KB금융그룹 | 국민의 평생 금융파트너

2024년 상반기 K-디지털 트레이닝

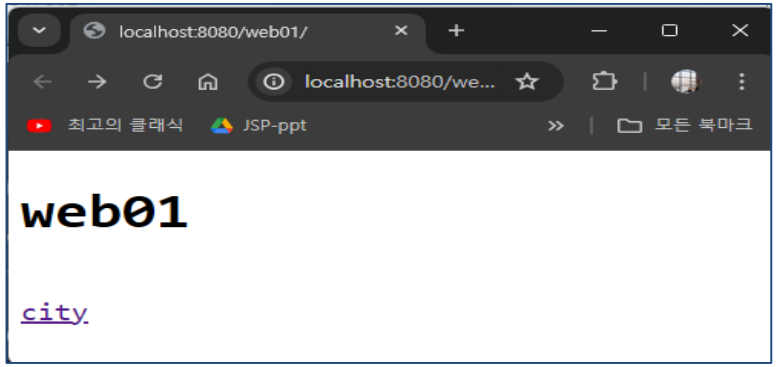
서블릿 Web 답안

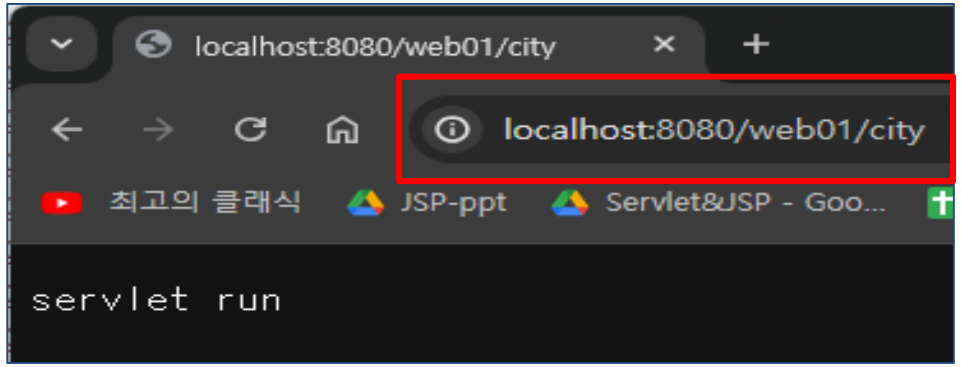
[KB] IT’s Your Life

KB 국민은행

Q1 - 서블릿

- 프로젝트명: **web01, 패키지명: com.multi.mvc01**
- index.jsp에 서블릿을 호출하도록 코드를 수정하시오.
- **CityServlet**서블릿을 생성하여 실행하시오.
- web.xml에 다음과 같이 실행되도록 서블릿을 등록하시오.






```
http://localhost:8080/web01
서블릿 초기화
GET요청 처리됨.
GET요청 처리됨.
```

Q1 - 서블릿

- **index.jsp**

```jsp
<%@ page contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8" %>
<!DOCTYPE html>
<html>
<body>
<h1>web01</h1>
<br/>
<a href="city">city</a>
</body>
</html>
```

- web.xml

```xml
<servlet>
   <servlet-name>CityServlet</servlet-name>
   <servlet-class>com.multi.web01.CityServlet</servlet-class>
</servlet>
<servlet-mapping>
   <servlet-name>CityServlet</servlet-name>
   <url-pattern>/city</url-pattern>
</servlet-mapping>
```

