44-563 Developing Web Applications and Services Spring 2013

Exam 2

*Part 1 JavaScript and jQuery*

*Questions 1-11 refer to the web page shown below.*

<body id="ticketPage">

<img id="airlineLogo" src="bearcat.jpg" alt="Airline Logo"><br>

Passenger Name: <input type="text" id="pName"><br>

Destination<br>

<select id="destination">

<option value="dfw">Dallas</option>

<option value="lax">Los Angeles</option>

<option value="jfk">New York</option>

</select><br>

Drink<br>

<input type="radio" id="tea">Tea<br>

<input type="radio" id="pepsi">Pepsi<br>

Snack<br>

<input type="checkbox" id="pretzels">Pretzels<br>

<input type="checkbox" id="peanuts">Peanuts<br>

Airline Mottos

<ul id="mottos">

<li>We'll get there eventually</li>

<li>BYOP (Bring Your Own Parachute)</li>

</ul>

<input type="button" id="purchase" value="Purchase Ticket">

<p id="message"></p>

</body>

1. (5 pts) Write JavaScript code to set the background color of the web page to blue.

Document.getElementById(“ticketpage”).style.backgroundColor=”blue”;

2. (5 pts) Write JavaScript code to change the image to "dog.jpg".

Document.getElementById(“airlinelogo”).src=”dog.jpg”;

3. (5 pts) Write JavaScript code to assign the value the user entered in the passenger name field to the variable passenger.

Var passenger = document.getElementById(“pNAme”).value;

4. (5 pts) Write JavaScript code to assign the value selected by the user in the dropdown list to the variable city.

Var city = document.getElementById(“destination”).value;

5. (5 pts) Write JavaScript code to

* Assign the value "t" to the variable drink if the user selected the tea radio button.
* Assign the value "p" to the variable drink if the user selected the pepsi radio button.

If(document.getElementById(“tea”).checked)

{

Drink = “t”;

}

Else if(document.getElementById(“pepsi”).checked)

{

Drink = “p”;

}

6. (5 pts) Write JavaScript code that adds 2.50 to the variable ticketPrice if the peanuts checkbox is checked.

If(Document.getElementById(“peanuts”).checked);

{

ticketPrice + =2.50;

}

7. (5 pts) Write JavaScript code to add the motto "All of our pilots are over the age of 12" to the unordered list of mottos.

8. (5 pts) Write JavaScript code to insert the text "Be Brave" to the paragraph at the end of the web page.

9. (5 pts) Write JavaScript code to assign the function reserveSeat as the event handler for clicking the button.

10. (5 pts) Write jQuery code to hide the image.

$(‘#arlineLogo’).hide();

11. (5 pts) Write jQuery code to remove the paragraph.

$(‘#message’).remove();

12. (5 pts) JavaScript is executed

A. by a browser on the client side.()

B. by Glassfish on the server side.

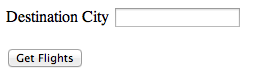
13. (5 pts) jQuery is

A. a JavaScript library()

B. a collection of Java methods

*Part 2 Servlets*

14. (6 pts) The web page shown below contains a form. When the button is clicked, the servlet getFlightsServlet handles the request.



The code for the form is shown below. Fill in the blanks to complete the code.

<form \_\_\_action\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_="getFlightsServlet">

Destination City

<input type="text" \_\_\_\_name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_="destCity">

<br><br>

<input type="\_\_\_\_\_\_\_\_\_\_\_\_\_\_submit\_\_\_\_\_\_" value="Get Flights">

</form>

15. (5 pts) Write servlet code that assigns the value of the request parameter named destCity to the string variable cityName.

String cityName = request.getParameter(“destCity”);

16. (5 pts) Servlet code is executed

A. By a browser on the client side.

B. By Glassfish on the server side.( )

*Part 3 AJAX*

The code in the questions is from the CourseList AJAX example covered in class. The user selects a subject, a list of courses in that subject is obtained from a servlet, and the list is displayed in the unordered list on the web page.

17. Here is part of the code for the web page:

**<p>**

**Select Subject:<br />**

**<select id="subject">**

**<option value="cs">Computer Science</option>**

**<option value="math">Math</option>**

**<option value="physics">Physics</option>**

**</select>**

**</p>**

**<p>**

**<input type=" " id="getCourseList"**

**value="Find Available Courses" /><br />**

**</p>**

**<ul id="courseList"></ul>**

(a) (4 pts) Does this code have to be inside a <form> tag?

YES NO ( ans )

(b) (4 pts) What value should be used for the type of the input element?

button submit

ans: button

18. Here is the header for the servlet:

**@WebServlet(name="CourseServlet",**

**urlPatterns={"/courses"})**

**public class CourseServlet extends HttpServlet {**

and here is the code for the action handler for the button:

**function getCourses() {**

**clearCourses();**

**request = createRequest();**

**if (request == null) {**

**alert("Unable to create request");**

**return;**

**}**

**var url = // See part (a)**

**request.open("GET", url, true);**

**request.onreadystatechange = displayCourses;**

**request.send(null);**

**}**

(a) (4 pts) Complete the code that assigns a value to the variable url. Be sure to include the request parameter.

var url =

(b) (4 pts) What is the name of the callback function?

DisplayCourses

19. (3 pts) Here is part of the code for the callback function:

**if (request.readyState == 4) {**

**if (request.status == 200) {**

**var courses = // See question below**

**var courseList = courses.split("\n");**

**for(var i = 0; i < courseList.length - 1; ++i) {**

**var item = document.createElement("li");**

Complete the statement that assigns the information returned from the server to the variable courses. Assume the information is being returned as text.

var courses =

ADDITIONAL SPACE

**DO NOT REMOVE THIS PAGE**

ADDITIONAL SPACE

**DO NOT REMOVE THIS PAGE**