GROUP 18 – README Document

Run Environment – Windows 10, Eclipse JEE Oxygen

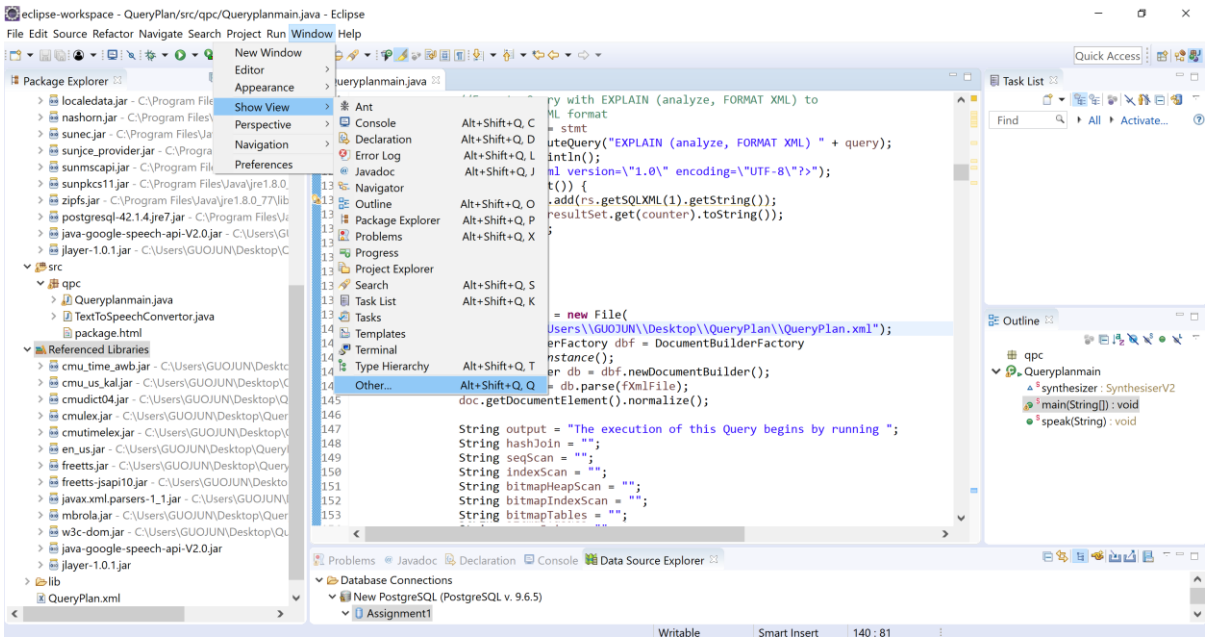
JDK Compliance from Execution Environment JavaSE-1.8.

First, user must ensure that PostgreSQL server must be set up.

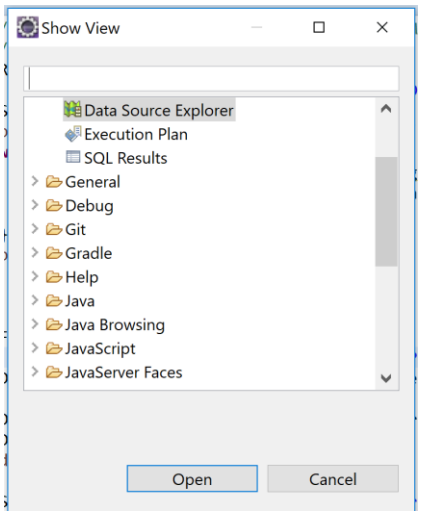
For user to link from Eclipse to Postgres, these steps must be followed.

User must ensure “Data Source Explorer” is open as one of the tabs.

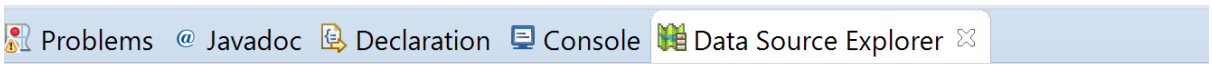
If user is not sure how to, he/she can go to “Window” tab and choose on “Show View”, follow by “Other…”.



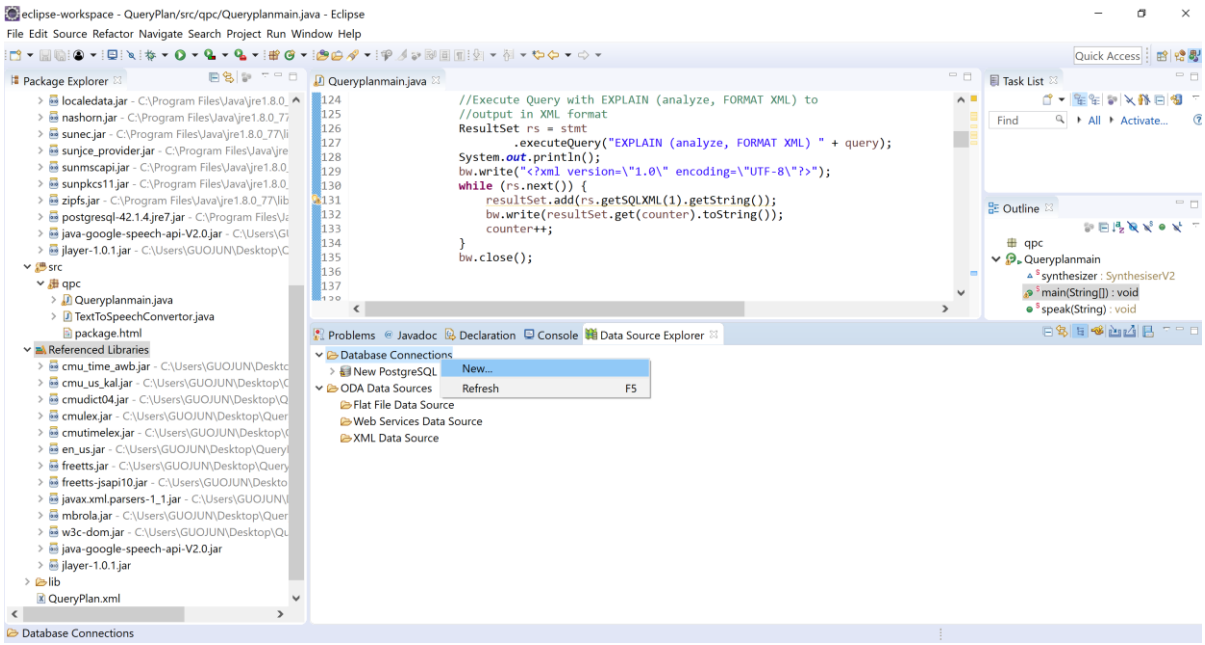
And choose on “Data Source Explorer” and click on “Open”.



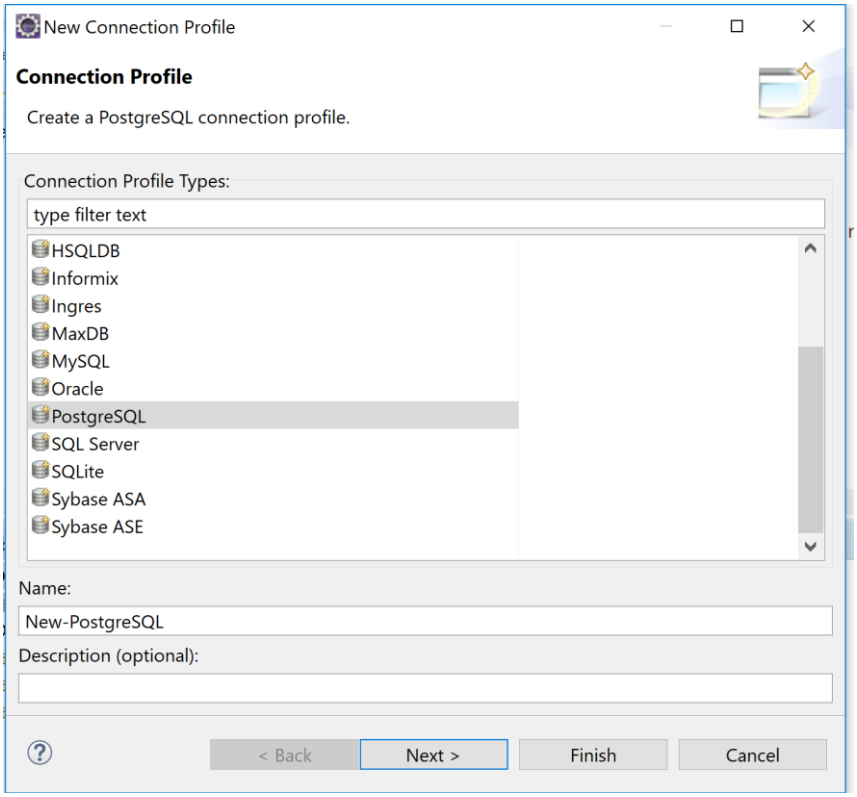
The “Data Source Explorer” will then be populated as one of the tabs”



