Google App Engine for Java using Eclipse - Tutorial

Introduction:

With the Google App Engine (GAE), Google offers a cloud computing infrastructure for creating and running web applications.
The GAE is a platform for creating web applications. Currently Google supports Python, Java and other Java Virtual Machine (JVM) based languages, e.g. Groovy. The GAE for Java is called GAE/J.

The GAE/J uses the Jetty servlet container to serve applications and supports the Java Servlet API in version 2.4. It provides access to databases via Java Data Objects (JDO) and the Java Persistance API (JPA). The GAE/J uses Google Bigtable as the distributed storage system for persisting application data.

GAE/J does not allow all Java classes to be used, for example Swing and AWT are not supported and you cannot use Threads. Google provides a full list of supported classes on the Google whitelist.

The Google App Engine allow you to use standard Java API, this way your application can run either on the GAE or on any other Java enabled server environment, e.g. Tomcat or Jetty.

Installation of the Google Tools for Eclipse

We use for this demo Eclipse Galileo (Pulsar) http://www.eclipse.org/pulsar/, however the Eclipse 3.5 is ok also.

We assuming of course that you have knowledge about Eclipse.

Open the Eclipse framework, select Help → Install New Software, in the Box Work with select Add options .

In the box Name you can write Google Application

in Location write: http://dl.google.com/eclipse/plugin/3.5 and click OK.

Then select the Option SDK and the installation will init automatically.!!!!

Register at the GAE/J

To deploy your application to the Google cloud you need a GAE/J account. To get such an account you need a Google email account.
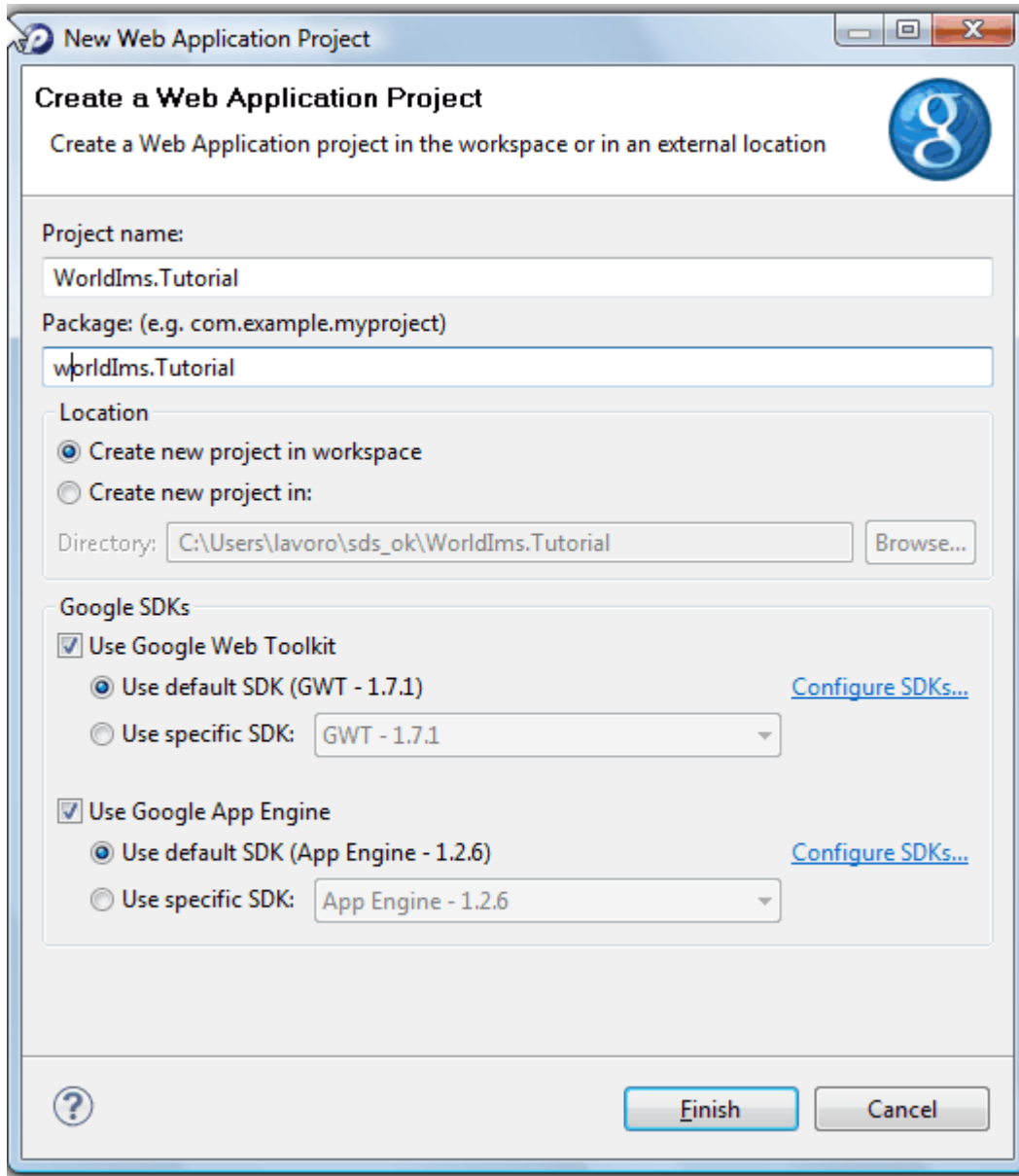
Open the following URL http://appengine.google.com/ and login with your Google account information. Press the button "Create an application".

