**File: HelloService.java**

java

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import com.sun.net.httpserver.HttpServer;

import com.sun.net.httpserver.HttpHandler;

import com.sun.net.httpserver.HttpExchange;

import java.io.\*;

import java.net.InetSocketAddress;

public class HelloService {

public static void main(String[] args) throws IOException {

HttpServer server = HttpServer.create(new InetSocketAddress(8081), 0);

server.createContext("/hello", new HelloHandler());

server.setExecutor(null);

server.start();

System.out.println("Server started at http://localhost:8081");

}

static class HelloHandler implements HttpHandler {

@Override

public void handle(HttpExchange exchange) throws IOException {

if ("GET".equals(exchange.getRequestMethod())) {

String query = exchange.getRequestURI().getQuery();

String userName = "User";

if (query != null && query.startsWith("name=")) {

userName = query.substring(5); // Skip "name="

}

String response = "Hello " + userName;

exchange.sendResponseHeaders(200, response.length());

OutputStream os = exchange.getResponseBody();

os.write(response.getBytes());

os.close();

}

}

}

}

**⚡ How to Run the Service:**

bash

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javac HelloService.java

java HelloService

* Server will start at ➔ http://localhost:8081/hello
* Example access ➔ http://localhost:8081/hello?name=Sejal

Output:

nginx

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Hello Sejal

**📄 Step 2: Create Client to Consume Web Service**

**File: HelloClient.java**

java

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import java.io.\*;

import java.net.\*;

public class HelloClient {

public static void main(String[] args) throws Exception {

String userName = "Sejal"; // You can take input from Scanner if you want

URL url = new URL("http://localhost:8081/hello?name=" + URLEncoder.encode(userName, "UTF-8"));

HttpURLConnection conn = (HttpURLConnection) url.openConnection();

conn.setRequestMethod("GET");

BufferedReader in = new BufferedReader(new InputStreamReader(conn.getInputStream()));

String response = in.readLine();

System.out.println(response);

in.close();

}

}

**⚡ How to Run the Client:**

bash

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javac HelloClient.java

java HelloClient

Output:

nginx

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Hello Sejal

**🏁 That's it!**

Now:

* You have a basic **Web Service** (HelloService.java)
* And a **Client** (HelloClient.java) that **consumes** it!