

First Demo of simple helloworld.java using servlet:

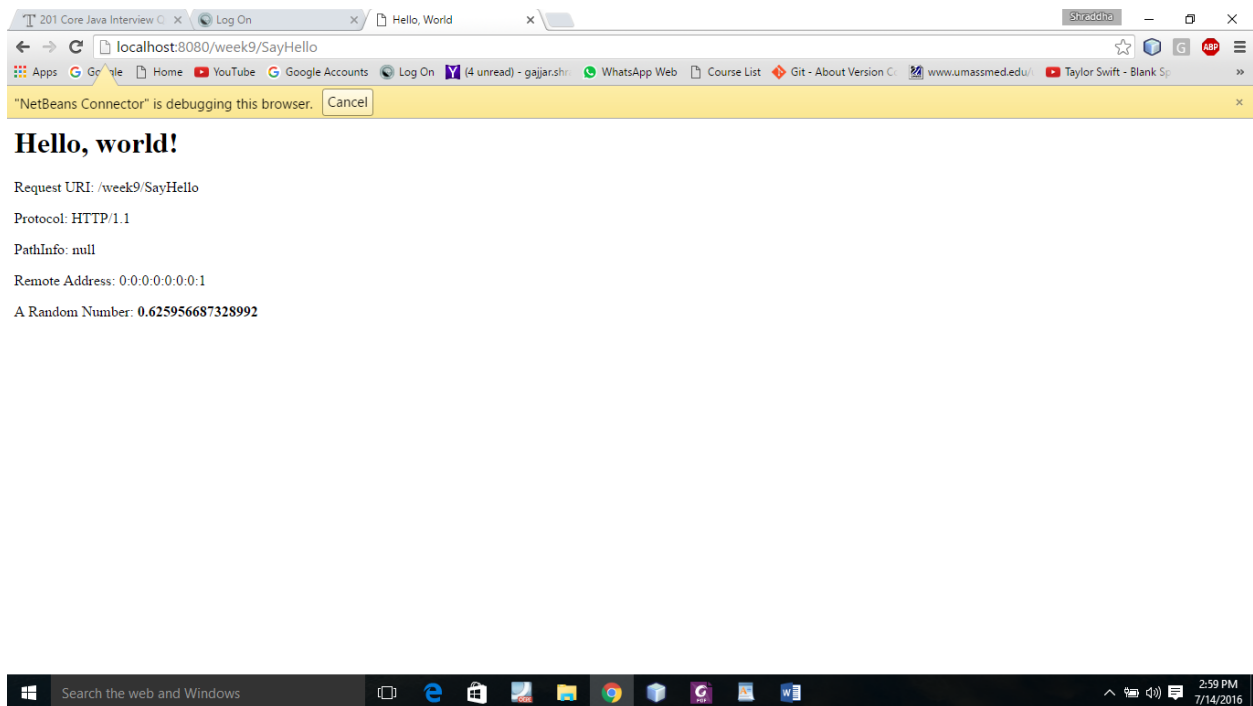
Practical -1

```
/*  
 * To change this license header, choose License Headers in Project Properties.  
 * To change this template file, choose Tools | Templates  
 * and open the template in the editor.  
 */  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import javax.servlet.ServletException;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
/**  
 *  
 * @author manthan  
 */  
@WebServlet(urlPatterns = {"/SayHello"})  
public class HelloWorldServlet extends HttpServlet {  
  
    @Override  
    public void doGet(HttpServletRequest request, HttpServletResponse response)  
        throws IOException, ServletException {  
  
        // Set the response MIME type of the response message
```

```
response.setContentType("text/html");

// Allocate a output writer to write the response message into the network socket
PrintWriter out = response.getWriter();

// Write the response message, in an HTML page
try {
    out.println("<html>");
    out.println("<head><title>Hello, World</title></head>");
    out.println("<body>");
    out.println("<h1>Hello, world!</h1>"); // says Hello
    // Echo client's request information
    out.println("<p>Request URI: " + request.getRequestURI() + "</p>");
    out.println("<p>Protocol: " + request.getProtocol() + "</p>");
    out.println("<p>PathInfo: " + request.getPathInfo() + "</p>");
    out.println("<p>Remote Address: " + request.getRemoteAddr() + "</p>");
    // Generate a random number upon each request
    out.println("<p>A Random Number: <strong>" + Math.random() + "</strong></p>");
    out.println("</body></html>");
} finally {
    out.close(); // Always close the output writer
}
}
```

Output:

Practical -2

That shows Date and Time of the selected country in selected language.

```
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 */
```