You will then need then to verify your account. After providing your phone number, Google will text you a verification code via SMS. You will then type the verification code into the verification box online.

Create an application name. You have to choose one which is still available.
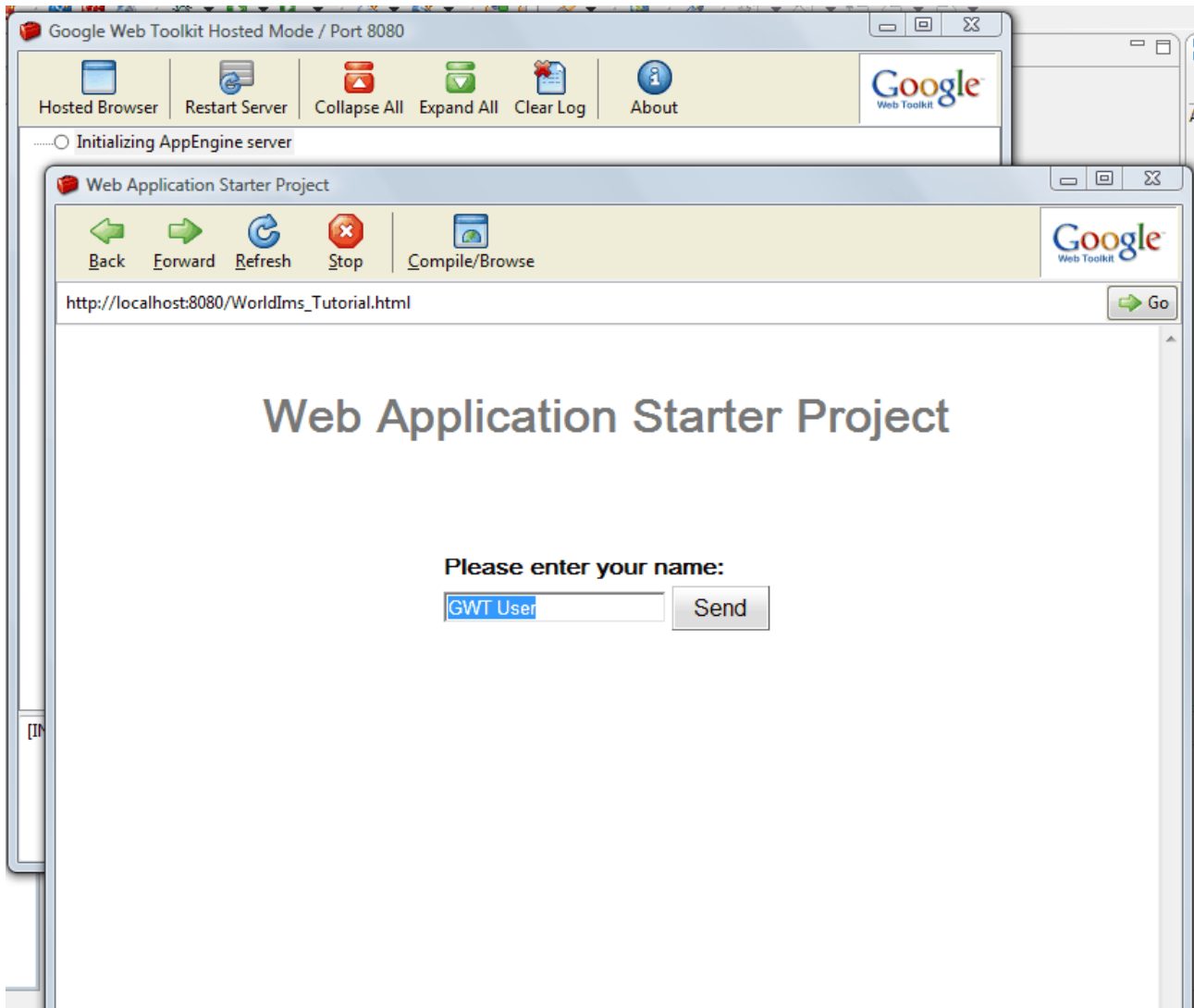
My First Application

