

Project Software and Versions

The purpose of this document is to list the most recent, stable generally available (GA) software versions to be used in our project.

Components List

The OS is irrelevant as all packages are cross-platform. For example, the production environment will use Fedora v26 Linux while my personal dev platform will be on Windows 10.

NOTE: Only stable versions will be considered (no alpha/beta/pre-release). In this case, I suggest the latest stable builds as of September 15 2017, and that we lock on those, even should a newer version be introduced during the project duration.

All software packages are using the 64-bit version.

| Layer | Component | Version | Notes | Link |
|-------------------------|---------------|---------|--|---|
| Web Tier, Business Tier | Apache Tomcat | 8.5.20 | Web Server and Application Server; supports JSP and Servlets | https://tomcat.apache.org/whichversion.html |

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|--|--------------------------------|--------------------------------|---|---|
| Data Tier | MySQL Community Server | 5.7.19 | Latest GA version; supports Fedora 26 and Win X | https://dev.mysql.com/downloads/mysql/ |
| Data Access | JDBC: MySQL Connector/J Driver | 5.1.44 | Developed by MySQL devs; needs to be installed into TomCat | https://dev.mysql.com/downloads/connector/j/ |
| Integrated Development Environment (IDE) | Eclipse Oxygen | Auto-updates to latest version | If you have it already, then update. If not, download Eclipse Oxygen for latest | https://www.eclipse.org/downloads/ |
| OS for Deployment Environment | Fedora Server | 26 | Fedora is a variant of Red Hat Linux and extremely stable | https://getfedora.org/en/server/download/ |
| OS for Development Environment | Whatever you are using | * | Personal choice | N/A |
| Java | JVM/JRE: OpenJDK | 1.8.0 Update 144 (64-bit) | The most recent free version of Java JDK | http://openjdk.java.net/install/index.html (Linux) https://java.com/en/download/ (Oracle binaries for |

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|------|-----------------------|--|---|---|
| | | | | Windows, Mac) |
| JSP | Apache Commons Taglib | 1.2.5 | Just place in project's WEB-INF lib/ directory. There are 4 .jar files. | http://tomcat.apache.org/download-taglibs.cgi#Standard-1.2.5 |
| Data | Hibernate | 4.3.11 NOTE: Will upgrade to 5.12.1 for Part 3 | Place in WEB-INF/lib/ directory. Include C3P0. | https://sourceforge.net/projects/hibernate/files/hibernate4/4.3.11.Final/ |

Other Tools

Here is a partial list of other tools that aren't necessary but may help:

- Putty (www.putty.org) for SSH (there's also a newer variant, Kitty, that is good)
- Jetty (embedded application server in Eclipse for testing/debugging servlets in the IDE)
- MySQL Workbench (dev.mysql.com) - visualization and administration tools for MySQL
- Notepad (LOL, just had to mention this basic one; can't live without it!)
- Github for code sharing; Eclipse has support for this; I will start a repository once we reach the next part
- MS Visio (free from [dreamspark](http://dreamspark.com)); for UML and logic / flow visuals
- MS Project (free from [dreamspark](http://dreamspark.com)); project plans and team tasks