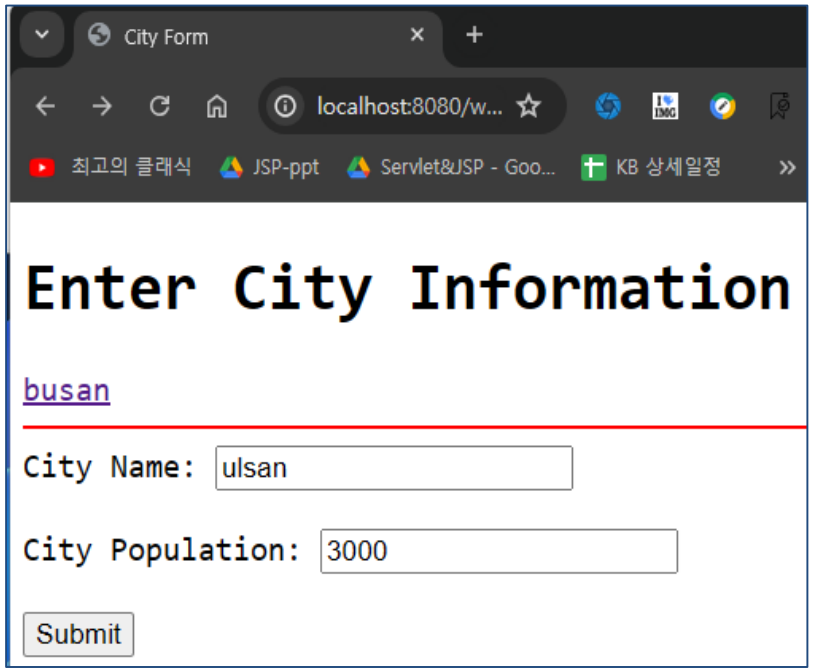
Q2 - 서블릿

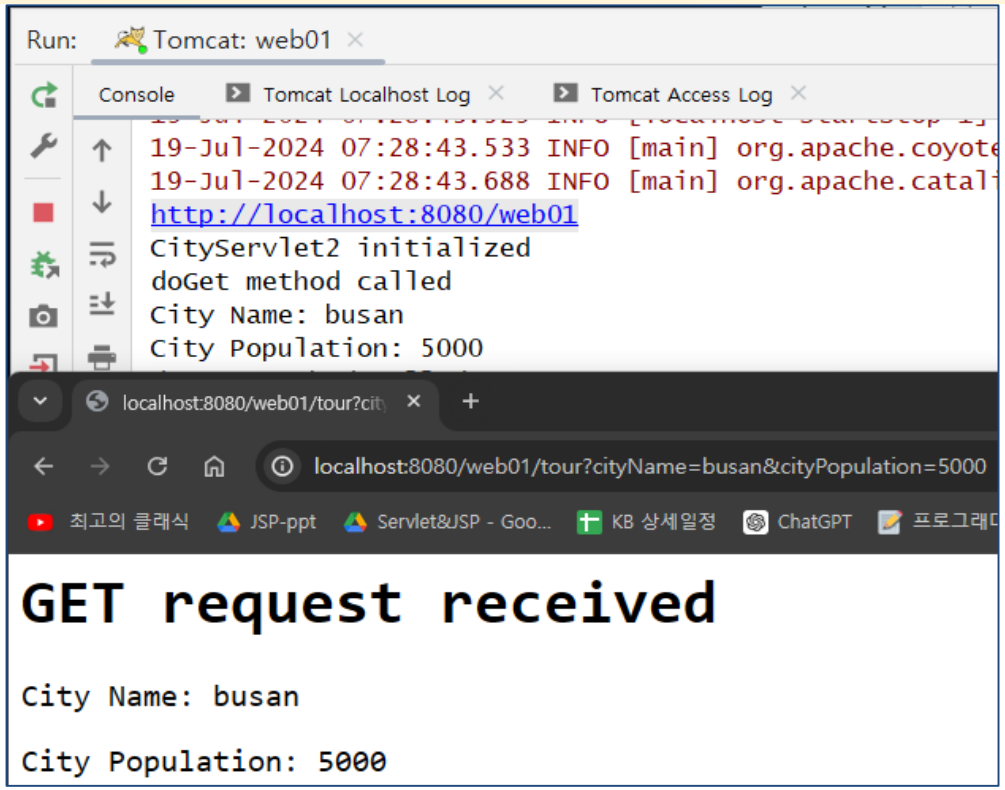
- **CityServlet.java**

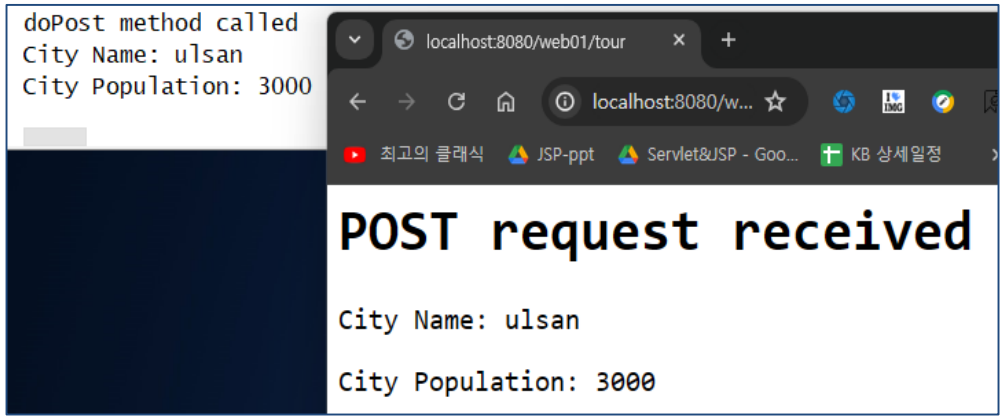
```
package com.multi.web01;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.IOException;

public class CityServlet extends HttpServlet {

    @Override
    public void init() throws ServletException {
        super.init();
        System.out.println("서블릿 초기화");
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        response.getWriter().append("servlet run");
        System.out.println("GET 요청 처리됨.");
    }

}
```

Q2 - 서블릿

- 프로젝트명: **web01, 패키지명: com.multi.mvc01**
- city.jsp에 서블릿을 호출하도록 코드를 작성하시오.
- **CityServlet2**서블릿을 생성하여 실행하시오.
- web.xml에 다음과 같이 실행되도록 서블릿을 등록하시오.







Q2 - 서블릿

- **city.jsp**

```
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<!DOCTYPE html>
<html>
<head>
    <title>City Form</title>
</head>
<body>
<h1>Enter City Information</h1>
<a href="tour?cityName=busan&cityPopulation=5000">busan</a>

<hr color="red">
<form action="tour" method="post">
    <label for="cityName">City Name:</label>
    <input type="text" id="cityName" name="cityName" required><br><br>
    <label for="cityPopulation">City Population:</label>
    <input type="number" id="cityPopulation" name="cityPopulation" required><br><br>
    <input type="submit" value="Submit">
</form>

</body>
</html>
```

- web.xml

```
<servlet>
    <servlet-name>CityServlet2</servlet-name>
    <servlet-class>com.multi.web01.CityServlet2</servlet-
class>
</servlet>
<servlet-mapping>
    <servlet-name>CityServlet2</servlet-name>
    <url-pattern>/tour</url-pattern>
</servlet-mapping>
```

