Final Module A

Due Dec 15 at 11:59pm   **Points** 20   **Questions** 20
Time Limit 40 Minutes

Instructions

The final exam is comprehensive, though the second portion of the course is emphasized. In addition to questions on the readings, there may be questions regarding the Bookstore project. You only have 40 minutes to complete 20 questions, therefore you may want to create a page of written notes for yourself to avoid having to look a lot of things up.

Major topics (about 10 questions total in 4 modules):

- HTML & CSS (including Flexbox)
- Internetworking, HTTP, and webapp architecture
- Javascript (including code, promises, and arrow functions)
- DAO (including find & create methods, and model classes)

Significant topics (about 5 questions total in 4 modules):

- Ajax, DOM, and Fetch
- Vuex and storage
- Vue components
- Databases and SQL
- Bookstore admin (including file layout, IntelliJ, and deployment)
- Vue directives
- Vulidate and validation
- SSL/TLS and cryptography
- SubmitOrder overview
- REST API (including naming, and Jersey & Jackson)

Attempt History

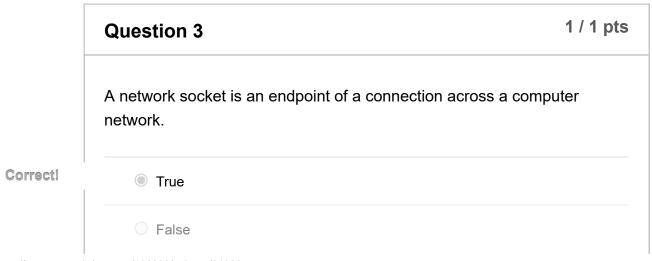|	Attempt	Time	Score
LATEST	**Attempt 1**	35 minutes	19 out of 20

Score for this quiz: **19** out of 20
Submitted Dec 5 at 4:29pm
This attempt took 35 minutes.

Question 1   1 / 1 pts

A page that uses Ajax can request data in the background and integrate it into the document already displayed in the browser.

Correct!

   ◉ True

   ○ False

Question 2   1 / 1 pts

Dropping the end tag of an HTML paragraph <p> element can produce unexpected results or errors in some web browsers.

Correct!

   ◉ True

   ○ False

Question 3   1 / 1 pts

A network socket is an endpoint of a connection across a computer network.

Correct!

   ◉ True

   ○ False

Question 4   1 / 1 pts

In the Bookstore project, you are asked to save you cart data to <u>local storage</u>. Where is local storage data held?

○ on the server as a JSON resource

Correct! ⦿ in your browser, even when the browser is closed

○ in your browser, but only while the browser is open

○ in the client's global store (in a property in store.js)

Question 5   1 / 1 pts

Web application development primarily focuses on this layer of the OSI network stack

Correct! ⦿ application layer

○ transport layer

○ network layer

○ session layer

Question 6   1 / 1 pts

Suppose you import a Vue component named MyFavComp.vue into another Vue component using:

```
import MyFavComp from '@/components/MyFavComp.vue';
export default {
  components: { MyFavComp }
}
```

How can you reference MyFavComp in the template portion of your code?

○ You can only reference the component using Pascal case (as defined):

   `<MyFavComp> ... </MyFavComp>`

○ You can only reference the component using kebab-case:

   `<my-fav-comp> ... </my-fav-comp>`

○

○ You cannot reference the component in the template portion of your code, only in the style portion.

Correct!

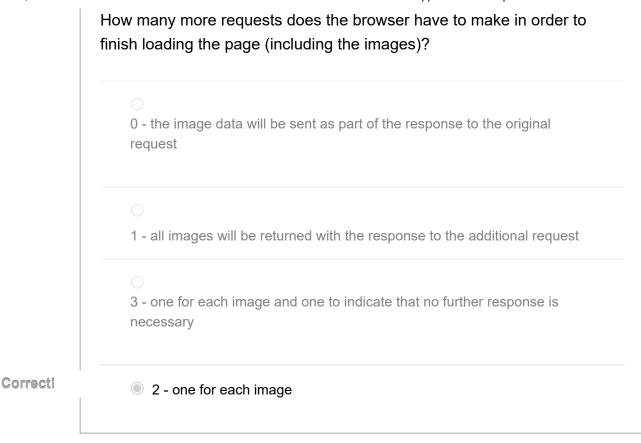◉ You can reference the component using either kebab-case or Pascal case.

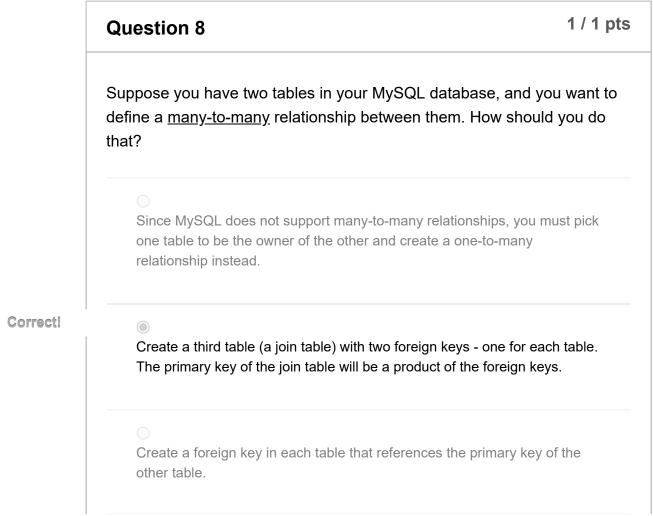## Question 7   1 / 1 pts

Suppose the browser requests a web page with the following form:

```
<html>
<body>
    <img src="foo.jpg"/>
    <img src="bar.jpg"/>
</body>
</html>
```

How many more requests does the browser have to make in order to finish loading the page (including the images)?

