

Java Programming AP Edition

U5R2 Algorithms and Data Structures

PACKAGING AND DEPLOYMENT OF A PROJECT

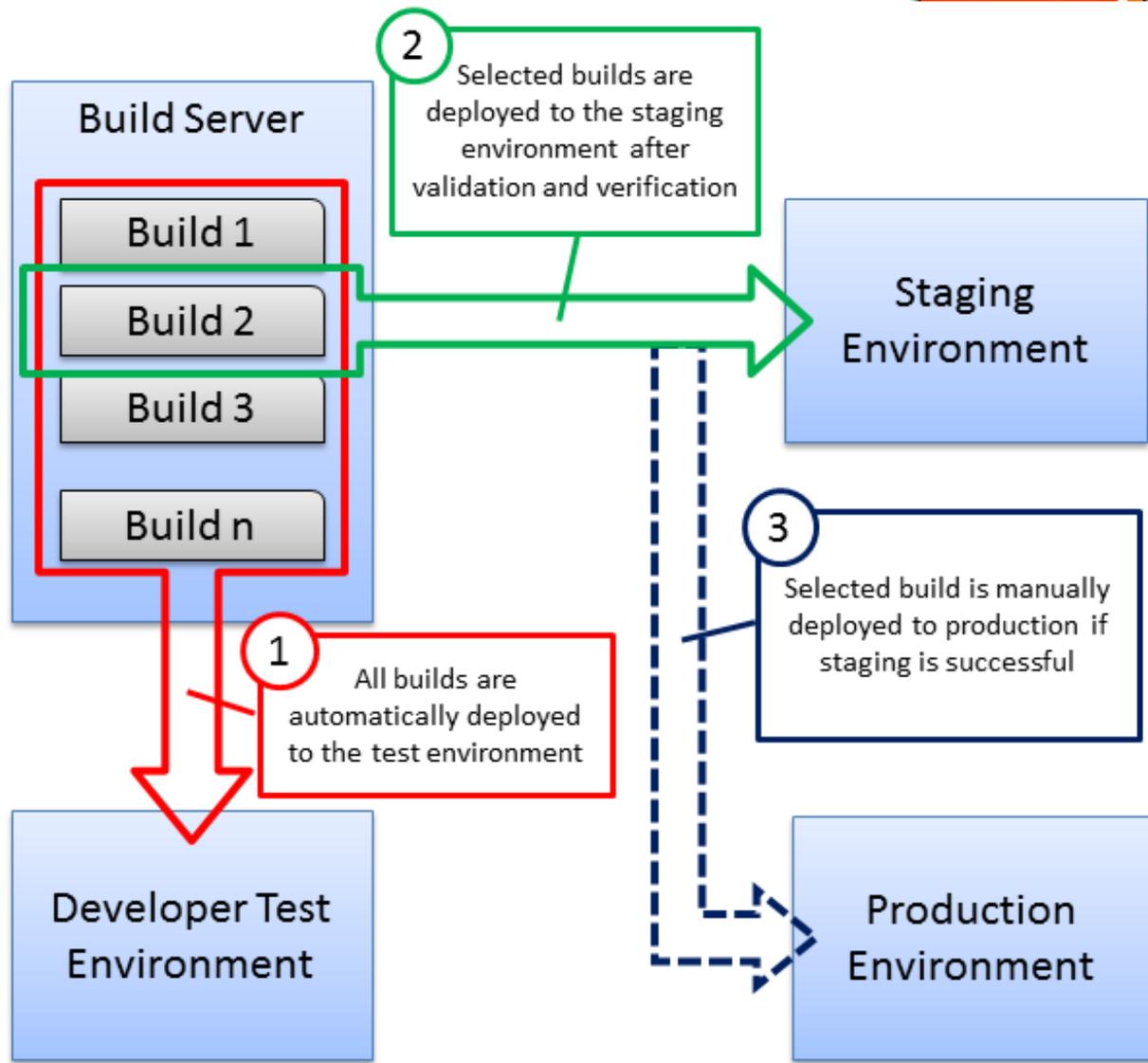
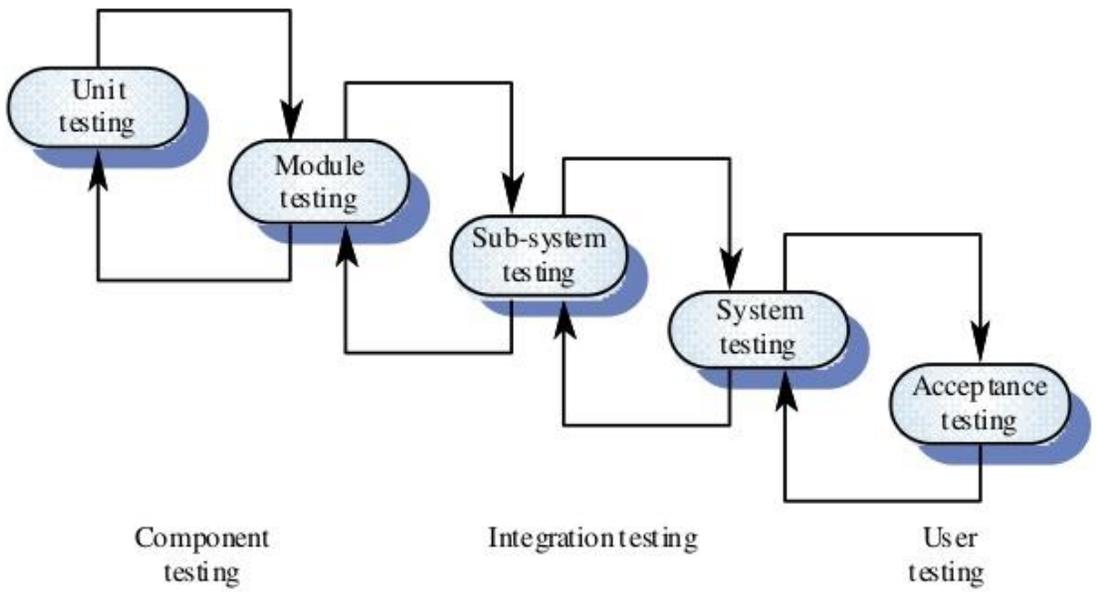
ERIC Y. CHOU, PH.D.