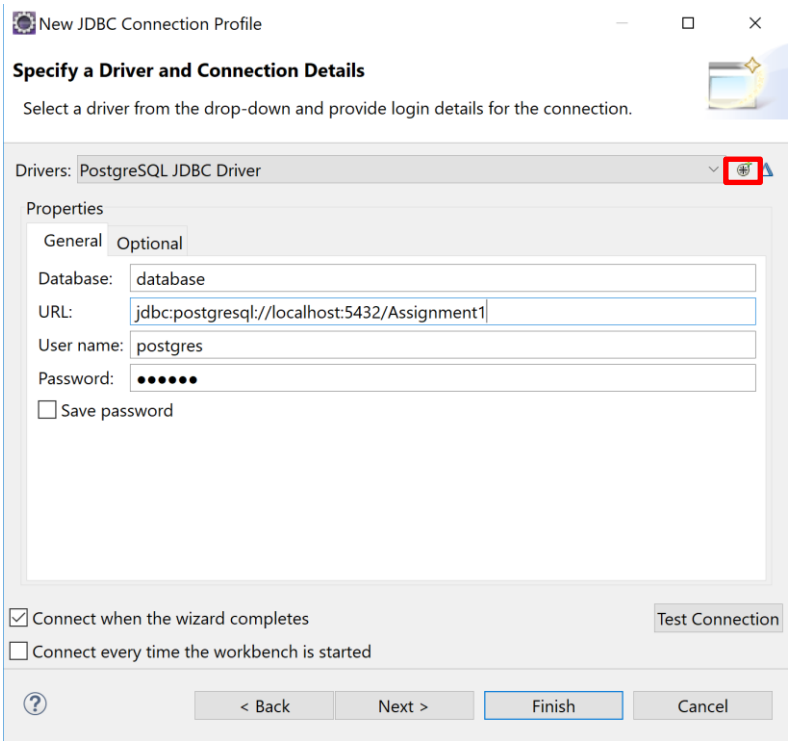
User will then need to go to “Data Source Explorer” tab and right click on “Database Connections”, and select on “New…”



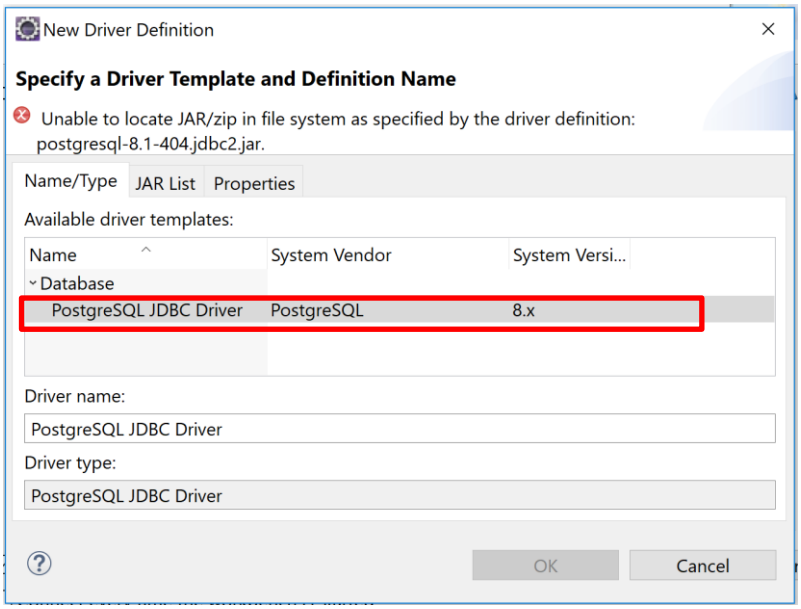
User will need to select on “PostgreSQL” and key in a name, and click “Next”.



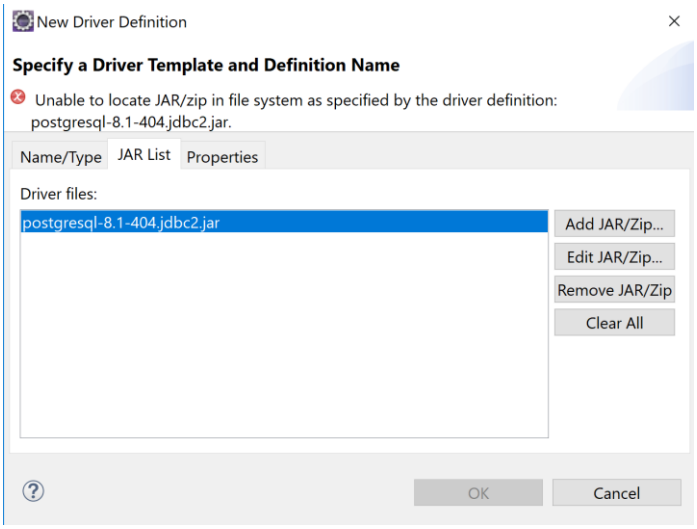
User will need to change the database name to its own name. In this case, our database is named as “Assignment1”. User also need to key in the username as ‘postgres’ and password as ‘123456’. User will then click on the red highlighted icon.



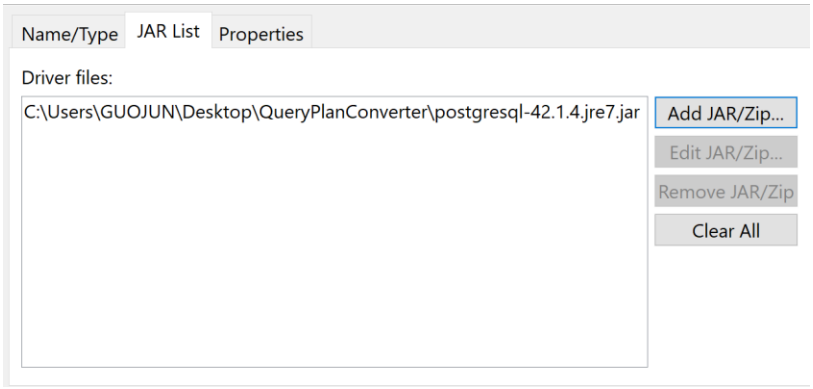
User will need to tap on the red highlighted “PostgreSQL JDB Driver” before tapping on the “JAR List” tab.



