EduMIPS Simulator Setup

Steps to build EduMIPS64 from Source on ECE Lab Workstations (Windows)

1. Download the "ECSE425_Project.zip" folder from Mycourses.
   It contains the manual, some example benchmarks and two folders:
   EduMIPS simulator
   Apache Ant (v1.10.5)
2. Unzip the compressed folders to a new folder "Tools" in your work drive (e.g. G:/ drive in ECE Lab Workstations)
3. Go to Start Menu, search for – "Edit environment variables for your account"
4. Add two new variables **ANT_HOME** and **JAVA_HOME** as follows –

ANT_HOME	G:\Tools\apache-ant-1.10.5-bin\apache-ant-1.10.5
AWP_LOCALE191	en-us
Home	P:\
JAVA_HOME	C:\Program Files\Java\jdk1.8.0_171

   Find the PATH variable and select new and add the following two lines

%JAVA_HOME%\bin
%ANT_HOME%\bin

5. Go to start menu and search for Command Prompt (cmd)
   Go to your work drive by
   `G:`
   Type the following commands to ensure that the Java path and ANT path are set correctly
   `java –version`
   `ant -version`
6. Now use cd to go to the EduMIPS folder (shown below)

7. And run the following command
   `ant svnjar`

```
P:\>G:

G:\>java -version
java version "1.8.0_171"
Java(TM) SE Runtime Environment (build 1.8.0_171-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.171-b11, mixed mode)

G:\>ant -version
Apache Ant(TM) version 1.10.5 compiled on July 10 2018

G:\>cd Tools

G:\Tools>cd edumips64-0.5.3

G:\Tools\edumips64-0.5.3>ant svnjar
Buildfile: G:\Tools\edumips64-0.5.3\build.xml

init:
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\img
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\data
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\utils
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\help
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\help_en
    [mkdir] Created dir: G:\Tools\edumips64-0.5.3\edumips\edumips64\help_it

svnjar:
    [javac] G:\Tools\edumips64-0.5.3\build.xml:64: warning: 'includeantruntime' was not set, defaulting to build.sysclasspath=last; set to false for repeatable builds
    [javac] Compiling 161 source files to G:\Tools\edumips64-0.5.3\edumips
    [javac]
    [javac]           WARNING
    [javac]
    [javac] The -source switch defaults to 1.8 in JDK 1.8.
    [javac] If you specify -target 5 you now must also specify -source 5.
    [javac] Ant will implicitly add -source 5 for you.  Please change your build file.
    [javac] Note: Some input files use unchecked or unsafe operations.
    [javac] Note: Recompile with -Xlint:unchecked for details.

makeGUIJar:
     [copy] Copying 25 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\en\html
     [copy] Copying 5 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\en
     [copy] Copying 26 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\it\html
     [copy] Copying 4 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\it\img
     [copy] Copying 4 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\en\img
     [copy] Copying 5 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\help\it
     [copy] Copying 21 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\img
     [copy] Copying 8 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\data
     [copy] Copying 2 files to G:\Tools\edumips64-0.5.3\edumips\edumips64\utils
     [copy] Copying 137 files to G:\Tools\edumips64-0.5.3\edumips\com
     [copy] Copying 190 files to G:\Tools\edumips64-0.5.3\edumips\javax
      [jar] Building jar: G:\Tools\edumips64-0.5.3\edumips64-svn.jar
   [signjar] Signing JAR: G:\Tools\edumips64-0.5.3\edumips64-svn.jar to G:\Tools\edumips64-0.5.3\edumips64-svn.jar as edumips64
   [signjar] jar signed.
   [signjar]
   [signjar] Warning:
   [signjar] The signer certificate has expired.
   [signjar] No -tsa or -tsacert is provided and this jar is not timestamped. Without a timestamp, users may not be able to validate this jar after the signer certificate's expiration date (2011-07-09) or after any future revocation date.

   [delete] Deleting directory G:\Tools\edumips64-0.5.3\edumips

BUILD SUCCESSFUL
Total time: 9 seconds
```

8. The simulator would be built in the same EduMIPS folder as "edumips64-svn.jar"