# PureCRUD Development Environment Setup Guide

This guide walks you through setting up the **optimal** development environment where everything “just works.” However, the PureCRUD Sample Application will mostly likely work fine in other environments and with other versions of the JDK, Maven, Jetty, Intellij or Eclipse.

# Install JDK

1. Download latest stable Java SE 7 from here:

[http://www. oracle.com/technetwork/java/javase/downloads/index.html](http://www.oracle.com/technetwork/java/javase/downloads/index.html)

1. Install to **C:\jdk1.7**

Note: PureCRUD has also been extensively tested against Java SE 6.

# Install Maven

1. Download latest stable Maven 3 from here: <http://maven.apache.org/download.html>
2. Unzip to **C:\maven**

# Configure Maven Client Access Credentials

1. Edit **~/.m2/settings.xml** (you might have to run maven for the first time so that it creates this file, e.g. **mvn –version** from DOS) and then add the following credentials to the file:

<servers>

<server>

<id>purebred-private-snapshots</id>

<username>customer</username>

<password>51Z6Yl6z</password>

</server>

</servers>

Note: these credentials give you access to our private repo: <http://www.purecrud.com/nexus/>

# Set up Environment Variables

1. MAVEN\_HOME= C:\maven
2. M2\_HOME= C:\maven
3. JAVA\_HOME=C:\jdk1.7
4. Add to PATH: %MAVEN\_HOME%\bin;%JAVA\_HOME%\bin

# Install Jetty

1. Download latest stable Jetty 7 from here: <http://download.eclipse.org/jetty/>
2. Unzip to C:\jetty
3. Optionally, change the port number in **C:\jetty\etc\jetty.xml** like so:

<Property name="jetty.port" default="7001"/>

Note: using port 7001 allows swapping Jetty for Weblogic during development without changing the URL. In corporate environments, it is wise to test the application periodically against whatever application server will be used in production.

# Get GitHub Access

1. Create a free account at <https://github.com/>
2. Ask me to add your username as a collaborator for project:

<https://github.com/juanosuna/purecrud-sample>

# Install Intellij

1. Download the latest Ultimate version from here:

<http://www.jetbrains.com/idea/download/index.html>

1. Optionally, go to **File:Import Settings** and import **intellij\_settings.jar** downloaded from here: <https://github.com/juanosuna/purecrud-sample/blob/master/extra/intellij_settings.jar>

Note: this is an optional step for novice Intellij users who want to make sure everything in Intellij “just works.”

# Install PureCRUD Sample Application

1. Go to project page: <https://github.com/juanosuna/purecrud-sample>
2. Click **Downloads** button to download project as a zip. Unzip to **C:\Projects\purecrud-sample**.
3. Open DOS window in the root of the project and type following commands:

* **mvn clean install**
* **mvn jetty:run**

Note: running these commands for the first time could take 10-15 minutes to download all the dependencies. Not all downloaded dependencies are actually used in the project. Maven just aggressively caches libraries in ~/.m2/repository.

1. Try the application URL: <http://localhost:7001/sample/app>

# Import and Configure Project in Intellij

The following video tutorial shows how to import and configure the project into Intellij so that you can build and easily launch the application from Intellij.

# Install and Configure SQuirreL SQL Client

SQuirreL SQL is a free tool that is capable of reading H2 database files, which PureCRUD uses as the lightweight database for development. This is useful for debugging.

1. Download and following instructions here: <http://www.squirrelsql.org/#installation>
2. Grab the JDBC URL from **database.dev.properties** in the project and paste into the SQuirreL dialog box for configuring the database connection:

