**CI/CD Deployment for Spring boot Application**

SOURCE CODE

# Src/main/java/com/SpringTest/SpringApplication.java:

**package** com.SpringTest;

**import** org.slf4j.Logger; **import**

org.slf4j.LoggerFactory;

**import** org.springframework.boot.SpringApplication;

**import** org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

**public class** SpringJenkinsApplication {

**public static** Logger log = LoggerFactory.getLogger(SpringJenkinsApplication.**class**);

**public void** init() {

log.info("Spring Boot Application Started. ");

}

**public static void** main(String[] args) {

log.info("Application Executed ");

SpringApplication.run(SpringJenkinsApplication.**class**, args);

}

}

# Src/test/java/com/SpringTest/SpringAplicationTest.java:

package com.SpringTest;

import org.junit.jupiter.api.Test; import org.slf4j.Logger; import org.slf4j.LoggerFactory;

import org.springframework.boot.test.context.SpringBootTest;

@SpringBootTest

class SpringJenkinsApplicationTests {

public static Logger log = LoggerFactory.getLogger(SpringJenkinsApplication.class);

@Test

void contextLoads() {

log.info("Spring Test Case Executing. ");

}

}

# META-INF/maven/com.SpringTest/Testing- SpringJenkins/pom.properties:

#Generated by Maven Integration for Eclipse #Tue May 10 13:03:45 IST 2022

m2e.projectLocation=C\:\\Users\\bh\\Desktop\\phase 5 project\\CI-CD-Deployment- forSpringboot-Application m2e.projectName=Spring-Jenkins groupId=com.SpringTest artifactId=Testing-Spring-Jenkins version=0.0.1-SNAPSHOT

# META-INF/maven/com.SpringTest/Testing-Spring-Jenkins/pom.xml:

<?xml version="1.0" encoding="UTF-8"?> <project xmlns="<http://maven.apache.org/POM/4.0.0>" xmlns:xsi="<http://www.w3.org/2001/XMLSchema-instance>" xsi:schemaLocation="<http://maven.apache.org/POM/4.0.0> https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.5.4</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.SpringTest</groupId>

<artifactId>Testing-Spring-Jenkins</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>Spring-Jenkins</name>

<description> Spring Boot -Jenkins</description>

<properties>

<java.version>11</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-thymeleaf</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

</project>

# MANIFEST.MF:

Manifest-Version: 1.0

Build-Jdk-Spec: 13

Implementation-Title: Spring-Jenkins Implementation-Version: 0.0.1-SNAPSHOT Created-By: Maven Integration for Eclipse

# Maven-archiver/pom.properties:

artifactId=Testing-Spring-Jenkins groupId=com.SpringTest version=0.0.1-SNAPSHOT

# mvnw:

#!/bin/sh

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#

# # Maven Start Up Batch script #

# Required ENV vars:

#

# JAVA\_HOME - location of a JDK home dir #

# Optional ENV vars #

# M2\_HOME - location of maven2's installed home dir

# MAVEN\_OPTS - parameters passed to the Java VM when running Maven # e.g. to debug Maven itself, use

# set MAVEN\_OPTS=-Xdebug - Xrunjdwp:transport=dt\_socket,server=y,suspend=y,address=8000 # MAVEN\_SKIP\_RC - flag to disable loading of mavenrc files #

if [ -z "$MAVEN\_SKIP\_RC" ] ; then

if [ -f /etc/mavenrc ] ; then

. /etc/mavenrc fi

if [ -f "$HOME/.mavenrc" ] ; then

. "$HOME/.mavenrc" fi

fi

# OS specific support. $var \_must\_ be set to either true or false. cygwin=false; darwin=false;

mingw=false case

"`uname`" in CYGWIN\*) cygwin=true ;; MINGW\*) mingw=true;;

Darwin\*) darwin=true

# Use /usr/libexec/java\_home if available, otherwise fall back to /Library/Java/Home # See https://developer.apple.com/library/mac/qa/qa1170/\_index.html

if [ -z "$JAVA\_HOME" ]; then if [ -x "/usr/libexec/java\_home" ]; then export JAVA\_HOME="`/usr/libexec/java\_home`" else

export JAVA\_HOME="/Library/Java/Home" fi fi ;; esac

if [ -z "$JAVA\_HOME" ] ; then

if [ -r /etc/gentoo-release ] ; then JAVA\_HOME=`java-config --jre-home`

fi fi

if [ -z "$M2\_HOME" ] ; then

## resolve links - $0 may be a link to maven's home PRG="$0"

# need this for relative symlinks while [ -h "$PRG" ] ; do ls=`ls -ld "$PRG"` link=`expr "$ls" : '.\*->

\(.\*\)$'` if expr "$link" : '/.\*' >

/dev/null; then PRG="$link" else

PRG="`dirname "$PRG"`/$link"

fi

done saveddir=`pwd`

M2\_HOME=`dirname "$PRG"`/..

