

Java

O cem to bude?

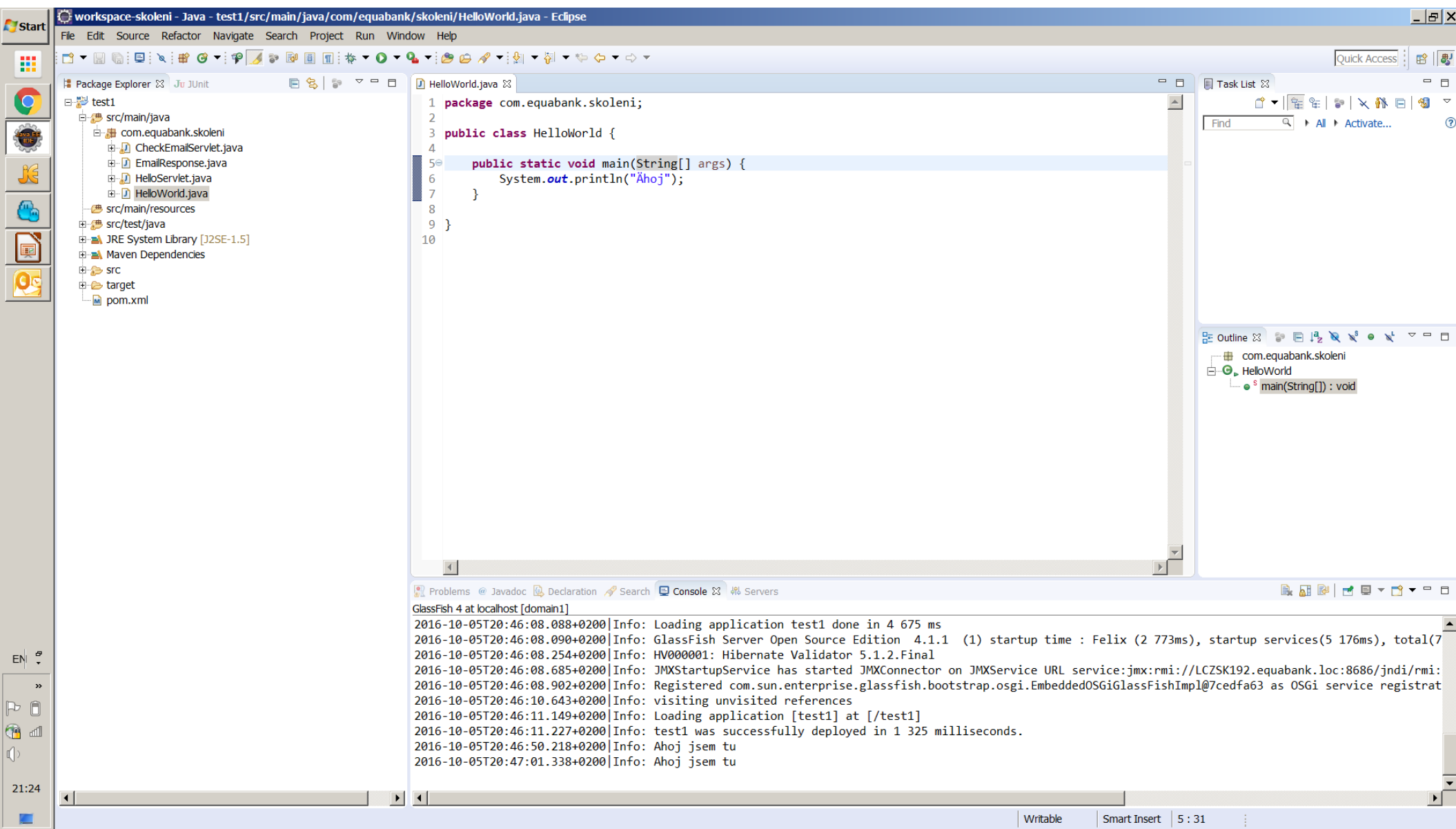
- Java – uvod
 - Install java, eclipse, glassFish
 - Hello world
 - Server
 - Konec
- *Instalace*
 - *Java*
 - *IDE – eclipse*
 - *Server – Tomcat*
 - *Priklady*
 - *HelloWorld*
 - *Napojeni na REST/JSON sluzbu*
 - *Servlety & JSP*
 - *REST/JSON*

<https://github.com/jajir/skoleni>

Java & JVM

- Zdrojovy kod x binarni kod
- Kompilace .class → .java
- Javac (ukázat, kde je to na disku)
- JVM
- Proc je to uspesne (<http://pypl.github.io/PYPL.html>)
 - Google
 - Tooling ()
 - Knihovny

IDE - Eclipse



Zalozeni projektu ...

- New maven project -maven-archetype-webapp
- New package
- New class HelloWorld
- Pom.xml – maven (vysvetlit)

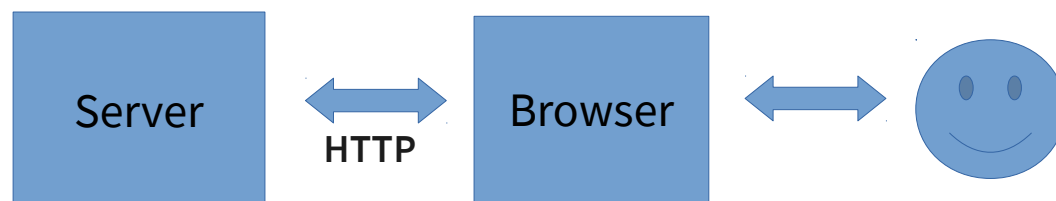
Hello World

```
package com.equabank.skoleni;  
  
public class HelloWorld {  
  
    public static void main(String[] args) {  
        System.out.println("Ahoj");  
    }  
  
}
```

Web Server

- **Server**

- html (php)
- .js, .css .ico ...



