**Workout guru installation**

The code depends on the android support library v7. When configuring the code in eclipse do the following:

1. Browse to the folder:

C:\Program Files (x86)\Android\android-sdk\extras\android\support\v7\appcompat

1. Copy the two jars in lib folder into the lib folder of the code

android-support-v4.jar

android-support-v7-appcompat.jar

1. Use the import project wizard to import the appcompat project into eclipse
   1. Right click on Prject explorer and select import
   2. Select Android -> “Existing Android Code into workspace”
   3. Browse to the folder mentioned in step 1.
   4. In the projects listing select the project and click finish.
2. Once the project is added to eclipse it may show an error. Goto project.properties file and change the target android save. Now undo the changes and save it back. The errors will now go away.
3. Goto Workout guru code and right click , select properties
4. Goto Android tab and in the Library section on the right click on Add. It will show the above project listed. Add it and click ok.

Algorithm considerations:

1. Implement the accelerator sensor as a service so it runs in the background when the user clicks on start.
2. User can explicitly terminate the service or the service terminates when the power falls beloew 14% threshold.
3. The values for x,y,z are saved in the CSV file.
4. Another service calculates the features like Avg, variance, corelation and stores it in sqlite database
5. Run the classifier every few seconds to update the activity recognition.
6. Implement formulas to derive the amount of time spent on each activity and thus the calories burned.