# make it fully qualified

M2\_HOME=`cd "$M2\_HOME" && pwd`

cd "$saveddir"

# echo Using m2 at $M2\_HOME fi

# For Cygwin, ensure paths are in UNIX format before anything is touched if

$cygwin ; then

[ -n "$M2\_HOME" ] && M2\_HOME=`cygpath --unix "$M2\_HOME"`

[ -n "$JAVA\_HOME" ] &&

JAVA\_HOME=`cygpath --unix "$JAVA\_HOME"` [ -n "$CLASSPATH" ] &&

CLASSPATH=`cygpath --path --unix "$CLASSPATH"`

fi

# For Mingw, ensure paths are in UNIX format before anything is touched if

$mingw ; then

[ -n "$M2\_HOME" ] && M2\_HOME="`(cd "$M2\_HOME"; pwd)`" [ -n "$JAVA\_HOME" ] &&

JAVA\_HOME="`(cd "$JAVA\_HOME"; pwd)`"

fi

if [ -z "$JAVA\_HOME" ]; then javaExecutable="`which javac`" if [ -n "$javaExecutable" ] && ! [ "`expr \"$javaExecutable\" : '\([^ ]\*\)'`" = "no" ]; then # readlink(1) is not available as standard on Solaris 10. readLink=`which readlink`

if [ ! `expr "$readLink" : '\([^ ]\*\)'` = "no" ]; then if $darwin ; then

javaHome="`dirname \"$javaExecutable\"`" javaExecutable="`cd \"$javaHome\" && pwd -P`/javac" else

javaExecutable="`readlink -f \"$javaExecutable\"`"

fi

javaHome="`dirname \"$javaExecutable\"`" javaHome=`expr "$javaHome" : '\(.\*\)/bin'` JAVA\_HOME="$javaHome"

export JAVA\_HOME fi

fi fi

if [ -z "$JAVACMD" ] ; then if [

-n "$JAVA\_HOME" ] ; then

if [ -x "$JAVA\_HOME/jre/sh/java" ] ; then

# IBM's JDK on AIX uses strange locations for the executables JAVACMD="$JAVA\_HOME/jre/sh/java"

else

JAVACMD="$JAVA\_HOME/bin/java"

fi

else

JAVACMD="`which java`" fi fi

if [ ! -x "$JAVACMD" ] ; then

echo "Error: JAVA\_HOME is not defined correctly." >&2 echo " We cannot execute $JAVACMD" >&2 exit 1 fi

if [ -z "$JAVA\_HOME" ] ; then

echo "Warning: JAVA\_HOME environment variable is not set." fi

CLASSWORLDS\_LAUNCHER=org.codehaus.plexus.classworlds.launcher.Launcher

# traverses directory structure from process work directory to filesystem root # first directory with .mvn subdirectory is considered project base directory find\_maven\_basedir() {

if [ -z "$1" ] then

echo "Path not specified to find\_maven\_basedir" return 1 fi

basedir="$1" wdir="$1"

while [ "$wdir" != '/' ] ; do

if [ -d "$wdir"/.mvn ] ; then basedir=$wdir

break

fi

# workaround for JBEAP-8937 (on Solaris 10/Sparc)

if [ -d "${wdir}" ]; then wdir=`cd "$wdir/.."; pwd`

fi

# end of workaround

done

echo "${basedir}"

}

# concatenates all lines of a file concat\_lines() { if [ -f "$1" ];

then echo "$(tr -s '\n' ' ' < "$1")" fi

}

BASE\_DIR=`find\_maven\_basedir "$(pwd)"` if [ -z "$BASE\_DIR" ]; then

exit 1; fi

########################################################################### ###############

# Extension to allow automatically downloading the maven-wrapper.jar from Maven-central # This allows using the maven wrapper in projects that prohibit checking in binary data. ########################################################################### ###############

if [ -r "$BASE\_DIR/.mvn/wrapper/maven-wrapper.jar" ]; then if [ "$MVNW\_VERBOSE" = true ]; then

echo "Found .mvn/wrapper/maven-wrapper.jar"

fi else

if [ "$MVNW\_VERBOSE" = true ]; then

echo "Couldn't find .mvn/wrapper/maven-wrapper.jar, downloading it ..."

