

PROG2240: Java Web Tech

Assignment 1

Winter 2022

Due Date: 23 February, 11: 59P.M

Background: In this assignment, you will use JSP pages to develop the presentation layer of a Membership Registration Web application. Use the **Model 1 pattern** (i.e., no servlets are created) to create a *prototype*. Use the HTML5 semantic elements to structure your HTML page. Apply the best practice of using external style sheets.

Task 1. NetBeans Preparation

- In **NetBeans 12.6**, create a new Java Web Application project
 - Project Name: **XXYYClub**, where XXYY is your team initials in upper case letters
 - Important: Use **Apache Tomcat Server** and **Java EE 7**
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Task 2. Add a Banner and Footer JSP pages

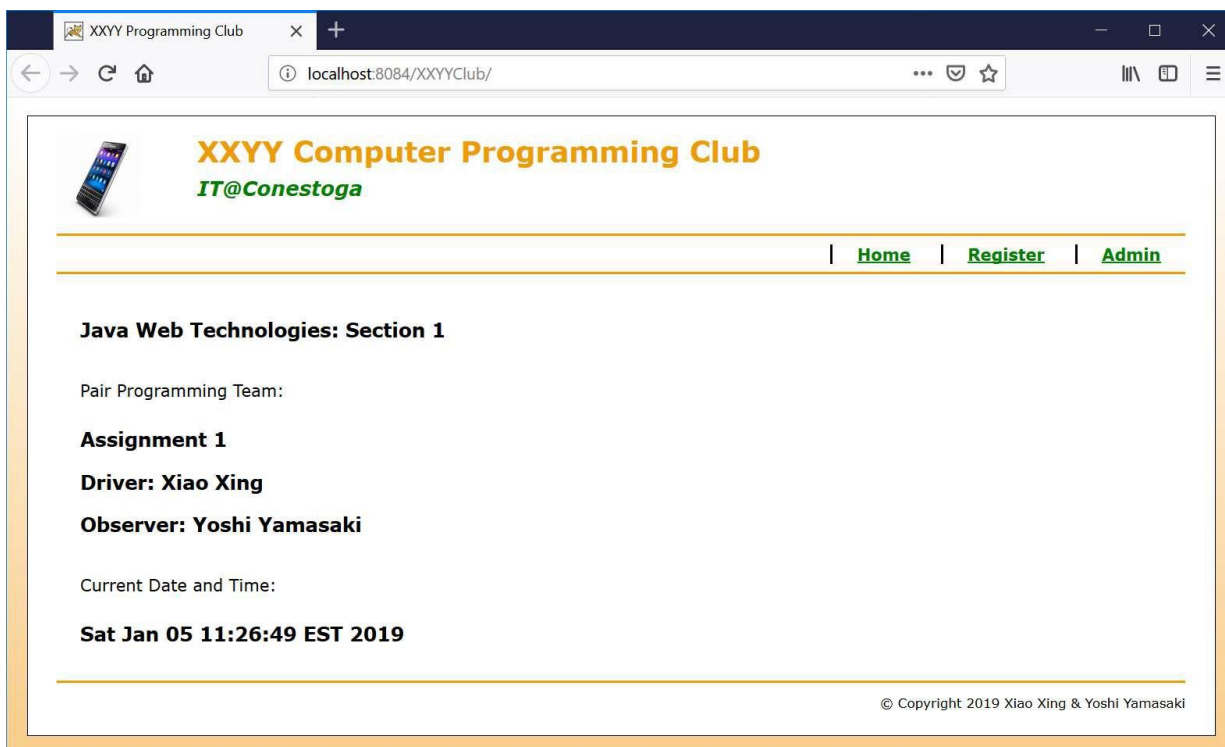
Your banner page must match the sample design layout shown in top area of Task 3 screenshot

Under "Web Pages" folder, create new **styles** and **images** folders

- Under the **styles** folder, find and add a sample style sheet
- Under the **images** folder, add a new team logo.
 - Create your own team logo (xxyy-icon.png) for your XXYY Club.
 - *Hint: You can download free icons from <http://www.iconarchive.com/>*
- Add a new JSP page named **Banner.jsp**.
 - Add a reference to your external style sheet
 - Add title to the page: **XXYY Computer Programming Club**
- Display your team logo and club name
 - Add image and HTML5 header elements
 - *Hint: Include an image, level-1 heading and level-2 heading elements*
 - Add an HTML5 navigation bar element with 3 links:
 - **Home** to Index.jsp,
 - **Register** to Register.jsp
 - **Admin** to Admin.jsp (not implemented in A1)
- Add a new JSP page named Footer.jsp
 - Include team member names and proper copyright information

Task 3. Add the Main (Index.jsp) JSP page

- Add a JSP page named **Index.jsp**
- Include the **Banner.jsp** and **Footer.jsp**
 - Hint: Use a JSP include tag: `<jsp:include page="Banner.jsp" />`
- Add the template data to match the design layout including the title shown below.
 - *Hint: Use HTML5 section, heading and paragraph elements to display course and team information.*
- Display the date and time the JSP page was rendered.
 - Hint: Use **Java code/scriptlet** to display the current date and time: `<%= new java.util.Date() %>`



Task 4. Add a Register JSP page.