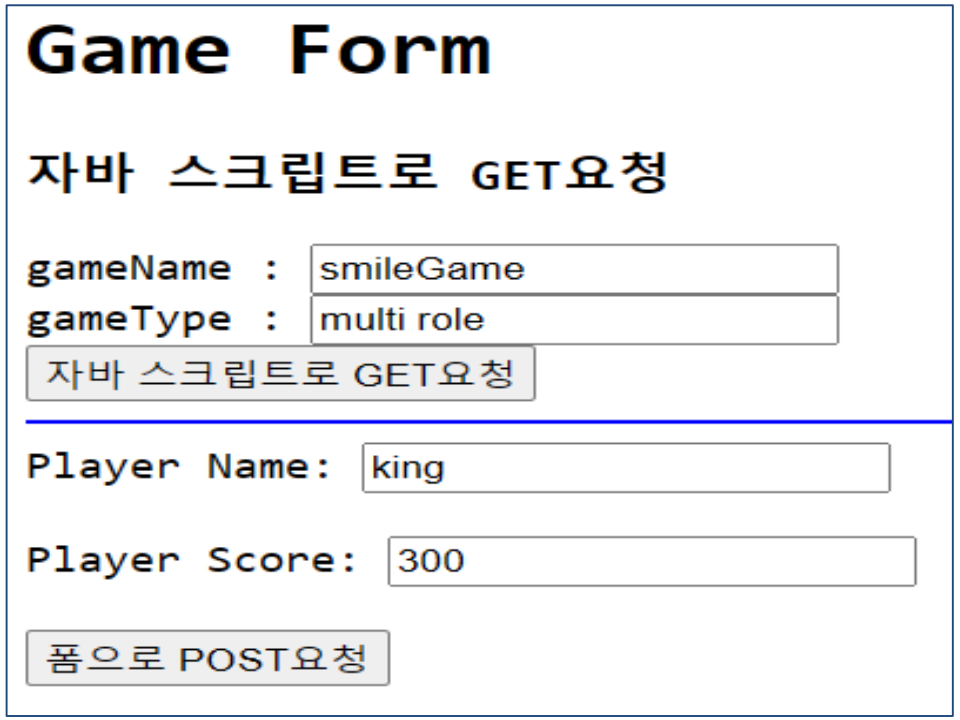
Q2 - 서블릿

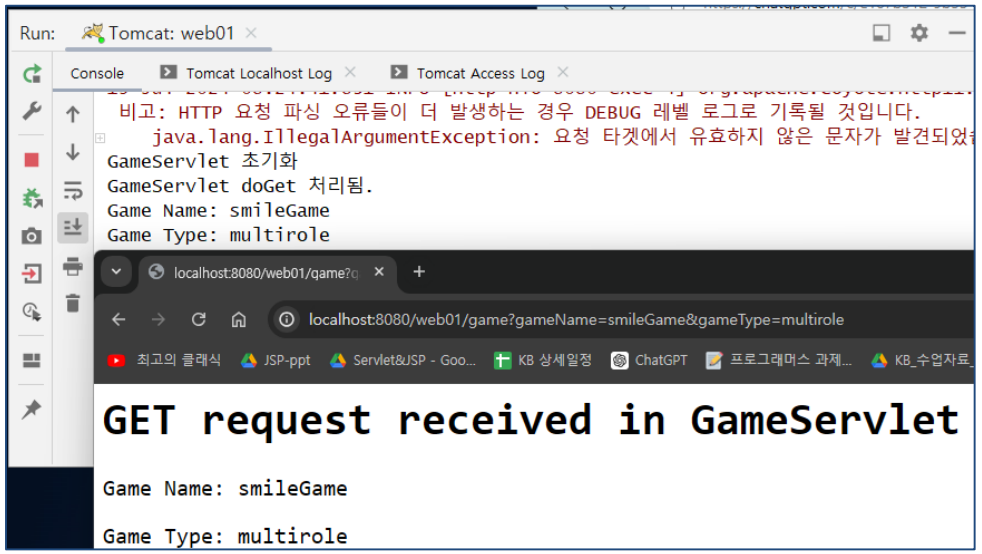
- CityServlet2.java

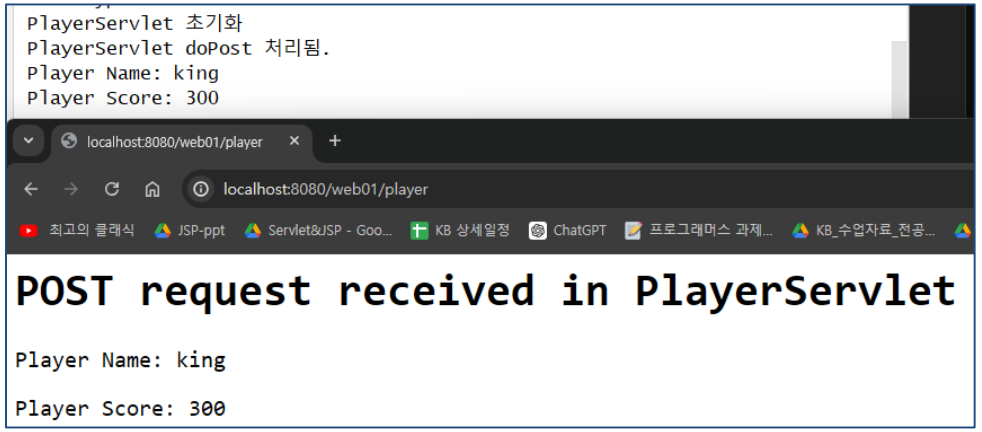
```
package com.multi.web01;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.IOException;

public class CityServlet2 extends HttpServlet {

    @Override
    public void init() throws ServletException {
        super.init();
        System.out.println("CityServlet2 initialized");
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        String cityName = request.getParameter("cityName");
        String cityPopulation = request.getParameter("cityPopulation");

        response.setContentType("text/html;charset=UTF-8");
        response.getWriter()
                .append("<h1>GET request received</h1>")
                .append("<p>City Name: ").append(cityName).append("</p>")
                .append("<p>City Population: ").append(cityPopulation).append("</p>");

        System.out.println("doGet method called");
        System.out.println("City Name: " + cityName);
        System.out.println("City Population: " + cityPopulation);
    }

    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        String cityName = request.getParameter("cityName");
        String cityPopulation = request.getParameter("cityPopulation");

        response.setContentType("text/html;charset=UTF-8");
        response.getWriter()
                .append("<h1>POST request received</h1>")
                .append("<p>City Name: ").append(cityName).append("</p>")
                .append("<p>City Population: ").append(cityPopulation).append("</p>");

        System.out.println("doPost method called");
        System.out.println("City Name: " + cityName);
        System.out.println("City Population: " + cityPopulation);
    }

    @Override
    public void destroy() {
        super.destroy();
        System.out.println("CityServlet2 destroyed");
    }
}
```