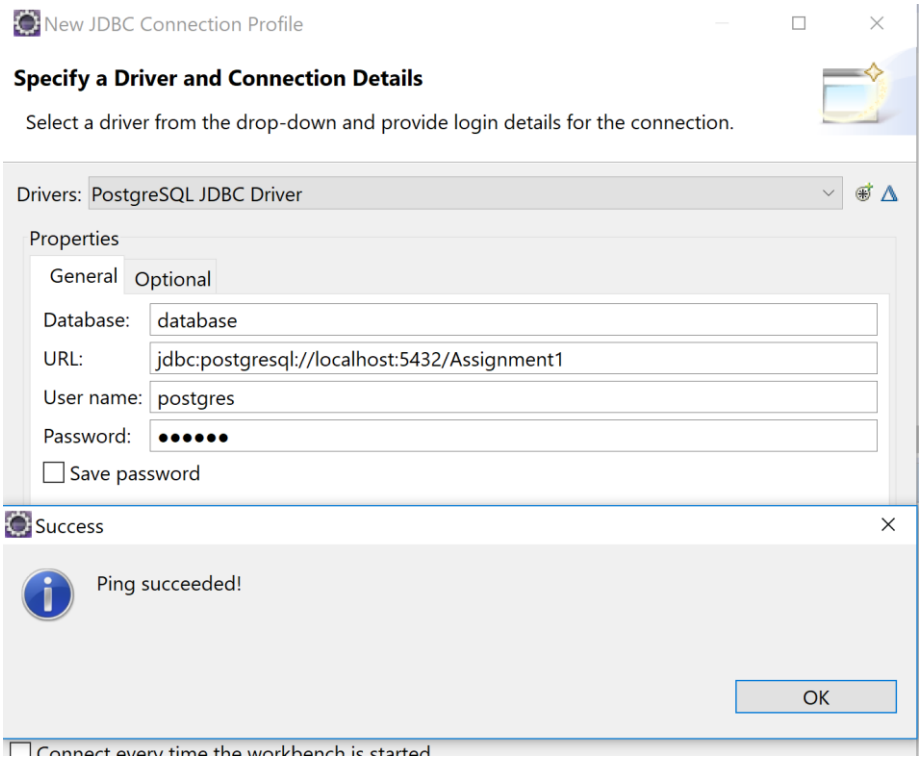
User then click on the “postgres-8.1-404.jdbc2.jar” and click on “Remove JAR/Zip”.



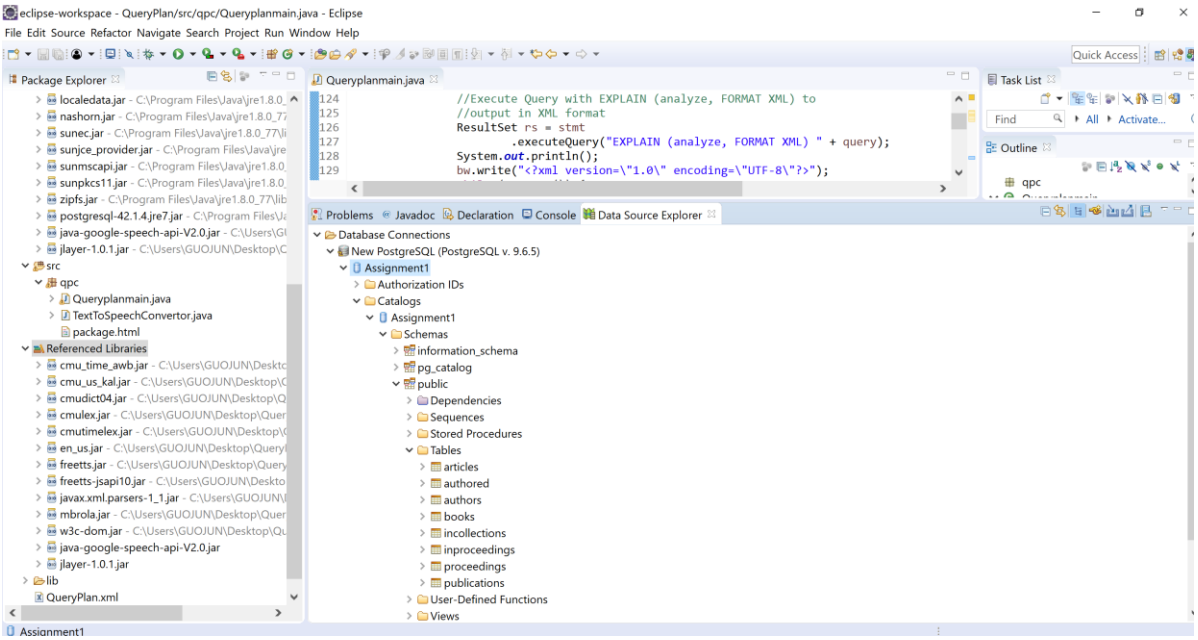
User then add the “postgresql-42.1.4jre7.jar” before clicking “OK”.



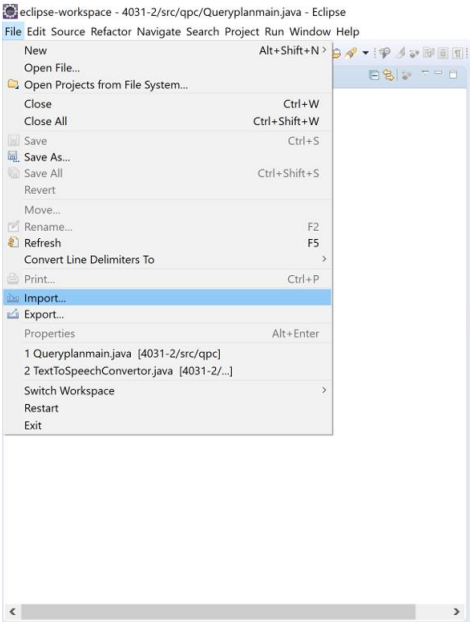
When user clicks on “Test Connection”, “Ping succeeded!” should be shown like the screenshot below to signify that the database is successfully connected to Eclipse.



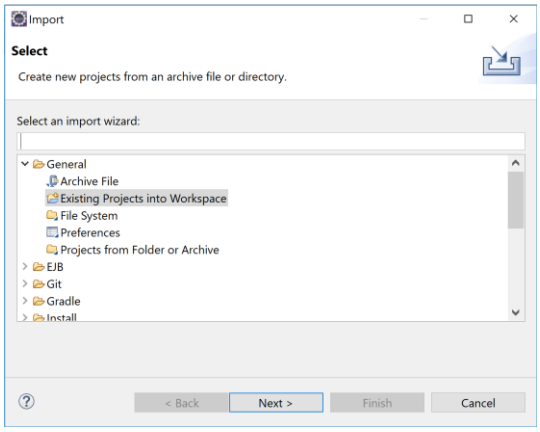
User will also see the tree structure of the database (Assignment1) from postgreSQL that is connected, showing all the tables that we populated in PostgreSQL from Assignment1's queries.

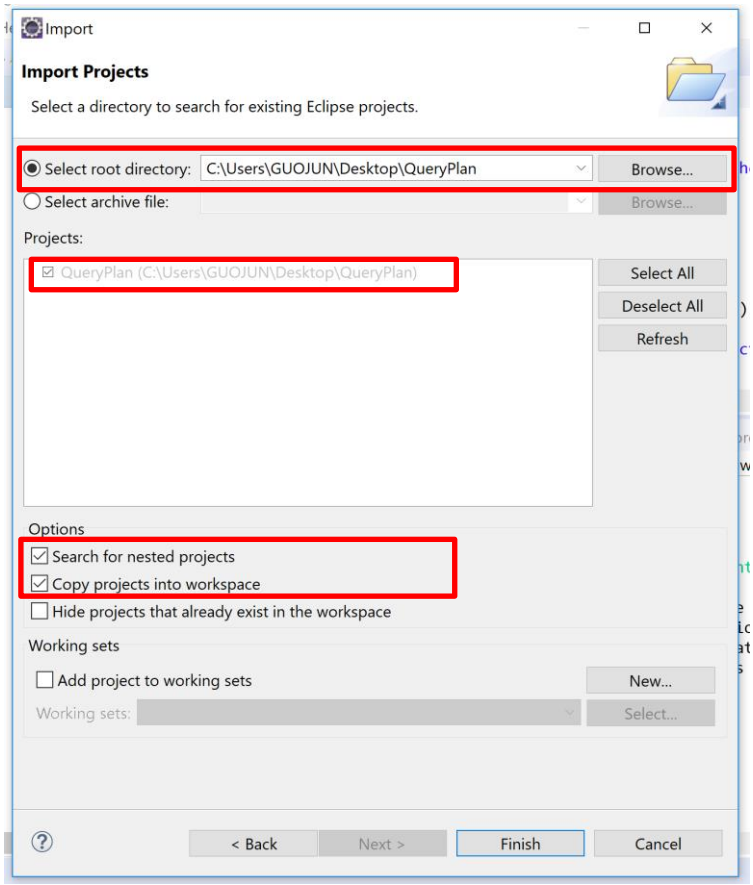


After the PostgreSQL is connected, user will have to click on "Import" to begin importing the project.