- Add a JSP page named **Register.jsp**
- Add a title and follow the labels as shown in sample screenshot below.
 - *Note: Full name and email are required fields.*
- Include the Banner.jsp and Footer.jsp
 - Add an HTML5 section element
- Within the section element, add the HTML controls to match the design layout shown below.
 - Your HTML <form> tag must call the **DisplayMember.jsp** (see **Task5 below**) using the HTTP POST method.
 - Use textbox widths of 100px, 200px or 300px, as appropriate.
 - *Hint: Use inline style. E.g., style="width:100px"*
 - IT Program values are:
 - CAS, SQATE, CPA, CP, ITID, CAD, ITSS
 - Year values are: 1, 2, 3, and 4
 - Add submit (i.e., Register Now!) and reset buttons.

Note: Server-side form validation is not part of this assignment.

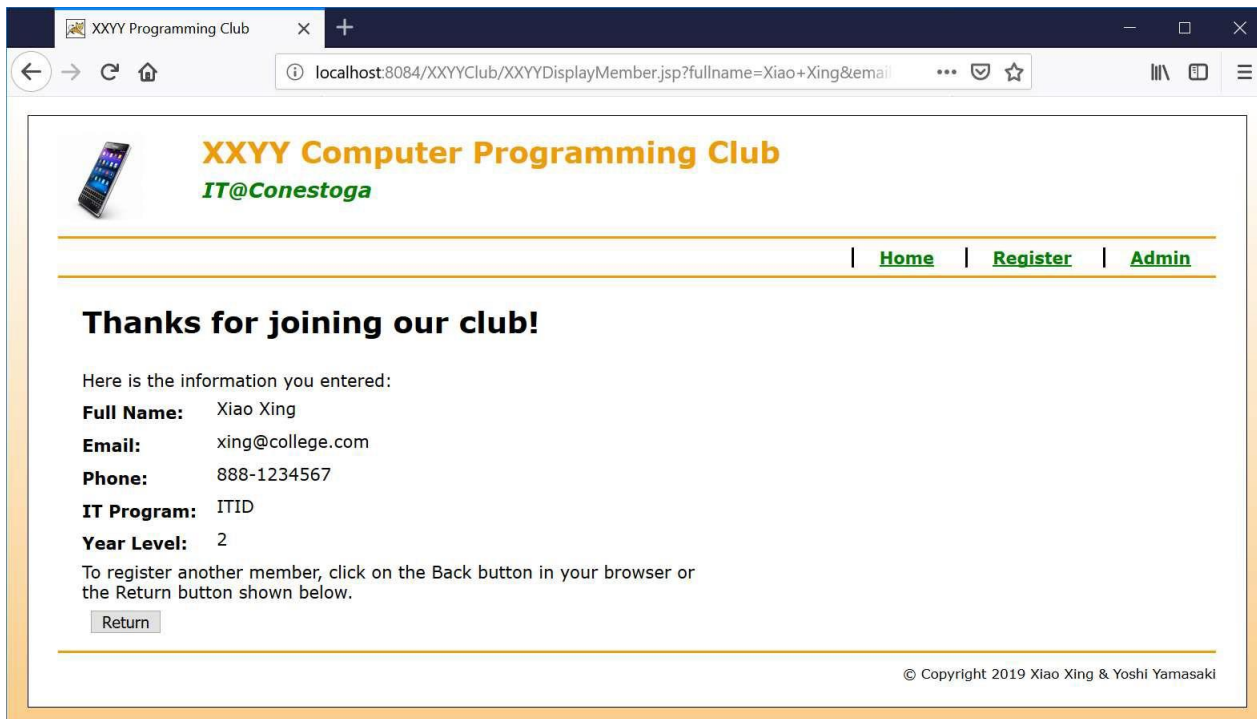
The screenshot shows a web browser window with the address bar displaying 'localhost:8084/XXYYClub/XXYYRegister.jsp'. The page content includes a header for 'XXYY Computer Programming Club' with a logo and the text 'IT@Conestoga'. Below the header is a navigation bar with links for 'Home', 'Register', and 'Admin'. The main content area is titled 'New Member Registration Form' and contains the following fields and controls:

- Full Name:** A text input field.
- Email:** A text input field.
- Phone:** A text input field.
- IT Program:** A dropdown menu with 'CAS' selected.
- Year Level:** A dropdown menu with '1' selected.
- Buttons:** 'Register Now!' and 'Reset' buttons.

At the bottom right of the form, there is a copyright notice: '© Copyright 2019 Xiao Xing & Yoshi Yamasaki'.

Task 5. Add a Display Member JSP page.

- Add a JSP page named **DisplayMember.jsp**
- Include the Banner.jsp and Footer.jsp
- Add the template data to match the design layout shown below.
- Use **JSP Expression Language (EL)** to display the parameter values from the request object
 - E.g., `${param.fullname}`
 - Note: *fullname* is the parameter name for the input tag
- *Hint for the Return button:*
 - Add an HTML `<form>` tag to allow the user to return to the Register.jsp.



Task 6. Prepare screenshots of your Web Application

- Create a new **A1_screens.docx**.
- Add at least **3 screenshots** similar to the above screenshots (with the **title** displayed).
 - Each screenshot should have an *appropriate title*.
 - The screenshots should be large enough for marking.

Assignment Submissions

Important: You must submit your code and screenshots (**zip file**) and upload your solution (XXYYClub.zip).