Select File > New > Web Application Project. Enter the name WorldIms.Tutorial for your project and the java package name"worldIms.Tutorial". Click **Finish.**

Run your application

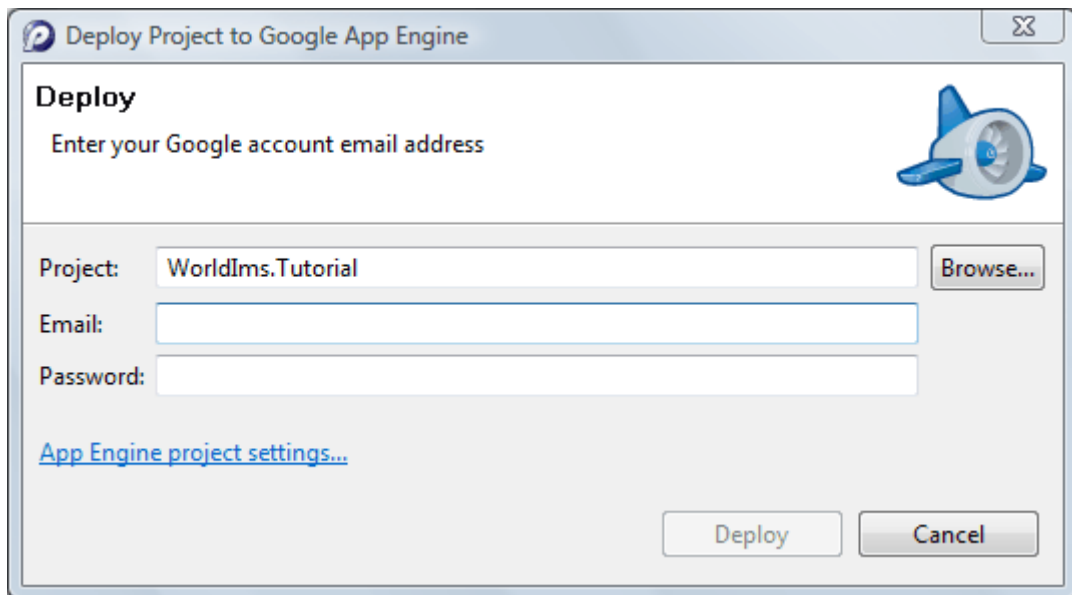Right click on your application, select **run as-> Web Application**

This should start Jetty on http://localhost:8080/ . Open the url in the browser and you should the possibility to select your servlet and to start it. If you select it you should see a "Hello, world" message.
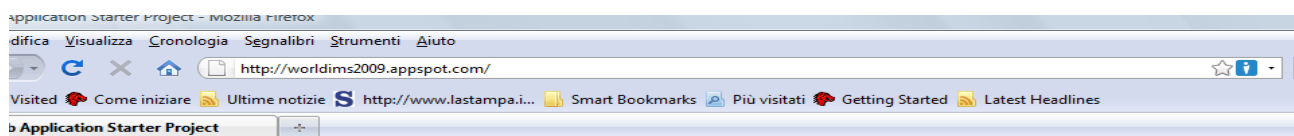

Deploy your application

Now deploy your application to the Google cloud. The following assumes that you have already created your account.

Right-click on your project and select Google > App Engine Settings... from the context menu. Enter your application ID.

Right-click on your project, Select Google -> Deploy to App Engine. You need to login with your Goole account information. After the upload completes you will find your application online under http://application-id.appspot.com, e.g. in my case http://worldims2009.appspot.com.

Thank you and help me to write tutorial visiting the site:

Http://worldims.weebly.com

I'm waiting your comment.