○ 0 - the image data will be sent as part of the response to the original request

○ 1 - all images will be returned with the response to the additional request

○ 3 - one for each image and one to indicate that no further response is necessary

Correct!   ⦿ 2 - one for each image

Question 8   1 / 1 pts

Suppose you have two tables in your MySQL database, and you want to define a <u>many-to-many</u> relationship between them. How should you do that?

○ Since MySQL does not support many-to-many relationships, you must pick one table to be the owner of the other and create a one-to-many relationship instead.

Correct!   ⦿ Create a third table (a join table) with two foreign keys - one for each table. The primary key of the join table will be a product of the foreign keys.

○ Create a foreign key in each table that references the primary key of the other table.

○
Create a third table (a join table) with two foreign keys - one for each table.
The primary key of the join table with be auto-generated by the database.

Question 9   1 / 1 pts

Suppose you see a margin property in a CSS file specified as "margin:
25px 50px 75px;" What is the bottom margin?

○ 50px

○ 25px

Correct! ⦿ 75px

○ 100px

Question 10   1 / 1 pts

In our Bookstore application, we used this file to tell Tomcat how to
connect to our database

○ server.xml

○ conf.xml

Correct! ⦿ context.xml

○ web.xml

Question 11   1 / 1 pts

Suppose you see a Vue component with the following template section:

```
<template>
  <p>{{ book.title }}</p>
  <p>{{ book.author }}</p>
</template>
```

What can you infer from this?

Correct!

- ◉ The component must <u>either</u> have a data function that returns a "book" object <u>or</u> have a "book" prop.

- ○ The component must have a "book" method.

- ○ The component that calls this component must have a v-for directive with the form:

  ```
  v-for="book in books"
  ```

- ○ The component must have a data function that returns a "book" object.

Question 12   1 / 1 pts

List the missing Vue directives names in order.

```
<template>
  <div _____="result < 0">negative</div>
  <div _____="result === 0">zero</div>
  <div _____="result > 0">positive</div>
  <div _____>bad result</div>
</template>
```

Correct!

○ v-if, v-else-if, v-else-if, v-else

○ v-if, v-if, v-if, v-else

○ v-if, v-else-if, v-else-if, v-else-if

○ v-case, v-case, v-case, v-default

Question 13   1 / 1 pts

What does the following JavaScript code do?

```
console.log(5 + 6);
```

○ Writes null to the console log

Correct!

◉ Writes 11 to the console log

○ Writes 5+6 to the console log

○ Writes 5 + 6 to the console log

Question 14   1 / 1 pts

In the Bookstore project, suppose we enter the incomplete email address "myname@" into an email field the uses Vuelidate. Which of the following is true about the $v.email properties?

Correct!

$v.email.$dirty is true

$v.email.$invalid is true

◉ $v.email.$error is true

$v.email.$dirty is true

$v.email.$invalid is false

○ $v.email.$error is false

$v.email.$dirty is false

$v.email.$invalid is false

○ $v.email.$error is false

$v.email.$dirty is true

$v.email.$invalid is true

○ $v.email.$error is false

Question 15   1 / 1 pts

Which of the following is NOT true about digital signature authentication?

○ The receiver creates a digest from the received message using the same cryptographic hash function the sender used

Correct!   ● The sender must encrypt the original message with a private key

○ The sender encrypts the message digest with a private key

○ The sender creates a digest from the message using a cryptographic hash function

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Question 16   1 / 1 pts

What is the typical sequence of events when writing data to a Vuex state?

○ 1. Vue component commits a Vuex action
   2. Vuex action dispatches a Vuex mutation
   3. Vuex mutation modifies the Vuex state

○ 1. Vue component commits a Vuex mutation
   2. Vuex mutation dispatches a Vuex action
   3. Vuex action modifies the Vuex state

Correct!

◉ 1. Vue component dispatches a Vuex action
   2. Vuex action commits a Vuex mutation
   3. Vuex mutation modifies the Vuex state

○ 1. Vue component dispatches a Vuex mutation
   2. Vuex mutation commits a Vuex action
   3. Vuex action modifies the Vuex state

Question 17   0 / 1 pts

In the Bookstore project, suppose an exception occurs on the server when we try to place an order. How can we get the message back to the client telling us the nature of the error?

○ Use an Ajax method to return the message to the client without having to reload the page

○ Use a Java remote procedure call to pass the message to the client and parse it with JavaScript

ou Answered

◉ We don't need to do anything special - Jersey/Jackson will convert Java exceptions to JavaScript errors and include the message

orrect Answer

○ Send an HTTP response with an error code and put the message in the body of the response

Question 18   1 / 1 pts

In the Bookstore project, which of the following is NOT true about the connection object created for the transaction?

○ After the relevant create methods are called, connection.commit() is called to explicitly commit the changes to the database

Correct!

◉ After the connection object is created, connection.setAutoCommit(true) is called to ensure that all changes are automatically committed to the database

○ If an exception is thrown, connection.rollback() is called to ensure that the changes are not committed to the database

○ The connection object is passed as a parameter to all relevant create methods

Question 19   1 / 1 pts

There is no way to declare more than one Vue component in the same file.

○ True

Correct!

◉ False

Question 20   1 / 1 pts

The public keys for many certificate authorities are already built into most browsers

Correct!

◉ True

○ False

Quiz Score: **19** out of 20