User will then have to choose “Existing Projects into Workspace” and click “Next”.

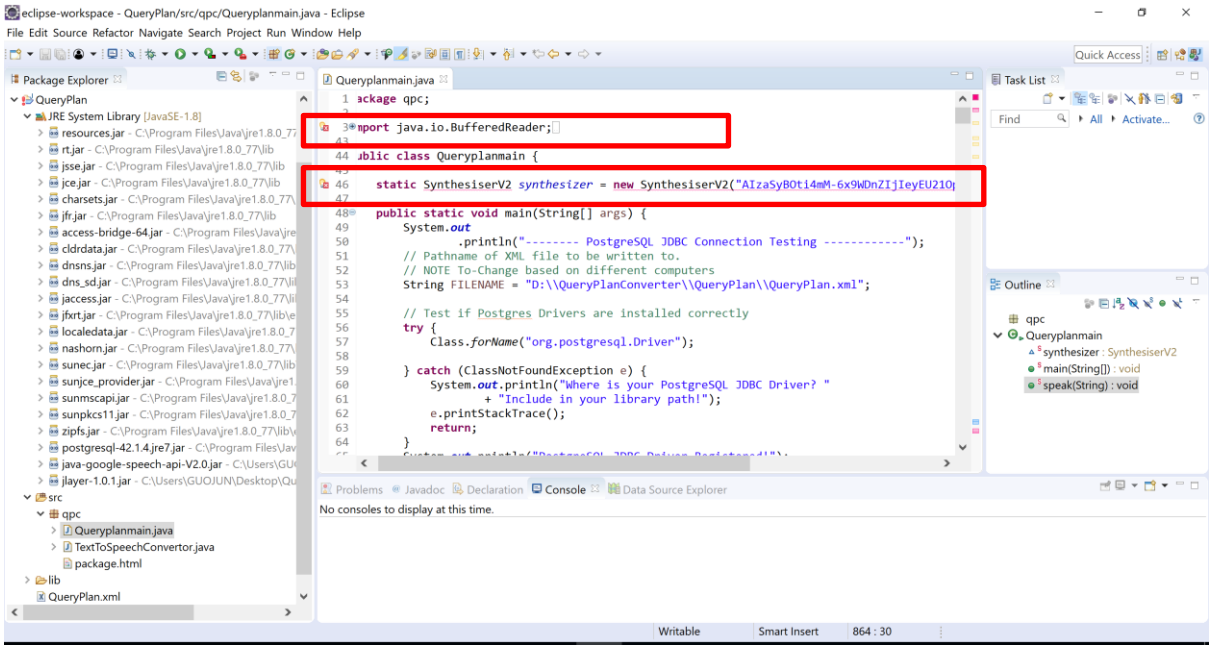


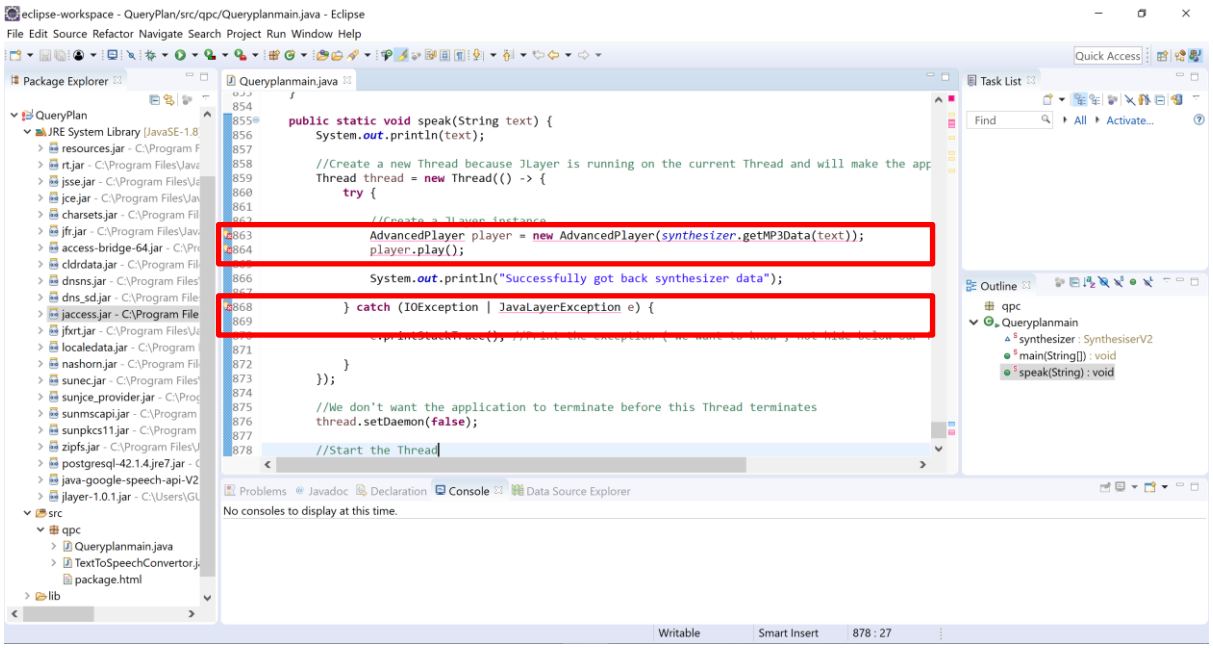


This import screen above will be prompted.

User will then have to choose “Browse” under the “Select root directory:” and find the directory of the path of the project. In this case, it’s “C:\Users\GUOJUN\Desktop\QueryPlan”.

After which, user have to make sure under “Projects:”, the QueryPlan(C:\Users\GUOJUN\Desktop\QueryPlan) is checked, before making sure under “Options”, the QueryPlan“Search for nested projects” and “Copy projects into workspace” checkboxes are checked as well. Lastly, click on “Finish”.



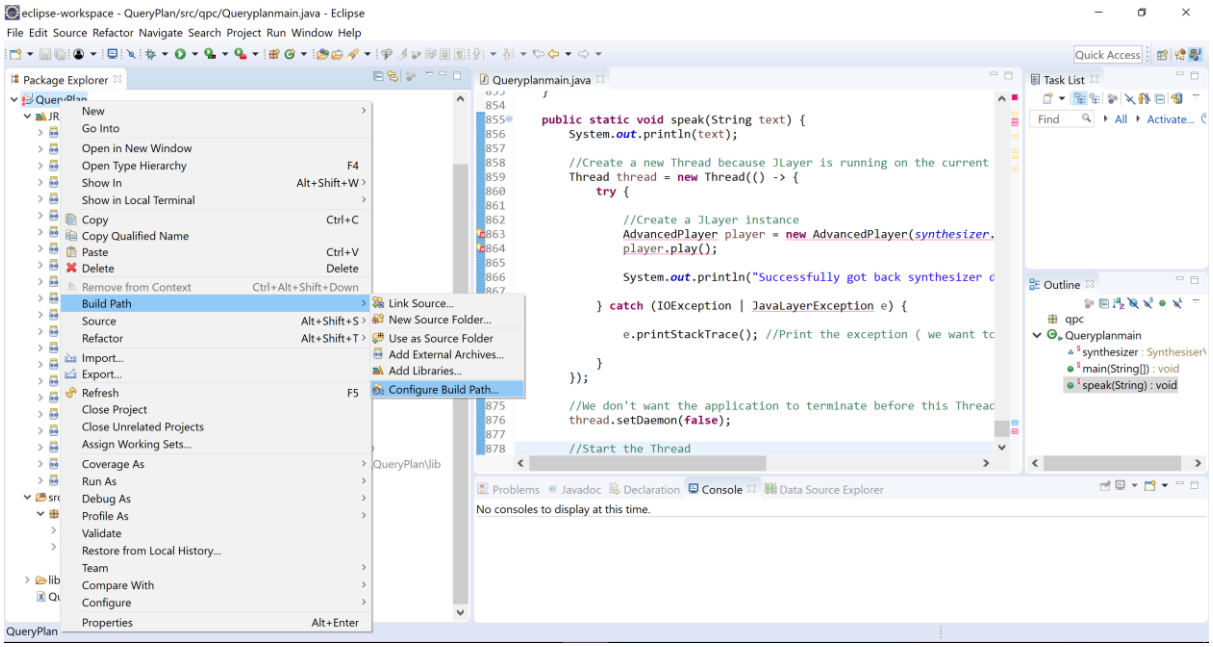


After clicking “Finish”, the project will be populated.

