For helpful reference:

<https://stackoverflow.com/questions/2636201/how-to-create-a-project-from-existing-source-in-eclipse-and-then-find-it>

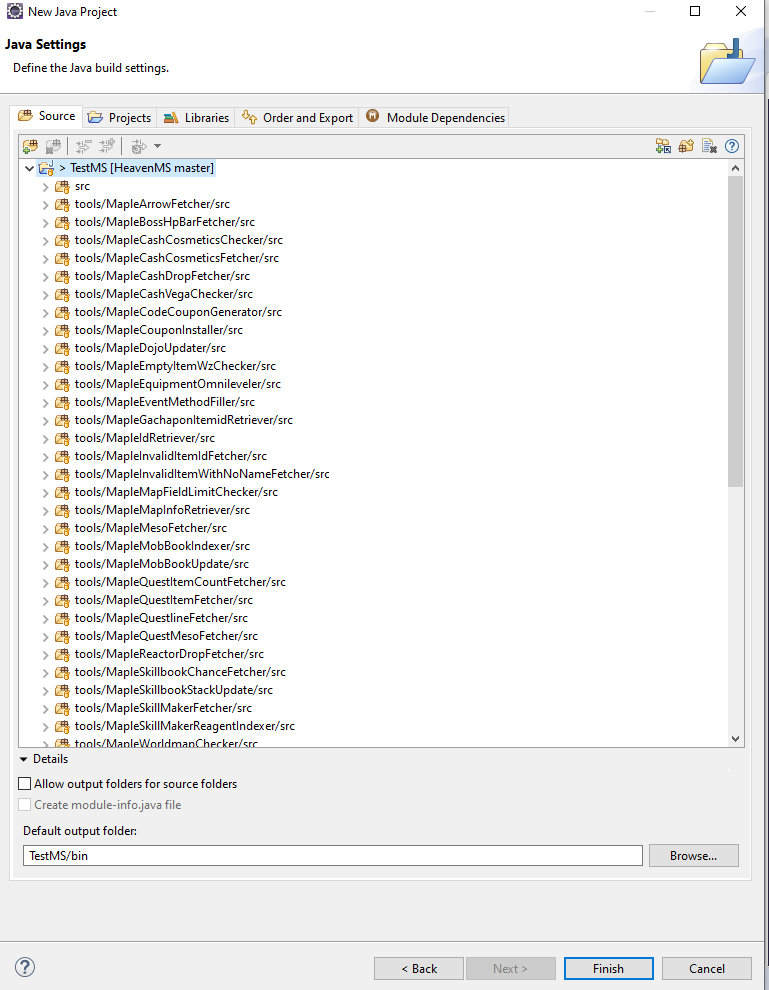
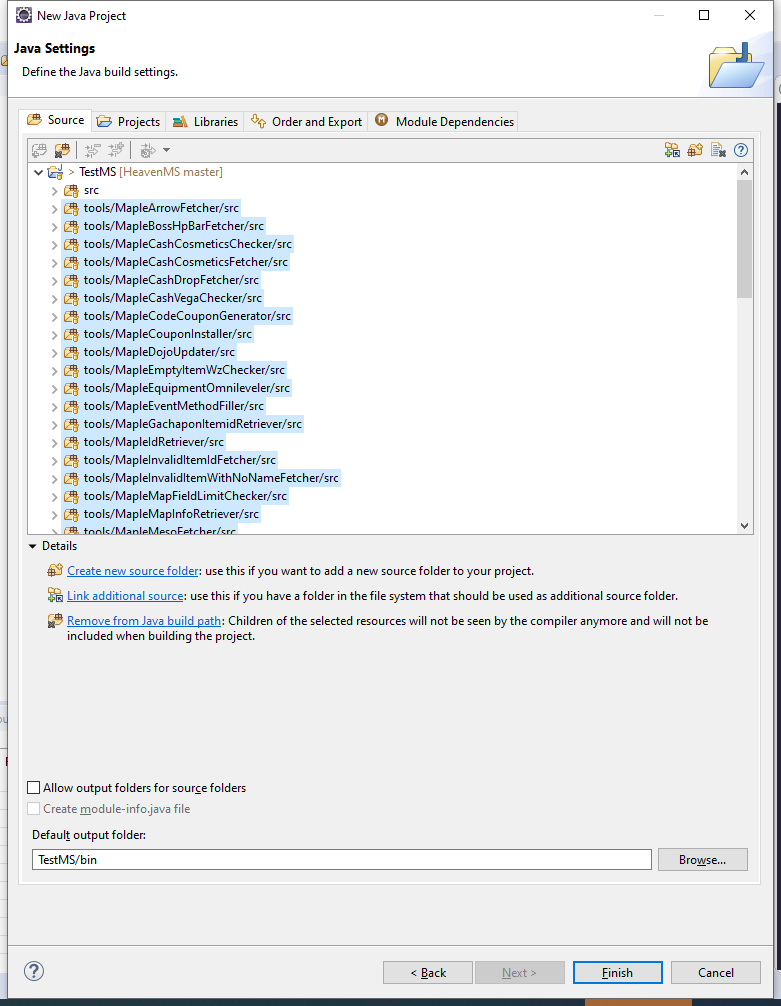
# Setup guide:

