** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following best describes a vertical prototype? | |
|  | |  | **A)** | A vertical prototype is discarded after it has been used to test out some aspect of the design. |
|  | |  | **B)** | A vertical prototype deals with a single layer of a layered architecture. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **C)** | **A vertical prototype takes one subsystem and develops it across all the layers.** |
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| **8** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following best describes a throwaway prototype? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **A throwaway prototype is discarded after it has been used to test out some aspect of the design.** |
|  | |  | **B)** | A throwaway prototype takes one subsystem and develops it across all the layers. |
|  | |  | **C)** | A throwaway prototype is used to test the design of object deletion mechanisms. |
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| **9** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is not a reason for using prototyping in the design of the user interface? | |
|  | |  | **A)** | Alternative approaches to the interface of a use case can be tried out. |
|  | |  | **B)** | Guidelines for the design of the interface can be tested. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **C)** | **Visual development environments can be used to blur the distinction between the interface and the business logic.** |
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| **10** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifBoundary classes will usually have a dependency on classes in some kind of user interface package, such as Java Swing or the Microsoft Foundation Classes. What kind of dependency is this likely to be? | |
|  | |  | **A)** | «realize». |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **«import».** |
|  | |  | **C)** | «include». |
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| **11** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhat notation is used in a sequence diagram to show that an object instance is created by a message? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **The arrow head of the message points at the object at the top of the lifeline.** |
|  | |  | **B)** | The stereotype «construct» is shown alongside the message arrow. |
|  | |  | **C)** | A large ‘C’ for ‘Constructor’ is shown on the object lifeline. |
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| **12** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhat notation is used in a sequence diagram to show that an object instance is destroyed as a result of receiving a message? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **A large ‘X’ is shown on the lifeline.** |
|  | |  | **B)** | The arrow head of the message arrow is open. |
|  | |  | **C)** | A large ‘D’ for ‘Destructor’ is shown on the lifeline. |
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| **13** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhy are state machines used to model the user interface? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | **To model the permitted states of the user interface and the events that cause the user interface to change state.** |
|  | |  | **B)** | To model the lifetime of all the user interface classes beyond the existence of a particular instance of the interface. |
|  | |  | **C)** | To show the sequential view of the user working through the user interface from top to bottom. |
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| **14** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following can be achieved by modelling the state of the user interface? | |
|  | |  | **A)** | Passing responsibility for all validation to the controller class. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **Constraining the behaviour of the interface to prevent users making errors.** |
|  | |  | **C)** | Describing the high-level requirements and main user tasks. |
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| **15** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is the notation for the deep history indicator in a state machine? | |
|  | |  | **A)** | H in a circle. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **H\* in a circle.** |
|  | |  | **C)** | «history» in a round-cornered rectangle. |
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| **16** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhat is recorded in an event–action table? | |
|  | |  | **A)** | The actions that objects can carry out and the events that take place as a result of those actions. |
|  | |  | **B)** | Events that objects can respond to and the actions that take place in response to those events. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **C)** | **Current states, events that can occur in each state, the actions associated with the combination of state and event, and the next states after the actions have taken place.** |
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| **17** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is the stereotype for a boundary class? | |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **A)** | http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig10_1.JPG**Figure10.1** |
|  | |  | **B)** | http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig10_2.JPGFigure 10.2 |
|  | |  | **C)** | http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig10_3.JPGFigure 10.3 |
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| **18** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following statements best describes the excerpt from a class diagram shown below?  http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig14.JPG**Figure 14** | |
|  | |  | **A)** | CheckCampaignBudgetUI inherits its behaviour from ClientLister. ListClients contains one or more ClientListers. |
|  | |  | **B)** | ListClients inherits its behaviour from ClientLister. CheckCampaignBudgetUI is a user interface class because of its relationship with ClientLister. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **C)** | **CheckCampaignBudgetUI implements the ClientLister interface. ListClients uses the operations of the interface when sending messages to CheckCampaignBudgetUI.** |
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| http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | | | | |
| **19** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the following is meant by the rectangle in the diagram below with the label loop in the top left-hand corner?  http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig15.JPG**Figure 15** | |
|  | |  | **A)** | The messages within the rectangle result in the destruction of the :ListClients object. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **The messages in the rectangle are repeated.** |
|  | |  | **C)** | The messages in the rectangle are all sent by the same object. |
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| http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | | | | |
| **20** | | http://highered.mheducation.com/olcweb/styles/shared/spacer.gif | http://highered.mheducation.com/olcweb/styles/shared/spacer.gifWhich of the objects in the diagram below would need to implement the ItemListener interface in order to respond to the itemStateChanged(evt) message?  http://highered.mheducation.com/sites/dl/free/0077125363/315085/Fig16.JPG**Figure 16** | |
|  | |  | **A)** | clientChoice:Choice. |
|  | | http://highered.mheducation.com/olcweb/styles/v2_glencoe/images/correct.gif | **B)** | **CheckCampaignBudgetUI.** |
|  | |  | **C)** | CheckCampaignBudget. |
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