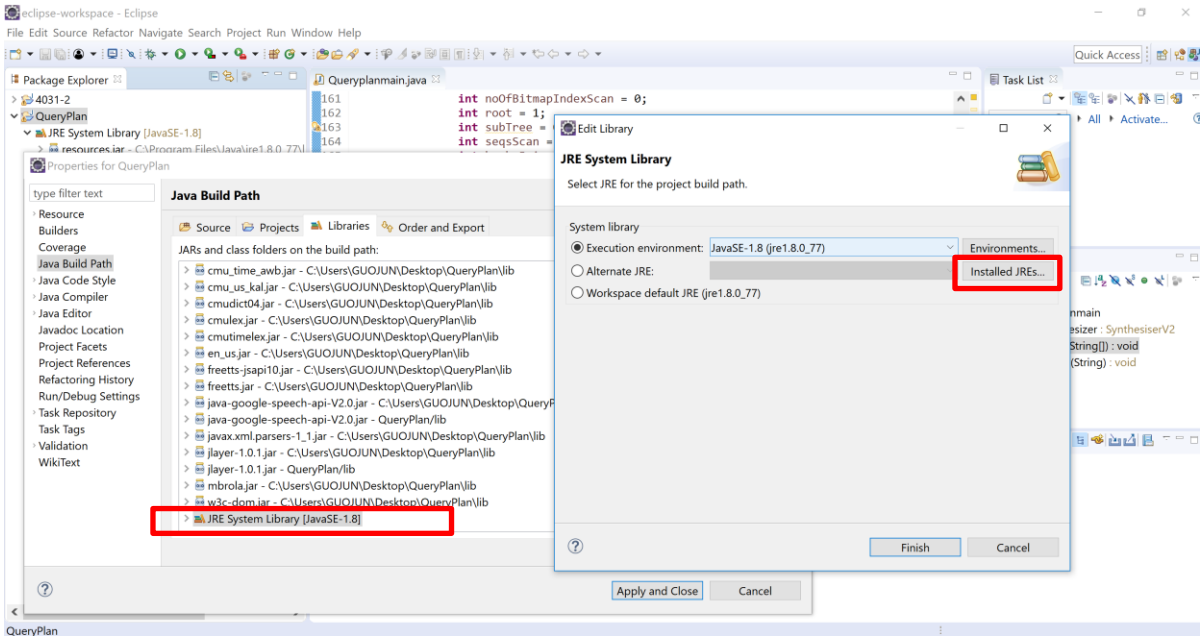
From the above 2 screenshots, user will realize there are some errors after the import of project, which is totally normal (because it is missing certain libraries).

Steps below will guide you on how to remove those errors.

User have to right click on Query Plan project and choose on “Build Path”, and “Configure Build Path…”

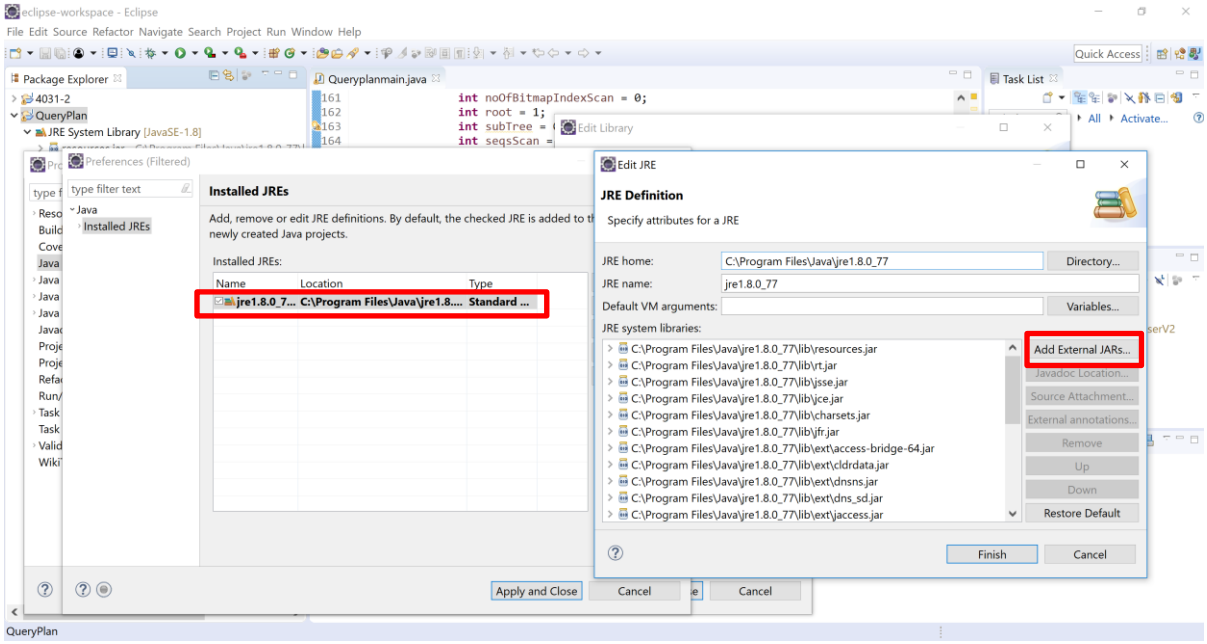


User will need to double click on “JRE System Library [JavaSE-1.8] and click on the “Installed JREs…” after the pop up.

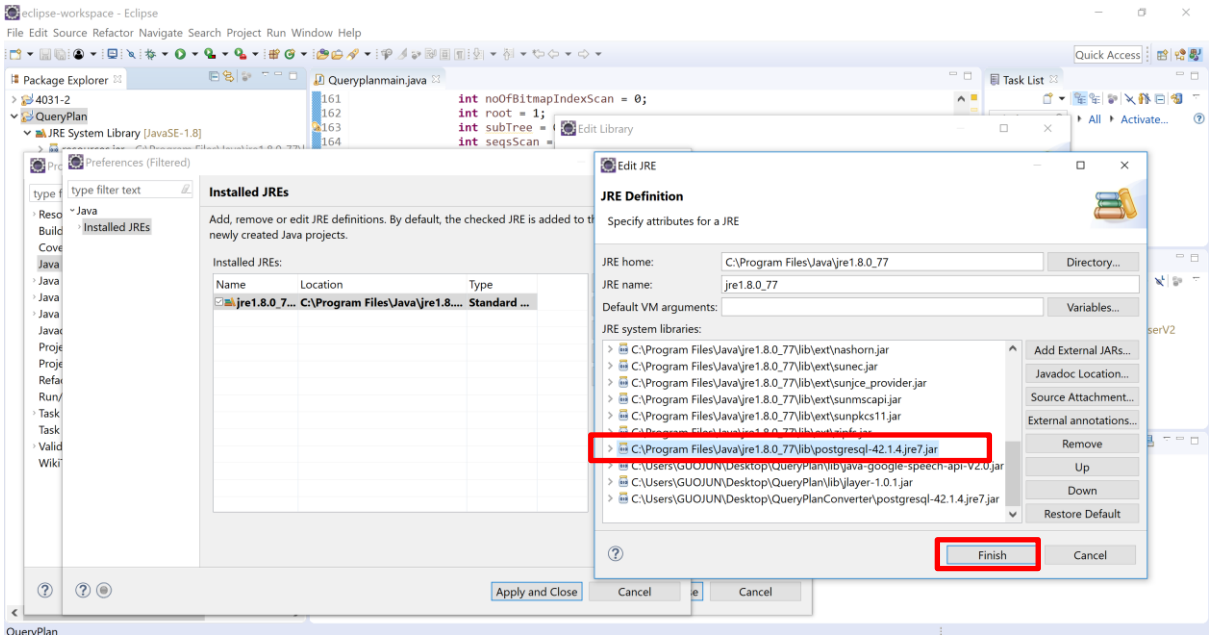


User then double click on the red highlighted “installed JREs: jre1.8.0_7… C:\Program Files\Java\jre1.8….Standard…” and will be directed to a pop up “Edit JRE”.