IEEE SENIOR MEMBER



Software Development Flow

The stages of testing process





Packaging and Deploying Java Projects

What is JAR?

Java archive file can be used to group all the project files in a compressed file for deployment.

The Java archive file format (**JAR**) is based on the popular **ZIP** file format.

This single file can be deployed on an end-user's machine as an application. It also can be downloaded to a browser in a single **HTTP** transaction, rather than opening a new connection for each piece.

This greatly simplifies application deployment and improves the speed with which an applet can be loaded onto a web page and begin functioning.



Creating JAR

(1) Command Line:

You can use the JDK jar command to create an archive file. The following command creates an archive file named TicTacToe.jar for classes TicTacToe.class and TicTacToe\$Cell.class.

```
jar -cf TicTacToe.jar TicTacToe.class TicTacToe$Cell.class
```

The -c option is for creating a new archive file, and the -f option specifies the archive file's name.

(2) Packaging by IDE:

Go BlueJ!!!



Viewing the Contents of a JAR File

You can view the contents of a .jar file using WinZip/PeaZip.

Name <	Type	Size	Packed	Date/time	Att...	CRC	Full name
MANIFEST.MF	.MF	62 B	61 B	2016-05-27 22:07:48		85BB9F1F	META-INF\MANIFEST.MF
package.bluej	.bluej	75 B	77 B	2016-05-27 22:07:50		6D44174D	package.bluej
README.TXT	.TXT	593 B	326 B	2016-05-27 22:07:50		D00594DB	README.TXT
splash.png	.png	150.5 KB	147.2 KB	2016-05-27 22:07:48		9BA532A1	image\splash.png
SplashScreen.class	.class	1.5 KB	907 B	2016-05-27 22:07:50		21CD6E0F	SplashScreen.class
SplashScreen.cbtxt	.cbtxt	205 B	124 B	2016-05-27 22:07:50		8487DC5C	SplashScreen.cbtxt
SplashScreen.java	.java	1.2 KB	540 B	2016-05-27 22:07:50		83F56356	SplashScreen.java
TicTacToe\$1.class	.class	175 B	145 B	2016-05-27 22:07:50		42DEDAC0	TicTacToe\$1.class
TicTacToe\$Cell\$MyMouseListener.class	.class	1.7 KB	926 B	2016-05-27 22:07:50		CF426CA2	TicTacToe\$Cell\$MyMouseListener.class
TicTacToe\$Cell.class	.class	1.5 KB	866 B	2016-05-27 22:07:50		9C75AA91	TicTacToe\$Cell.class
TicTacToe.class	.class	2.7 KB	1.5 KB	2016-05-27 22:07:50		E2C98B65	TicTacToe.class



.jar to exe Embedded JRE

launch4j 3.8

- Home
- Docs
- Changelog
- Screenshots
- Download
- Support
- Project summary
- Bug tracker
- Links

downloads 15k/month
sourceforge

Cross-platform Java executable wrapper

Launch4j is a cross-platform tool for wrapping Java applications distributed as jars in lightweight Windows native executables. The executable can be configured to search for a certain JRE version or use a bundled one, and it's possible to set runtime options, like the initial/max heap size. The wrapper also provides better user experience through an application icon, a native pre-JRE splash screen, and a Java download page in case the appropriate JRE cannot be found.