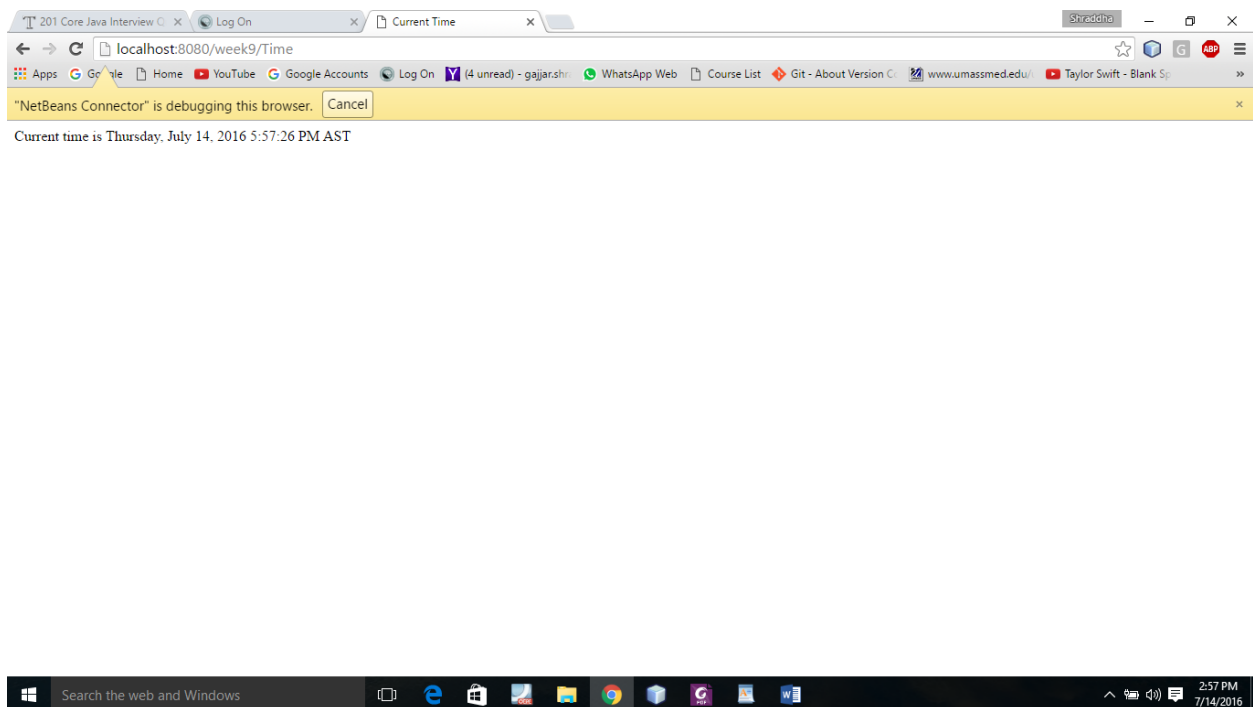
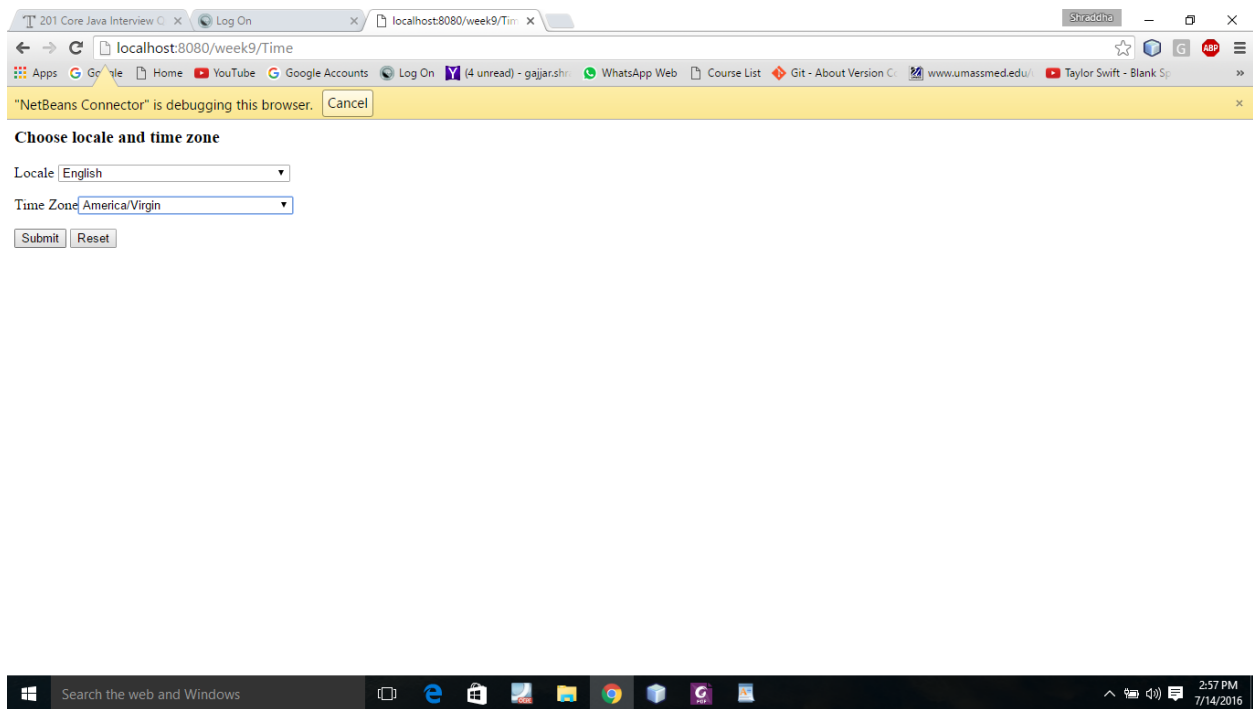
```
import javax.servlet.annotation.WebServlet;  
import javax.servlet.*;  
import javax.servlet.http.*;  
import java.io.*;  
import java.util.*;  
import java.text.*;  
  
/**  
 *  
 * @author manthan  
 */  
@WebServlet(name = "Time", urlPatterns = {"/Time"})  
public class TimeForm extends HttpServlet {  
  
    private static final String CONTENT_TYPE = "text/html";  
    private Locale[] allLocale = Locale.getAvailableLocales();  
    private String[] allTimeZone = TimeZone.getAvailableIDs();  
  
    /** Process the HTTP Get request */
```

```
public void doGet(HttpServletRequest request, HttpServletResponse
    response) throws ServletException, IOException {
    response.setContentType(CONTENT_TYPE);
    PrintWriter out = response.getWriter();
    out.println("<h3>Choose locale and time zone</h3>");
    out.println("<form method=\"post\" action=" +
        "Time>");
    out.println("Locale <select size=\"1\" name=\"locale\">");

    // Fill in all locales
    for (int i = 0; i < allLocale.length; i++) {
        out.println("<option value=\"" + i + "\">" +
            allLocale[i].getDisplayName() + "</option>");
    }
    out.println("</select>");

    // Fill in all time zones
    out.println("<p>Time Zone<select size=\"1\" name=\"timezone\">");
    for (int i = 0; i < allTimeZone.length; i++) {