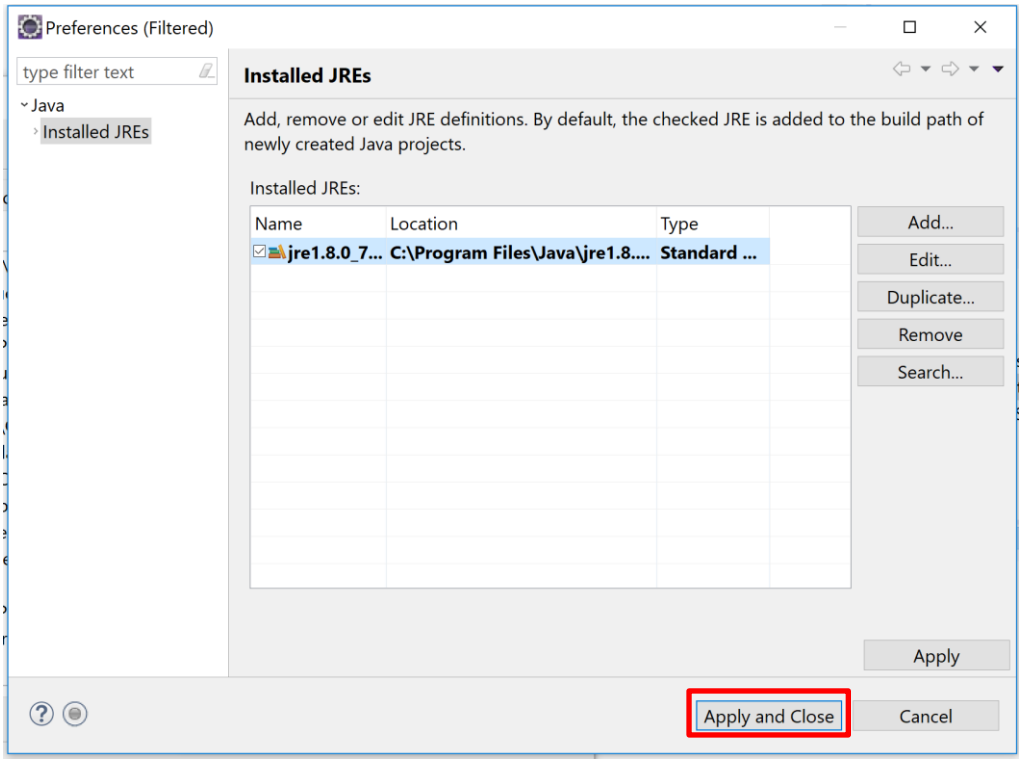
Under “Edit JRE”, click on “Add External JARs…”



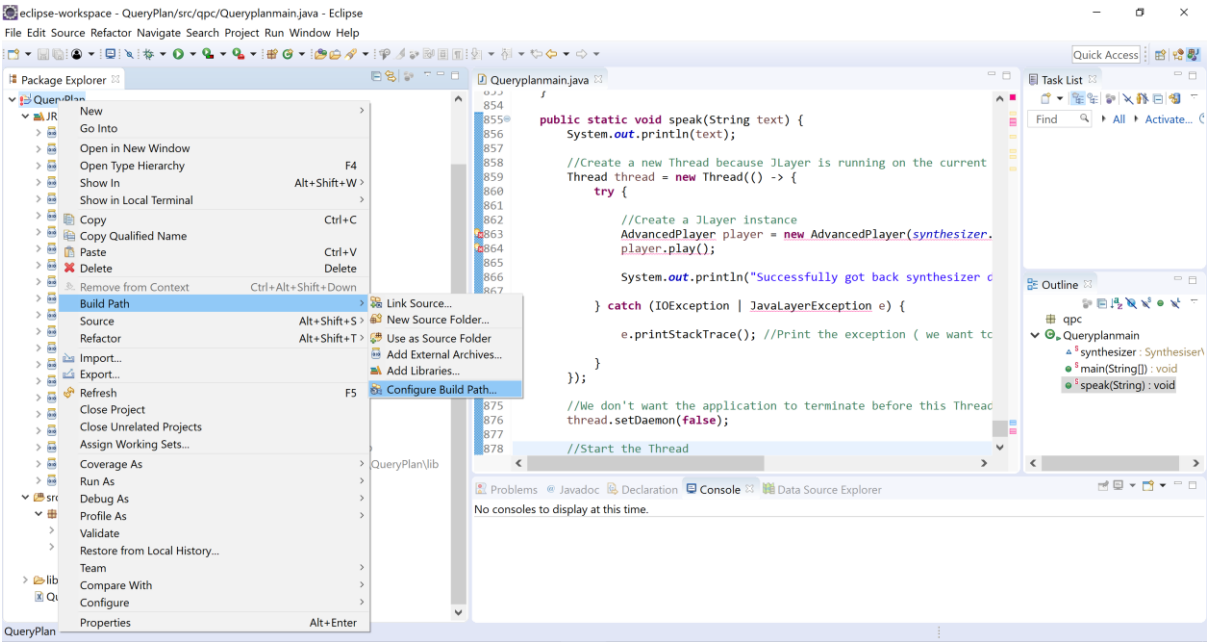
User will need to make sure the red highlighted jar file (postgresql-42.1.4jre7.jar) below is added by clicking “Finish”.



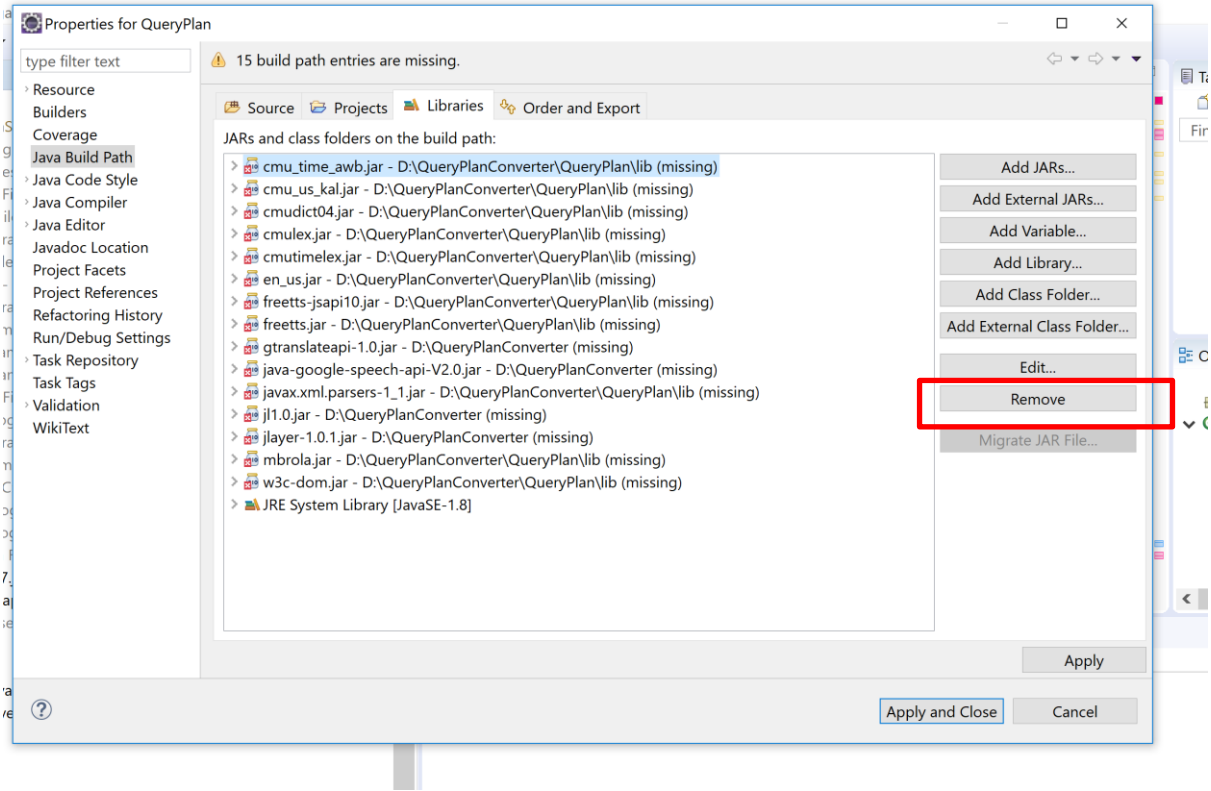
User then click on “Apply and Close”.



