# Java Applications vs. Applets

(no lab...just for fun)

#### More on Applications

- So far, we have been writing Java applications.
- A Java application is a stand-alone program that can be executed using the Java interpreter.
- Java contains the interpreter and is an application itself. (What language is it written in?).
- Applications run in a console (DOS) window.
- Applications can create and read files on your machine.
- Applications require a psvm (public static void main).
- The psvm tells Java where to start your program.
- Applications run on your machine once you decide to install the application.

## Applets...

- An applet is a Java program that is embedded in an HTML document and executed using a Web browser.
- A Java applet is just another type of media that can be exchanged across the Web (like sound, graphics, text,...).
- A Java applet is an executable program.
- A Java applet can either be transported across the Web or viewed locally using a Web browser.
- They can also be viewed using the appletviewer tool in the Java Software Development Kit. This tool interprets and executes the Java applet.
- The applet does not have a psvm since it can be thought of as part of the larger Web browser program that is already running.

### Applets...cont.

- Applets have an init() or begin() method which is called when the applet opens.
- Applets running in your browser were possibly written by people you do not know.
- Applets cannot open/close files on your machine for security reasons.
- A class that defines an applet must extend the Applet class.

#### So What?

- Applications vs. applets is a Java specific issue (not a Computer Science issue).
- Nobody on the AP Test Committee is concerned with applications vs. applets.
- You probably do/will though.
- This curriculum uses applications to teach the basics and applets to teach the graphics. It doesn't have to be that way though.
- We now are going to create a bunch of applets...