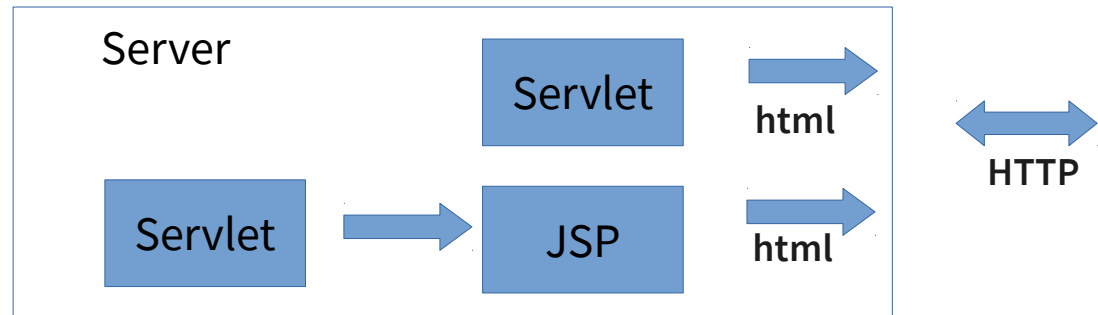
- **HTTP**

- Method get, post, delete ...
- Formular

```
<form name="checkEmailForm" method="post"
action="checkEmail">
Email: <input type="text" name="email"/> <br/>
<input type="submit" value="Odeslat" />
</form>
```

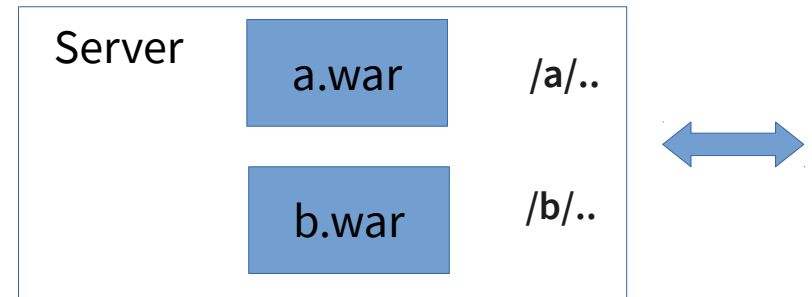
Web application

- Servlet
- Servlet – JSP
- .war
- META-INF
- Web.xml
 - Servlet mapping
 - Welcome page



War

- .war - projekt
- Web.xml
- Deploy – nasazeni
- Redeploy – aktualizace
- Server (enterprise, servlet container ...)
- Mvn package → .war



Hello world servlet

Web.xml

HelloServlet.java

```
<servlet>
<servlet-name>helloServlet</servlet-name>
<servlet-class>com.equabank.skoleni.HelloServlet</servlet-class>
</servlet>
```

```
<servlet-mapping>
<servlet-name>helloServlet</servlet-name>
<url-pattern>/index</url-pattern>
</servlet-mapping>
```

```
<welcome-file-list>
<welcome-file>index</welcome-file>
</welcome-file-list>
```

```
@Override
protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
    System.out.println("Ahoj jsem tu");
    req.setAttribute("ahoj", "Ahoj vzacny hoste");
    RequestDispatcher requestDispatcher = req.getRequestDispatcher("/index.jsp");
    requestDispatcher.forward(req, resp);
}
```

Form – email (validace)

- **Servlet**

- Get → form
- Post → result

- **Jsp**

- form
- result

Email – super validate

```
Client client = Client.create();
WebResource webResource = client
    .resource("https://ajith-Verify-email-address-
v1.p.mashape.com/verifyEmail?email=" + email + "");
ClientResponse response =
    webResource.getRequestBuilder().header("Accept", "application/json")
        .header("X-Mashape-Key",
            "c1CZ2L4YdimshRiXqsgHuCoJXfI2p1N4RL0jsn2zYu6JrPnBF9")
        .accept("application/json").get(ClientResponse.class);
if (response.getStatus() != 200) {
    throw new RuntimeException("Failed : HTTP error code : " +
        response.getStatus());
}
return response.getEntity(EmailResponse.class);
```

Kde hledat pomoc?



- **Gfo team**
- <http://stackoverflow.com/>
- **Google**
 - Negativni odpoved je taky odpoved
- **Dlasi znalosti**
 - Oracle certifikace
 - Amazon – treba:
 - https://www.amazon.com/Java-Beginners-Guide-Herbert-Schildt/dp/0071809252/ref=sr_1_1?s=books&ie=UTF8&qid=1474528527&sr=1-1&keywords=java+programming

O cem to nebylo

- Jazyk
 - Logging
 - IoC
 - Tooling (...)
 - kvalita kodu
 - Release process
 - DB (ORM)
 - Messaging
 - Navrh kodu – design patterny
 - Big data
 - ... tuna dalsiho
- Do javy kompilovane jazyky
 - SCM – git ...
 - Image processing
 - Java.* libraries
 - Navrh aplikaci