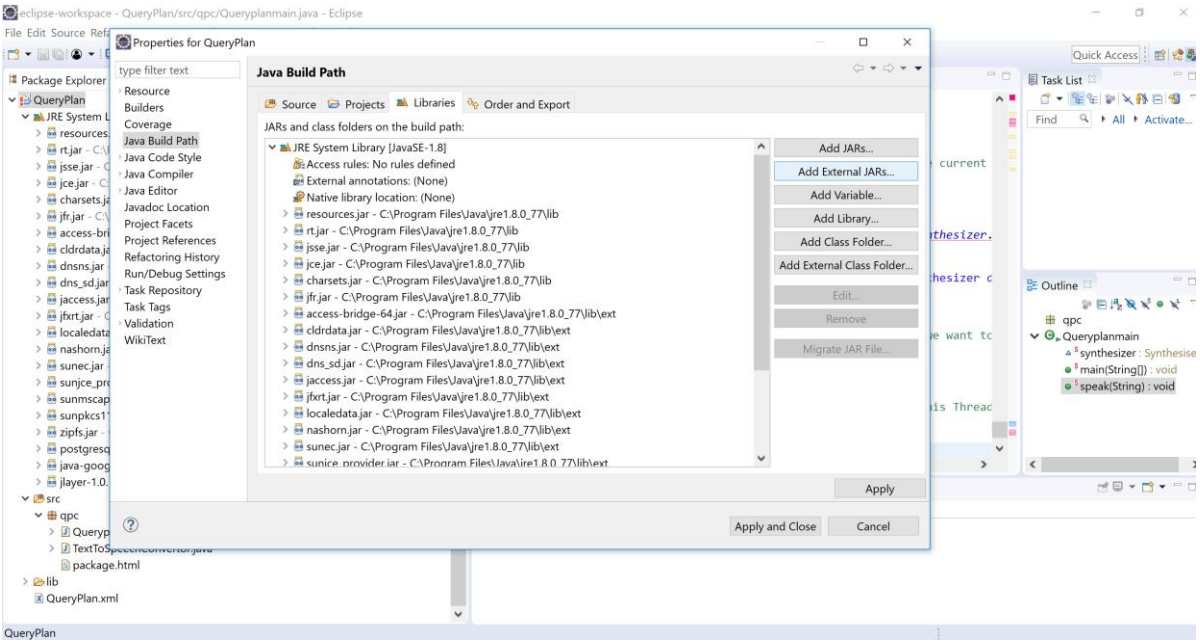
Next, user will have to right click on Query Plan project and choose on “Build Path”, and “Configure Build Path…”



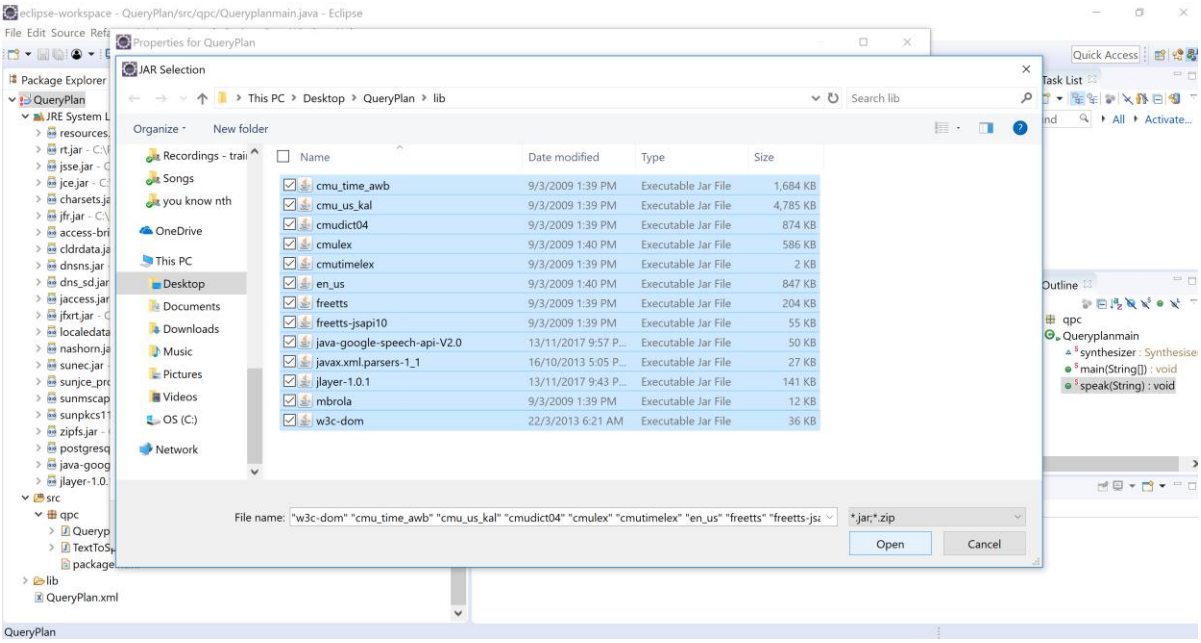
User will see libraries that are missing. User will then need to click on “Remove” to remove all the highlighted missing libraries.



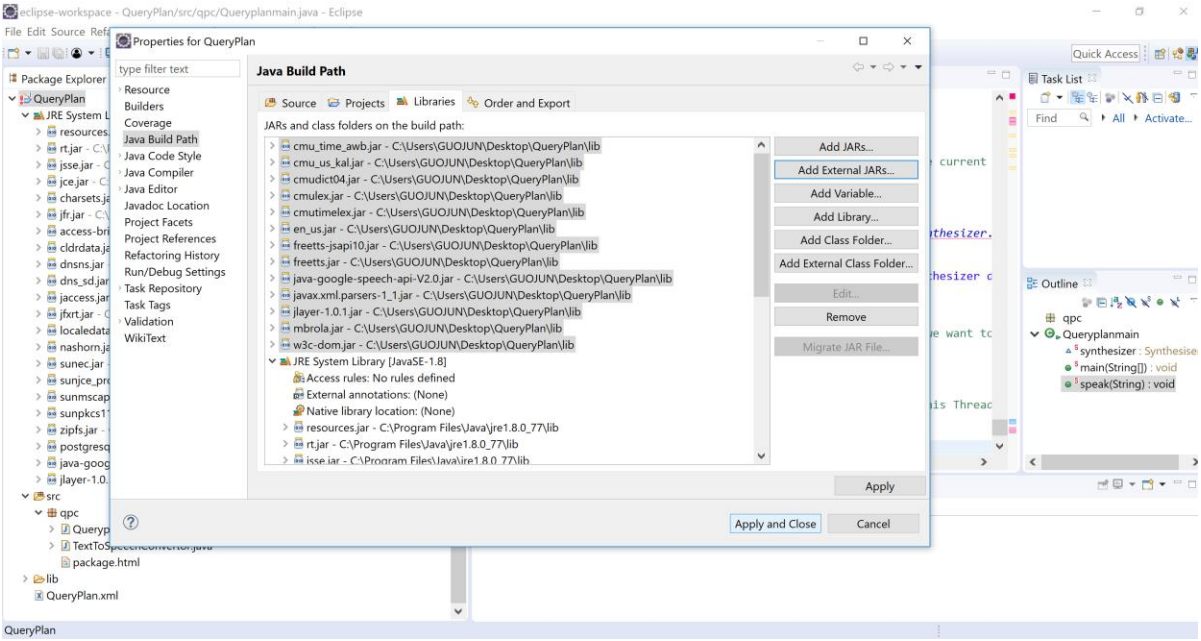
User will need to select on “Add External JARs…”



