Build Source Code on Windows

1. Install Prerequisites

- **Install the Java Development Kit (JDK)**
  - Download the Java Development Kit (JDK) 7 or above from http://www.oracle.com/technetwork/java/javase/downloads/index.html.
  - Follow the installation instructions at https://docs.oracle.com/javase/8/docs/technotes/guides/install/windows_jdk_install.html
  - Set JAVA_HOME:
    - In Windows 7 right click **My Computer** and select **Properties** > **Advanced**.
    - In Windows 8 go to **Control Panel** > **System** > **Advanced System Settings**.
    - Click the **Environment Variables** button.
    - Under **System Variables**, click **New.**
    - In the **Variable Name** field, enter JAVA_HOME
    - In the **Variable Value** field, enter the JDK installation path e.g. C:\Program Files\Java\jdk1.8.0_77

- **Install MySQL.**
  - Download MySQL Server 5.5 or above from http://dev.mysql.com/downloads/mysql/
  - Follow the installation instructions at http://dev.mysql.com/doc/en/windows-installation.html

- **Install Apache Maven**
  - Download Apache Maven 2.2.1 or above from https://maven.apache.org/download.cgi
  - Follow the installation instructions at https://maven.apache.org/install.html
  - Please ensure that the "mvn" command can be executed from the command line by adding it to the PATH:
    - In Windows 7 right click **My Computer** and select **Properties** > **Advanced**.
    - In Windows 8 go to **Control Panel** > **System** > **Advanced System Settings**.
    - Click the **Environment Variables** button.
    - Under **System Variables**, select the variable Path and click **Edit.**
    - In the **Variable Value** field, append the Maven path (e.g. C:\Program Files\apache-maven-3.3.9\bin) to the current path

- **Install Git Client**
  - Download and install the Git client from https://git-scm.com/download/win

2. Install 3rd Party Libraries

- Download the 3rd party libraries ZIP from http://dev.joget.org/community/download/attachments/19104566/install-libraries.zip
- Unzip the file
- Open a Command Prompt to execute the install_win.bat file

```
cd install-libraries
install_win.bat
```

Depending on your version of Apache Maven, you might get an error "BUILD FAILED" containing the message: Cannot run program "mvn.cmd"

In this case, edit the file install-libraries\lib\setup-maven_win.xml and replace all occurrences of "mvn.cmd" with "mvn.bat"

3. Obtain Source Code

- Open a Git CMD (Git Bash) window and execute the following:

```
mkdir joget_src
cd joget_src
git clone https://github.com/jogetworkflow/jw-community.git --branch 5.0-SNAPSHOT
```

4. Configure Datasource for Test Case

- Open a Command Prompt, and create a MySQL database with the SQL file in joget_src/jw-community/wflow-install/src/main/resources/data/jwdb-empty.sql

```
mysql -uroot -p
create database jwdb;
exit
mysql -uroot -p jwdb < joget_src/jw-community/wflow-install/src/main/resources/data/jwdb-empty.sql
```

- Download the sample configuration files wflow.zip and unzip it in your **user home folder** e.g. C:\Users\yourusername\
- Edit the **wflow\app_datasource-default.properties** file e.g. C:\Users\yourusername\wflow\app_datasource-default.properties and ensure that the configuration (e.g. MySQL username and password) is correct

```
workflowDriver=com.mysql.jdbc.Driver
workflowUrl=jdbc\:mysql\://localhost\:3306/jwdb?characterEncoding\=UTF-8
workflowUser=root
profileName=
workflowPassword=root
```

To pass unit tests which require a valid datasource, it is important to ensure that:

1. the wflow folder is located in the correct path inside your user home folder e.g. C:\Users\yourusername\wflow
2. the MySQL configuration settings in wflow\app_datasource-default.properties are correct

5. Build Project

- In a Command Prompt, browse to the jw-community\wflow-app folder and execute the Maven install command

```
cd joget_src\jw-community\wflow-app\
mvn clean install
```