Q3 - 서블릿

- 프로젝트명: **web01, 패키지명: com.multi.mvc01**
- game.jsp에 서블릿을 호출하도록 코드를 작성하시오.
- **GameServlet, PlayerServlet**서블릿을 생성하여 실행하시오.
- annotation을 사용하여 서블릿을 등록하시오.
  - GameServlet(url- game), PlayerServlet(url- player)
- game정보 처리 요청은 자바 스크립트를 이용해서 get 방식으로 요청하시오.







Q3 - 서블릿

- **game.jsp**

```
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<!DOCTYPE html>
<html>
<head>
 <title>Game Form</title>
 <script>
    function btnClick() {
     //서블릿 호출 주소 : game
      let gameName = document.getElementById("gameName").value;
      let gameType = document.getElementById("gameType").value;
      location.href = "game?gameName=" + gameName + "&gameType=" + gameType;
    }
 </script>
</head>
<body>
<h1>Game Form</h1>
<h3>자바 스크립트로 GET요청</h3>
gameName : <input type="text" id="gameName" value="smileGame"><br>
gameType : <input type="text" id="gameType" value="multirole"><br>
<button onclick="btnClick()">자바 스크립트로 GET요청</button>
<hr color="blue">
```

```
<!-- PlayerServlet 호출 폼 (POST 요청) -->
<form action="player" method="post">
 <label for="playerName">Player Name:</label>
 <input type="text" id="playerName" name="playerName" value="king"
required><br><br>
 <label for="playerScore">Player Score:</label>
 <input type="number" id="playerScore" name="playerScore" value="300"
required><br><br>
 <input type="submit" value="폼으로 POST요청">
</form>
</body>
</html>
```

Q2 - 서블릿

- GameServlet.java

```
@WebServlet("/game")
public class GameServlet extends HttpServlet {

    @Override
    public void init() throws ServletException {
        super.init();
        System.out.println("GameServlet 초기화");
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        String gameName = request.getParameter("gameName");
        String gameType = request.getParameter("gameType");

        response.setContentType("text/html;charset=UTF-8");
        response.getWriter().append("<h1>GET request received in GameServlet</h1>")
                .append("<p>Game Name: ").append(gameName).append("</p>")
                .append("<p>Game Type: ").append(gameType).append("</p>");

        System.out.println("GameServlet doGet 처리됨.");
        System.out.println("Game Name: " + gameName);
        System.out.println("Game Type: " + gameType);
    }

    @Override
    public void destroy() {
        super.destroy();
        System.out.println("GameServlet 소멸됨.");
    }
}
```

- PlayerServlet.java

```
@WebServlet("/player")
public class PlayerServlet extends HttpServlet {

    @Override
    public void init() throws ServletException {
        super.init();
        System.out.println("PlayerServlet 초기화");
    }

    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        String playerName = request.getParameter("playerName");
        String playerScore = request.getParameter("playerScore");

        response.setContentType("text/html;charset=UTF-8");
        response.getWriter().append("<h1>POST request received in PlayerServlet</h1>")
                .append("<p>Player Name: ").append(playerName).append("</p>")
                .append("<p>Player Score: ").append(playerScore).append("</p>");

        System.out.println("PlayerServlet doPost 처리됨.");
        System.out.println("Player Name: " + playerName);
        System.out.println("Player Score: " + playerScore);
    }

    @Override
    public void destroy() {
        super.destroy();
        System.out.println("PlayerServlet 소멸됨.");
    }
}
```

수고하셨습니다!

KB 국민은행