Java Programming AP Edition
U5R2 Algorithms and Data Structures

PACKAGING AND DEPLOYMENT OF A PROJECT
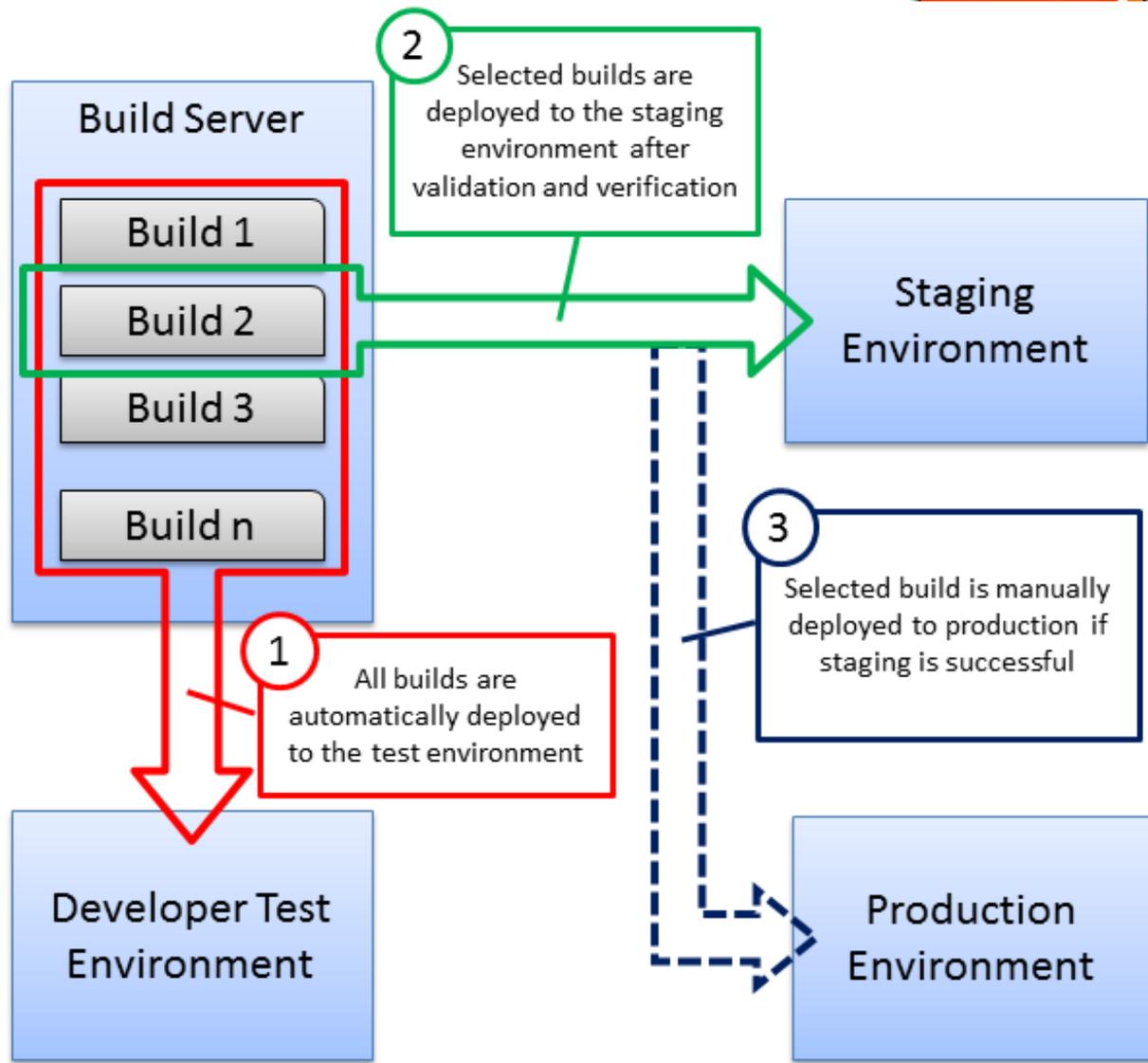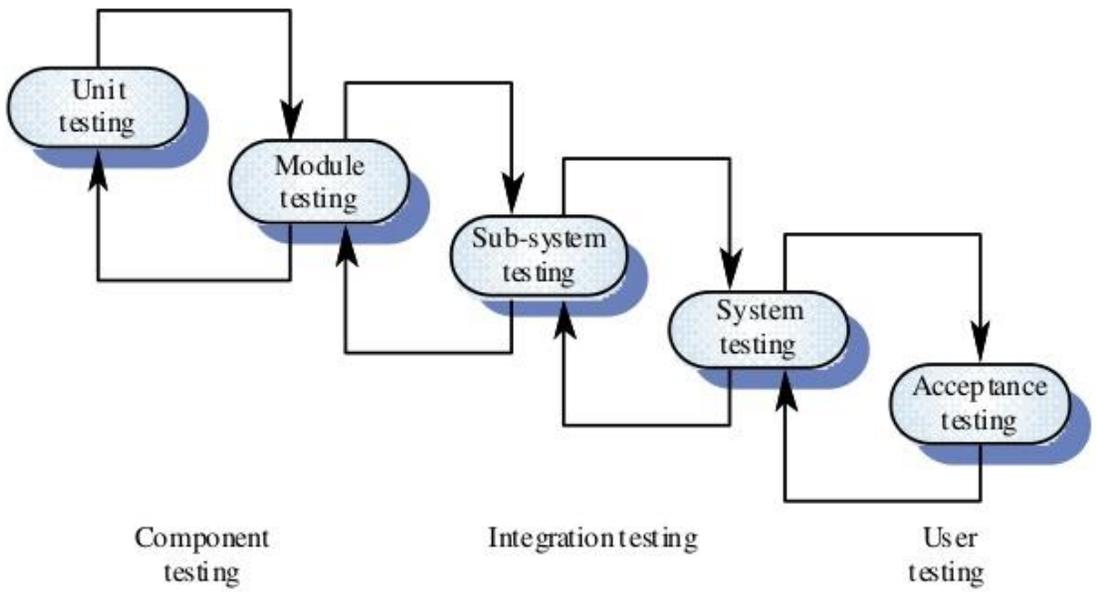
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Software Development Flow

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.

.jar to exe
Embedded JRE

launch4j.sourceforge.net

launch4j 3.8

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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.

app.exe

Launch4j → Application jar

app.exe   app.jar

Launch4j → Application jar

app-setup.exe

Installer created by an external installer program.

app.exe

Launch4j → Application jar

jar library   dll library

jar library   dll library

jar library   dll library

Embedded JRE