fi

if [ -n "$MVNW\_REPOURL" ]; then

jarUrl="$MVNW\_REPOURL/io/takari/maven-wrapper/0.5.6/maven-wrapper-0.5.6.jar"

else jarUrl="https://repo.maven.apache.org/maven2/io/takari/maven- wrapper/0.5.6/mavenwrapper-0.5.6.jar"

fi

while IFS="=" read key value; do

case "$key" in (wrapperUrl) jarUrl="$value"; break ;; esac

done < "$BASE\_DIR/.mvn/wrapper/maven-wrapper.properties" if [ "$MVNW\_VERBOSE" = true ]; then

echo "Downloading from: $jarUrl"

fi

wrapperJarPath="$BASE\_DIR/.mvn/wrapper/maven-wrapper.jar"

if $cygwin; then

wrapperJarPath=`cygpath --path --windows "$wrapperJarPath"`

fi

if command -v wget > /dev/null; then if [ "$MVNW\_VERBOSE" = true ]; then

echo "Found wget ... using wget"

fi

if [ -z "$MVNW\_USERNAME" ] || [ -z "$MVNW\_PASSWORD" ]; then

wget "$jarUrl" -O "$wrapperJarPath" else

wget --http-user=$MVNW\_USERNAME --http-password=$MVNW\_PASSWORD "$jarUrl" -O "$wrapperJarPath"

fi

elif command -v curl > /dev/null; then if [ "$MVNW\_VERBOSE" = true ]; then echo "Found curl ... using curl" fi

if [ -z "$MVNW\_USERNAME" ] || [ -z "$MVNW\_PASSWORD" ]; then

curl -o "$wrapperJarPath" "$jarUrl" -f else

curl --user $MVNW\_USERNAME:$MVNW\_PASSWORD -o "$wrapperJarPath" "$jarUrl" -f

fi

else

fi

if [ "$MVNW\_VERBOSE" = true ]; then

echo "Falling back to using Java to download"

javaClass="$BASE\_DIR/.mvn/wrapper/MavenWrapperDownloader.java"

# For Cygwin, switch paths to Windows format before running javac if

$cygwin; then

javaClass=`cygpath --path --windows "$javaClass"`

fi

if [ -e "$javaClass" ]; then

if [ ! -e "$BASE\_DIR/.mvn/wrapper/MavenWrapperDownloader.class" ]; then

if [ "$MVNW\_VERBOSE" = true ]; then

echo " - Compiling MavenWrapperDownloader.java ..."

fi

# Compiling the Java class ("$JAVA\_HOME/bin/javac" "$javaClass")

fi

if [ -e "$BASE\_DIR/.mvn/wrapper/MavenWrapperDownloader.class" ]; then

# Running the downloader

if [ "$MVNW\_VERBOSE" = true ]; then

echo " - Running MavenWrapperDownloader.java ..."

fi

("$JAVA\_HOME/bin/java" -cp .mvn/wrapper MavenWrapperDownloader

"$MAVEN\_PROJECTBASEDIR")

fi fi fi fi ########################################################################### ###############

# End of extension ########################################################################### ###############

export MAVEN\_PROJECTBASEDIR=${MAVEN\_BASEDIR:-"$BASE\_DIR"} if

[ "$MVNW\_VERBOSE" = true ]; then echo $MAVEN\_PROJECTBASEDIR fi

MAVEN\_OPTS="$(concat\_lines "$MAVEN\_PROJECTBASEDIR/.mvn/jvm.config")

$MAVEN\_OPTS"

# For Cygwin, switch paths to Windows format before running java if

$cygwin; then

[ -n "$M2\_HOME" ] &&

M2\_HOME=`cygpath --path --windows "$M2\_HOME"` [ -n "$JAVA\_HOME" ] &&

JAVA\_HOME=`cygpath --path --windows "$JAVA\_HOME"` [ -n "$CLASSPATH" ] &&

CLASSPATH=`cygpath --path --windows "$CLASSPATH"` [ -n "$MAVEN\_PROJECTBASEDIR" ] &&

MAVEN\_PROJECTBASEDIR=`cygpath --path --windows "$MAVEN\_PROJECTBASEDIR"`

fi

# Provide a "standardized" way to retrieve the CLI args that will # work with both Windows and non-Windows executions.

MAVEN\_CMD\_LINE\_ARGS="$MAVEN\_CONFIG $@"

export MAVEN\_CMD\_LINE\_ARGS WRAPPER\_LAUNCHER=org.apache.maven.wrapper.MavenWrapperMain

exec "$JAVACMD" \

$MAVEN\_OPTS \

-classpath "$MAVEN\_PROJECTBASEDIR/.mvn/wrapper/maven-wrapper.jar" \ "- Dmaven.home=${M2\_HOME}" "- Dmaven.multiModuleProjectDirectory=${MAVEN\_PROJECTBASEDIR}" \

${WRAPPER\_LAUNCHER} $MAVEN\_CONFIG "$@"

# Pom.xml:

<?xml version="1.0" encoding="UTF-8"?> <project xmlns="<http://maven.apache.org/POM/4.0.0>" xmlns:xsi="<http://www.w3.org/2001/XMLSchema-instance>" xsi:schemaLocation="<http://maven.apache.org/POM/4.0.0> https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.5.4</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.SpringTest</groupId>

<artifactId>Testing-Spring-Jenkins</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>Spring-Jenkins</name>

<description> Spring Boot -Jenkins</description>

<properties>

<java.version>11</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-thymeleaf</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

</project>