        out.println("<option value=\"" + allTimeZone[i] + "\">" +
            allTimeZone[i] + "</option>");
    }
    out.println("</select>");
    out.println("<p><input type=\"submit\" value=\"Submit\" >");
    out.println("<input type=\"reset\" value=\"Reset\"></p>");
    out.println("</form>");
    out.close(); // Close stream
}
```

```
/** Process the HTTP Post request */  
  
public void doPost(HttpServletRequest request, HttpServletResponse  
    response) throws ServletException, IOException {  
    response.setContentType(CONTENT_TYPE);  
    PrintWriter out = response.getWriter();  
    out.println("<html>");  
  
    int localeIndex = Integer.parseInt(  
        request.getParameter("locale"));  
  
    String timeZoneID = request.getParameter("timezone");  
    out.println("<head><title>Current Time</title></head>");  
    out.println("<body>");  
  
    Calendar calendar =  
        new GregorianCalendar(allLocale[localeIndex]);  
  
    TimeZone timeZone = TimeZone.getTimeZone(timeZoneID);  
    DateFormat dateFormat = DateFormat.getDateInstance(  
        DateFormat.FULL, DateFormat.FULL, allLocale[localeIndex]);  
    dateFormat.setTimeZone(timeZone);  
  
    out.println("Current time is " +  
        dateFormat.format(calendar.getTime()) + "</p>");  
    out.println("</body></html>");  
    out.close(); // Close stream  
}  
}
```