1. Open Eclipse and create a new workspace “HeavenMS”
2. Click File > New > Other > Java Project > Next
3. Give it any project name
4. Uncheck “Use default location”
5. Browse to “HeavenMS” root and select it
6. Click **Next**, **NOTE under the “Source” tab:**
   1. Other than the “**src**” folder, the REST OF THE FOLDERS THAT CONSIST OF .java files NESTED INSIDE themselves under their own “src” folder will be detected by eclipse and added as a [source folder](#image_1).
   2. We need to REMOVE ALL THESE USELESS SOURCE FOLDER. They are a project ON ITS OWN.
   3. Select everything (shift+click) other than the “**src**” folder e.g.: “tools/MapleArrowFetcher/src”, “tools/MapleBossHpBarFetcher/src” and ““tools/MapleCashCosmeticsChecker/src”” and click on the blue link that says “[Remove from Java build path](#image_3)”
   4. After you successfully removed it, you should only see the root folder [ONLY](#image_3) in the “Source” tab
7. Click Finish and let the project build. You only only see **197 warnings**. **NO ERRORS.**
8. Right click on your project and see the java build path
   1. Under Source you will notice that the only src is our only src folder
   2. The “Libraries” tab will automatically import all dependencies in {projectName}/cores which will **RESOLVES ALL ERROR MESSAGE AUTOMATICALLY**
   3. Libraries tab will consist of other .jar file too which is automatically imported for us. This is awesome.
9. A few new files will be automatically created by Eclipses:
   1. .classpath
      1. Consist about details of:
         1. Our source files path
         2. Our lib files path (those in cores, tools automatically imported too. Cool)
         3. Our bin output folder
   2. .project
      1. Not sure what this is except for project name
   3. .gitignore updated automatically (if version tracking with github)

# Basic important configurations:

1. Database configuration and Server to Client communication settings are located in root/config.yaml
   1. Database is configured under keyword “#Database Configuration”
      1. Databse connection is explained as follow:
         1. DB\_URL: "jdbc:mysql://192.168.1.6/heavenms"
            1. no port number needed in my case
            2. that IP is pointed to my raspberry DB
            3. IP number to be the pathing to your DB. In my case my server hoster is on the same local network, therefore im using local IP and not public IP
         2. DB\_USER: “*removed for security*”
         3. DB\_PASS: “*removed for security*”
         4. DB\_CONNECTION\_POOL: true
   2. Server to client connection is configured under keyword “#Ip Configuration”
      1. Settings explained as follow:
         1. HOST: 192.168.1.10 // The server IP that’s hosting it, local “192.168.1.10” for local LAN hosting, public IP for public to join
         2. LOCALSERVER: false // Not sure what this is
         3. GMSERVER: false // Not sure what this is
2. Server Firewall configurations (Router)
   1. Go to 192.168.1.1 and login
   2. Navigate to Port forward section and add the following port number to allow access to your server E.G.:
      1. Server has internal IP 192.168.1.10
      2. Allow port in section C e.g.: 8484 to forward to 192.168.1.10
   3. The following explain ports and their purpose:
      1. 8484 (default, config in Server.java)
         1. If this is not forwarded to the server, game client cannot connect at all, a typical popup will appear saying “We are unable to connect to the login server due to a server check, a firewall block or other network issues. Please check the MapleStory homepage for ongoing server checks as well as your firewall settings”
      2. 7575 (default, config in Channel.java)
         1. If this is not forwarded to the server, the respective channel in the channel list can be seen and selected to proceed to the character selection screen. BUT selecting and character by double clicking will fail and cause user to be booted to login screen
      3. Incremented channel will take port of default channel+1, e.g.: 7575+1 = 7576
3. Server Firewall configurations (Server)
   1. I did not configure any port to allow Inbound rules specific to the ports listed above (8484, 7575) and it work automatically.
4. Game client IP configuration (Hex edit)
   1. In order for client to connect to the server, the IP must be edited in Hex to reflect the server IP
   2. Install HxD from HxDSetup.zip, open the localhost.exe with the editor
   3. Look for “127.0.0.1”, edit by OVERWRITING the current IP address to whatever target IP address you need, either local or public is fine. REMEMBER TO OVERWRITE IT FROM THE FIRST CHARACTER LEFT TO RIGHT, DO NOT INSERT more characters, this will change the binary file size and corrupt the executable

# Images:

1. 
2. 
3. 