**Spider Delegate Image Capture**

**Introduction:** The goal of this project is to capture images of Spider delegates through webcam. Previously, there was an implementation using Java Media Framework (JMF) which was not functional. JMF is a buggy framework. Besides, it has to be installed on user PC.

Considering these all, our target is to use a tool which is lightweight and user doesn’t need a heavy framework installed on PC to capture image.

Webcam-capture is a lightweight easy-to-use java framework. Please visit <http://webcam-capture.sarxos.pl/> to get an overall idea on it. There are some examples using this tool at <https://github.com/sarxos/webcam-capture/tree/master/webcam-capture/src/example/java> .

**Project Description:** This is a maven project named **webcam-capture-applet** with an applet which runs in browser and captures delegate images using webcam-capture interface. The applet class name is WebcamAppletButton.java.

**Build:**

It requires Maven 3 to build the project. After downloading latest maven, set the following two envoirnemntal varibale and add relevant bin paths in **path** variable

* JAVA\_HOME=C:\Program Files\Java\jdk1.7.0\_40 (point to JDK installed at machine)
* MAVEN\_HOME= S:\softwares\apache-maven-3.1.1 (point to Maven at machine)

Change plugin.jar location entry POM.xml

|  |
| --- |
| <dependency>  <groupId>sun.plugin</groupId>  <artifactId>plugin</artifactId>  <version>1.6.7</version>  <scope>system</scope>  <systemPath>S:\ImageCapture\trunk\webcam-capture-applet\plugin.jar</systemPath>  </dependency> |

From command prompt locate the pom directory in the Image Capture project (S:\ImageCapture\trunk\webcam-capture-applet)

Run the command **mvn clean install** (or mvn –x clean install to see full stack trace) (S:\ImageCapture\trunk\webcam-capture-applet>mvn -x clean install)

Once build commad is completed an **appet.jar** file should be created.

This jar will be used in image capture in Spider

**Signing jar:** The jar has to be signed before deployment. To create a keystore for signing the jar the command is as follows:

>keytool –genkey –alias <alias-name> -keyalg <name> -keystore <name> -keysize <size>

Example: keytool -genkey –alias example –keyalg RSA –keystore keystore.jks –keysize 2048

Now using the keystore jars can be signed like following:

>jarsigner –keystore <name> -storepass <password> <jar-name> <alias-name>

Example: jarsigner -keystore keystore.jks –storepass abc123 applet.jar example

**Deployment:** The signed jar has to be deployed there at spider root directory which the applet tag will point.

**Client requirement:** The browser must have Java-plugin installed to run the webcam capture applet, JRE requirement is 6 or above.

**JSP:** The Jsp file pgGrabImage.jsp has the applet tag that points to the webcam capture applet that has been deployed in spider root path. The applet tag is as follows:

<applet ID="GrabImageApplet"

codebase="."

archive="applet.jar"

code="WebcamAppletButton.class"

width="440" height="300"

alt="Webcam Capture Applet">

<param name="separate\_jvm" value="true" />

<param name="personName" value="<strutsbean:write name="pgGrabImageForm" property="persondName" filter="false"/>">

<param name="personId" value="<strutsbean:write name="pgGrabImageForm" property="persondId" filter="false"/>">

<param name="userCode" value="<strutsbean:write name="pgGrabImageForm" property="userCode" filter="false"/>">

<param name="baseUrl" value="<strutsbean:write name="pgGrabImageForm" property="baseUrl" filter="false"/>">

This browser does not support Applets.

</applet>