Output:

Practical -3**Registration class:**

```
/*  
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 */
```

```
import java.io.IOException;  
import java.io.PrintWriter;  
import javax.servlet.ServletException;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;
```

```
/**  
 *  
 * @author manthan  
 */  
@WebServlet(urlPatterns = {"/Regiclass"})  
public class Regiclass extends HttpServlet {
```

```
    private String lastname;
```



```
private String firstname;
private String gender;
private String telephone;
private String eamil;

public Regiclass(String lastname, String firstname, String gender, String telephone, String eamil) {
    this.lastname = lastname;
    this.firstname = firstname;
    this.gender = gender;
    this.telephone = telephone;
    this.eamil = eamil;
}

public String getFirstname() {
    return firstname;
}

public String getLastname() {
    return lastname;
}

public String getGender() {
    return gender;
}

public String getTelephone() {
    return telephone;
}
```

```
public String getEamil() {  
    return eamil;  
}  
  
public void setLastname(String lastname) {  
    this.lastname = lastname;  
}  
  
public void setFirstname(String firstname) {  
    this.firstname = firstname;  
}  
  
public void setGender(String gender) {  
    this.gender = gender;  
}  
  
public void setTelephone(String telephone) {  
    this.telephone = telephone;  
}  
  
public void setEamil(String eamil) {  
    this.eamil = eamil;  
}  
}
```

Regiservelt java class that take value from user write in dat file then read from it and display what you entered:

```
/*  
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 */  
  
import java.io.IOException;  
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import javax.servlet.ServletException;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
import java.io.*;  
import javax.servlet.*;  
import javax.servlet.http.*;  
  
/**  
 *  
 * @author manthan  
 */  
@WebServlet(urlPatterns = {"/Regi"})
```

```
public class Regi extends HttpServlet {

    private String message;

    public void init() throws ServletException
    {
        // Do required initialization
        message = "Shraddha Gajjar";
    }

    public void doGet(HttpServletRequest request,HttpServletResponse response)throws ServletException,
    IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<h3>Choose locale and time zone</h3>");
        out.println("<form method=\"post\" action=\" +
            \"Regi>");
        out.println("<p>First Name : <input type=\"text\" name=\"FirstName\"> </p>");

        out.println("<p>Last Name : <input type=\"text\" name=\"LastName\"> </p>");

        out.println("<p> Gender: <select size=\"1\" name=\"Gender\"> </p>");

        out.println("<option value=\"Female\">Female</option>");

        out.println("<option value=\"Male\">Male</option>");
```

```
out.println("</select>");

out.println("<p>Telephone : <input type=\"text\" name=\"Teleno\">");

out.println("<p>Email ID : <input type=\"text\" name=\"Email\">");


out.println("<p><input type=\"submit\" value=\"Submit\" >");
out.println("<input type=\"reset\" value=\"Reset\"></p>");
out.println("</form>");
out.close(); // Close stream
}

public void doPost(HttpServletRequest request, HttpServletResponse
    response) throws ServletException, IOException {
    response.setContentType("text/html");

    PrintWriter out = response.getWriter();

    String lastName = request.getParameter("LastName");
    String firstName = request.getParameter("FirstName");
    String gender = request.getParameter("Gender");
    String telephone = request.getParameter("Teleno");
    String email = request.getParameter("Email");

    if (lastName.length() == 0 || firstName.length() == 0) {
        out.println("Last Name and First Name are required");
        return; // End the method
    }
}
```

```
Regiclass r = new Regiclass(lastName, firstName, gender, telephone, email);

try{
    ObjectOutputStream outFile = new ObjectOutputStream(new FileOutputStream("Regidata.dat"));
    outFile.writeObject(r);
    outFile.close();
} catch(Exception e){
    System.out.println(e);
}

try{

    ObjectInputStream inFile = new ObjectInputStream(new FileInputStream("Regidata.dat"));

    Regiclass regiin = (Regiclass)inFile.readObject();

    out.println("You entered the following data");
    out.println("<p>Last name: " + regiin.getLastname());
    out.println("<br>First name: " + regiin.getFirstname());
    out.println("<br>Gender: " + regiin.getGender());
    out.println("<br>Telephone: " + regiin.getTelephone());
    out.println("<br>Email: " + regiin.getEamil());
} catch(Exception e){
    System.out.println(e);
}

}
```

```
public void destroy()
{
    // do nothing.
}
}
```

Output:

The screenshot shows a web browser window with the address bar displaying 'localhost:8080/week9/Regi'. A yellow banner at the top states '"NetBeans Connector" is debugging this browser.' with a 'Cancel' button. Below the banner is a form titled 'Enter Your Details' with the following fields and values:

- First Name :
- Last Name :
- Gender:
- Telephone :
- Email ID :

Below the email field is a tooltip showing file information: 'Type: Fovit PhantomPDF PDF Document', 'Size: 123 kB', and 'Date modified: 3/12/2016 10:56 AM'. At the bottom of the form are 'Submit' and 'Reset' buttons. The Windows taskbar at the bottom shows the search bar and various application icons, with the system clock indicating 3:01 PM on 7/14/2016.

