

jQuery UI Exercises: Setup

1. Set up a project for jQuery UI. You can do it yourself from scratch as described in the notes, or you can use a shortcut as described here:

- Make a new Dynamic Web Project.
- Go to my “jquery-ui-basics-exercises” project and copy the css and scripts folders to your new project.
- In your new project, go to the scripts folder and delete all the JavaScript files *except* for jquery.js and jquery-ui.js. Then create a new empty file there called jquery-ui-exercises.js.
- Finally, make a simple HTML page in your WebContent folder that loads all the CSS and JavaScript files. You can copy index-template.html from my jquery-ui-basics-exercises project, or just type it. Here it is:

```
<!DOCTYPE html>
<html>
<head><title>jQuery UI 1: Exercises</title>
<link rel="stylesheet" href="css/jquery-ui/jquery-ui.css"/>
<link rel="stylesheet" href="css/extra-styles.css"/>
<script src="scripts/jquery.js"></script>
<script src="scripts/jquery-ui.js"></script>
<!-- You must create and put code in the following file -->
<script src="scripts/jquery-ui-exercises.js"></script>
</head>
<body>
<!-- Your HTML here -->
</body></html>
```

2. You will want a JSP page that will read an incoming request parameter called “range” and return a random number from 0 to that range. You can copy number-in-range.jsp from my jquery-ui-basics-exercises project, or just type it. Here it is:

```
<% double range = 1.0;
    try {
        range = Double.parseDouble(request.getParameter("range"));
    } catch(Exception e) {}
%>
<%= Math.random() * range %>
```

Test this with the URL <http://localhost/your-project/number-in-range.jsp?range=100> and make sure you get a number between 0 and 100.

Exercises: jQuery UI Basics

1. Make a number spinner that lets the user choose a number between 0 and 200.
2. Put a styled button under your spinner. Make the title of the button be “Show Number in Range”, but for now, the button won’t actually do anything.
3. Make a textfield that, when the user clicks inside it, pops up a calendar.
4. Put a styled button under your popup calendar. Make the title of the button be “Make Reservation”, but the button won’t actually do anything.
5. Add a click handler to the spinner button so that, when the button is pressed, it sends the selected range to the server (see number-in-range.jsp on Setup handout), gets back the resultant number, and inserts that number into the page. Hints:
 - `$("#spinner-id").spinner("value")` returns the spinner’s value.
 - Remember the load function, which is simpler for this task than `$.ajax`.
6. Make a slider that lets the user choose a number between 100 and 300. Don’t bother to display the slider’s numeric value on the page; just make the slider. That is, skip the “slide” option, so the user will see the slider but not see the current value. Simply put a prompt in front of the slider that says “Range (100-300):”. Even without the slide: event handler, making a slider harder than making a spinner, since you have to control the size of the slider. One of the easiest approaches is to use a table, put the prompt in the left table cell, put the slider in the right table cell, and say `<td style="width: 200px">` for the right table cell. See the slider example in the notes.
7. Put a styled button under your slider. Make the title of the button be “Show Number in Range”, but for now, the button won’t actually do anything.
8. Add a click handler to the slider button so that, when the button is pressed, it sends the selected range to the server (see number-in-range.jsp on Setup handout), gets back the resultant number, and inserts that number into the page.
 - Hint: `$("#slider-id").slider("value")` returns the slider’s value.