Session 27

Final Exam Review

What to Expect

- Monday, 12/17 (5:30PM-8:00PM)
- 45 minutes (equivalent to 3 quizzes)
- Exam will cover material from the entire semester, but the emphasis will be on recent material
- Style of questions similar to the mid-term exam and the quizzes
- API given with exam
  - Might not cover all classes, methods, etc. needed to answer questions
  - Be familiar with API format/style

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Today's Review

- Sample programming questions
- Try to write your answers, and not use your computer to code (will better simulate the exam environment)
- Consult with the related APIs
- I'll give you a little time for each question, then we'll review a possible solution

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Exam Document

- For this question, download the html file on the CSE336 Web site
- Open the file in a simple text editor, so your environment closely resembles the final exam environment (for any similar question on the actual final exam, you will be given a sheet of html)

www3.cs.stonybrook.edu/~cse336/CSE336-Project-FinalReview.html

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Question 1

▌ Notice that the DOCTYPE for the html is XHTML 1.1

▌ (a) Identify two changes to the html that would bring it into better compliance with the rules of XML

▌ (b) Write the lines of html (replacing an existing lines) that will tell browsers to treat the document as HTML5

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Question 1 - Solution

▌ (a) Validate the html document with

    `https://validator.w3.org/check`

▌ (b) `<!DOCTYPE html>`
    `<html>`

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Question 2

▌ Write the Spring Controller class that will check if the card number field contains 3 digits. If so, it would directly return "ok" to the client. If not, it would directly return "please enter a 3-digit card number" to the client.

▌ You can assume that the Spring Controller is invoked when the user clicks on the Submit button.

▌ You do not need to code the import statements

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Question 2 - Solution

```
@RestController
@RequestMapping(value="/displaypage")
public class CSE336Controller {
 @RequestMapping(value="/finalreview", method=RequestMethod.GET)
    String checkCnum(@RequestParam("cnum") String cnum) {
        if (cnum.length() == 3) {
            return "ok";
        } else {
            return "please enter a 3-digit card number";
        }
    }
}
```

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Question 2 – Alternate Solution

```
@Controller
@RequestMapping(value="/displaypage")
public class CSE336Controller {
  @GetMapping(value="/finalreview2")
  @ResponseBody
  String checkCnum(@RequestParam("cnum") String cnum) {
        if (cnum.length() == 3) {
            return "ok";
        } else {
            return "please enter a 3-digit card number";
        }
    }
```

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Question 3

▌ If the user did not select a radio button when the form was submitted, the name value pair will not be included in the form dataset.

▌ Write a Spring Controller method that will add a name value pair to the context for an unselected radio button. The value will be "not selected" You controller should request that Spring generate a view with a view name of ShowForm

▌ Just code the method. You can assume the class has a mapping for /displaypage

After you have a solution,
try it out in your IDE

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Question 3 - Solution

```
@PostMapping(value="/finalreview3")
String checkRadio(Model m,
     @RequestParam() Map<String,String> params) {
        if (!params.containsKey("rdotype"))  {
            m.addAttribute("rdotype", "not selected");
        }
        return "thfinal";
    }
}
```

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Question 4

Assume that a Spring Controller was implemented correctly to implement the previous question. That controller requested that Spring resolve the view with a Thymeleaf template that included the code below.

Assume that the original html form was not filled in when the submit button was clicked.

Write the output resulting from the execution of the template

```
<table>
<tr><td>Property</td><td>Value</td></tr>
  <tr th:each="aname:
${#request.parameterMap}">
    <td ><span th:text="${aname.key}">
</span></td>
    <td> <span
th:text="${#request.getParameter(aname.key)}">
</span>
</td></tr></table>
```

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Question 4 - Solution

▌ The radio button not selected is not included in the parameters. Based on the Q2 Controller, the new name/value pair will be in the context, but not in the parameters

Thymeleaf Track

Property	Value
cnum	
nickname	
submits	Submit Library Card Application

Be prepared for "reverse" coding questions in the actual final exam

This style of question can also be helpful in obtaining info not found in the API

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Comments

▌ This review focused on recent material, but the final exam will cover earlier topics also

▌ Examples of earlier topic questions can be found among the quizzes and mid-term exam questions

▌ Final exam emphasis will be on recent material

▌ API will be provided with the final exam

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