

Applets

ECE 155B – Spring 2012

Discussion Section 1.3

Applets Tutorial

<http://download.oracle.com/javase/tutorial/deployment/applet/index.html>

Java Applet Code

- Your class should extend JApplet instead of JFrame (which you would use if you were creating a Java application instead of a Java Applet)
- Use init() (instead of a constructor)
- Use start() (instead of main)
- init() – initialize applet
- start() – starts the execution of the applet
- stop() – stop the execution of the applet (called when the browser window is minimized)
- destroy() – removes the applet from the context of the appletviewer/browser
- You do not need to create an instance of your class in the main() function
- An instance of your applet class is automatically created when an applet is loaded in browser
- Use *appletviewer* tool to test your applet code
- Command: `appletviewer -J-Djava.security.policy=dist/java.policy dist/Doctor.html`

Java Policy File (Important!)

- Use *policytool* to add policies in your *.java.policy* file
- See <http://download.oracle.com/javase/6/docs/technotes/guides/security/PolicyFiles.html> for details about applet security restrictions
- If you want to edit it by yourself, put the updated file in your **\$HOME** directory
- By default, an applet does not have File permissions, or Socket permissions
- Put java policy file on the same directory as your jar & html files

Sample File

```
grant {permission java.io.FilePermission "<<ALL FILES>>", "read, write, delete, execute"};;

grant {permission java.net.SocketPermission "www.ucsb.edu", "accept, connect, listen, resolve"};;

grant {permission java.lang.RuntimePermission "exitVM"};;

grant {permission java.security.AllPermission};;
```

Sample HTML File which includes applet

```
<HTML>
  <BODY>
    <APPLET code ="ece155b.DoctorApplet" width=500 height=500></APPLET>
  </BODY>
</HTML>
```