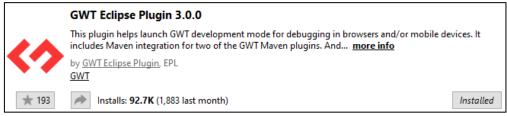
## **Installing Tools**

- 1. Install Eclipse Oxygen for Java Developers, I highly recommend using the Eclipse Installer: <a href="https://www.eclipse.org/downloads/packages/installer">https://www.eclipse.org/downloads/packages/installer</a>
- 2. Install the GWT plugin for Eclipse. GWT allows Java code to be compiled to JS.
  - a. In Eclipse, select *Help => Eclipse Marketplace...*
  - b. Search for "gwt" and you should be able to find the most recent version of gwt:



Marketplace page for GWT 3.0.0

- c. Click on Install
- 3. Install Java SE Development Kit 8 from <a href="https://www.oracle.com/java/technologies/javase/javase-jdk8-downloads.html">https://www.oracle.com/java/technologies/javase-jdk8-downloads.html</a> and note where it is installed. You will need to create or sign into an Oracle account.
- 4. Clone or download the Git repo at <a href="https://github.com/pfalstad/circuitjs1">https://github.com/pfalstad/circuitjs1</a>

## Compiling for Development

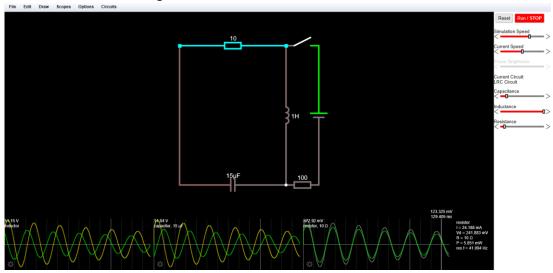
- 1. Open the circuitjs1 repo in Eclipse
  - a. Select File => Open Project from File System...
  - b. Select the circuitis folder and tick the options **Search for nested projects** and **Detect** and configure project natures.
- 2. Select JRE 1.8 as the active JRE in Eclipse
  - a. Navigate to **Project => Properties...**
  - b. Select Java Build Path from the panel on the left
  - c. Click on the *Libraries* tab
  - d. If you have another version of Java installed, you may see an entry beginning with "JRE System Library". If so, select this entry and click *Edit*. Otherwise, click *Add Library*.
  - e. Click on Alternate JRE and Installed JREs...
  - f. A window should appear listing installed JREs.
  - g. Click Add...
  - h. Select Standard VM and click Next >.
  - Next to *JRE Home*, select *Directory* and navigate to *jdk1.8.0* (or similar) on your system as installed earlier.
  - j. Select *Finish*
  - k. Tick the box for jdk1.8.0 and select Apply and Close.
- 3. Compile with GWT
  - a. Click on the GWT icon in the toolbar:



GWT icor

b. Select the project from the package explorer and click on GWT Compile Project...

- c. Click on Compile
- d. If you encounter an error at this stage related to com.google.gwt.core.Core, ensure that you are using JRE 1.8.
- 4. Move contents of "war" folder (EXCEPT "WEB-INF") to server docs folder
- 5. Start the server
- 6. Open a web browser and navigate to "http://localhost:[PORT NUMBER]/circuitjs.html". You should se the following:



Falstad running on local server