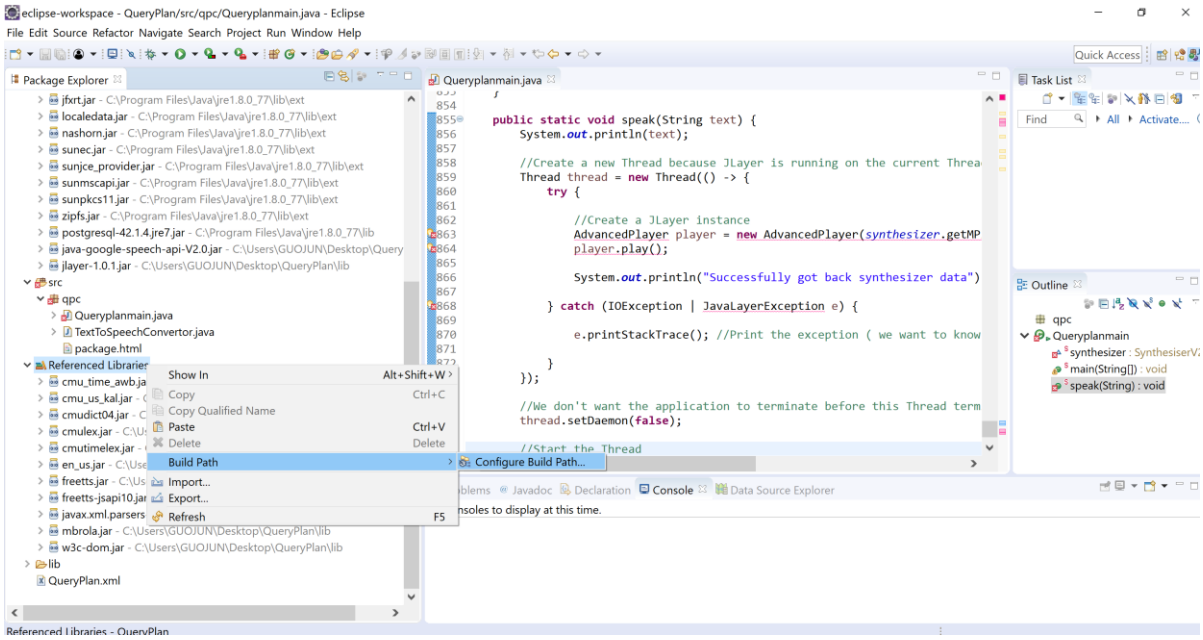
This JAR Selection will pop out, and user will have to choose all the Jar files and click on “Open”.



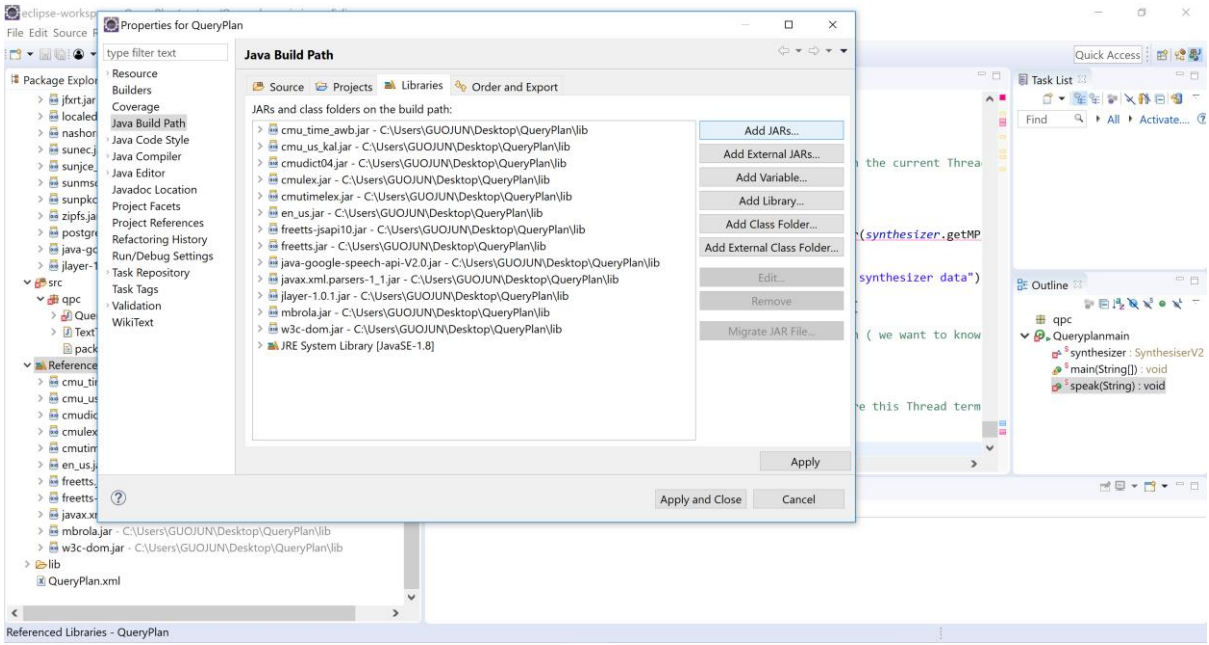
After the jar files are added, user will have to click on “Apply and Close”.



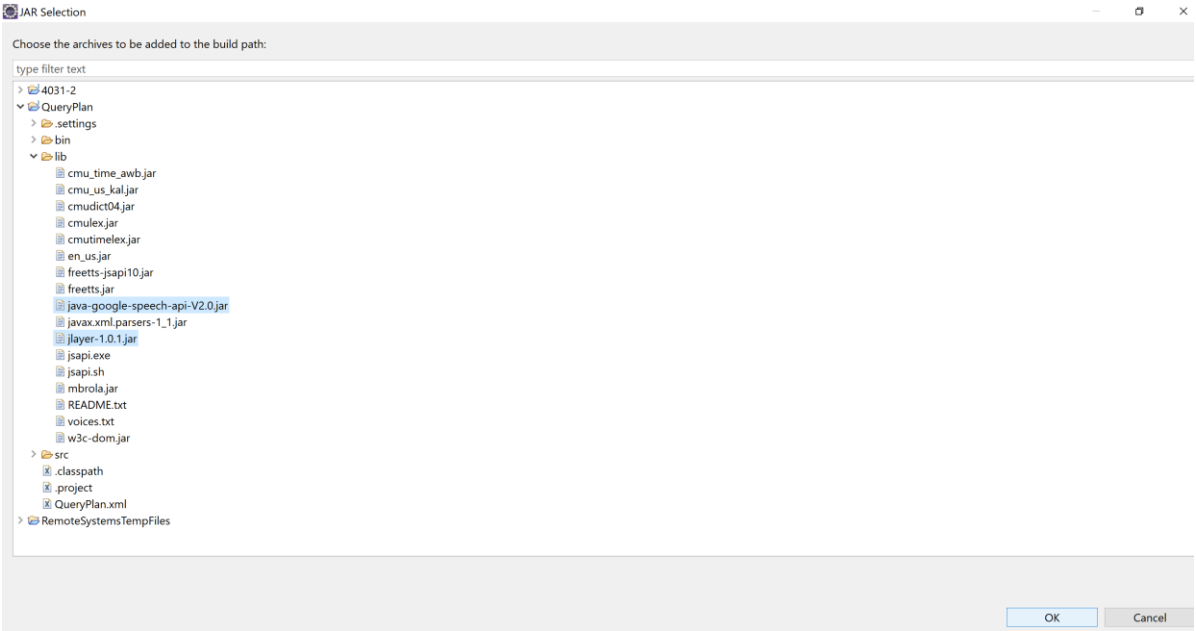
User will have to right click on ‘Referenced Libraries’ and click on “Build Path” and “Configure Build Path…”



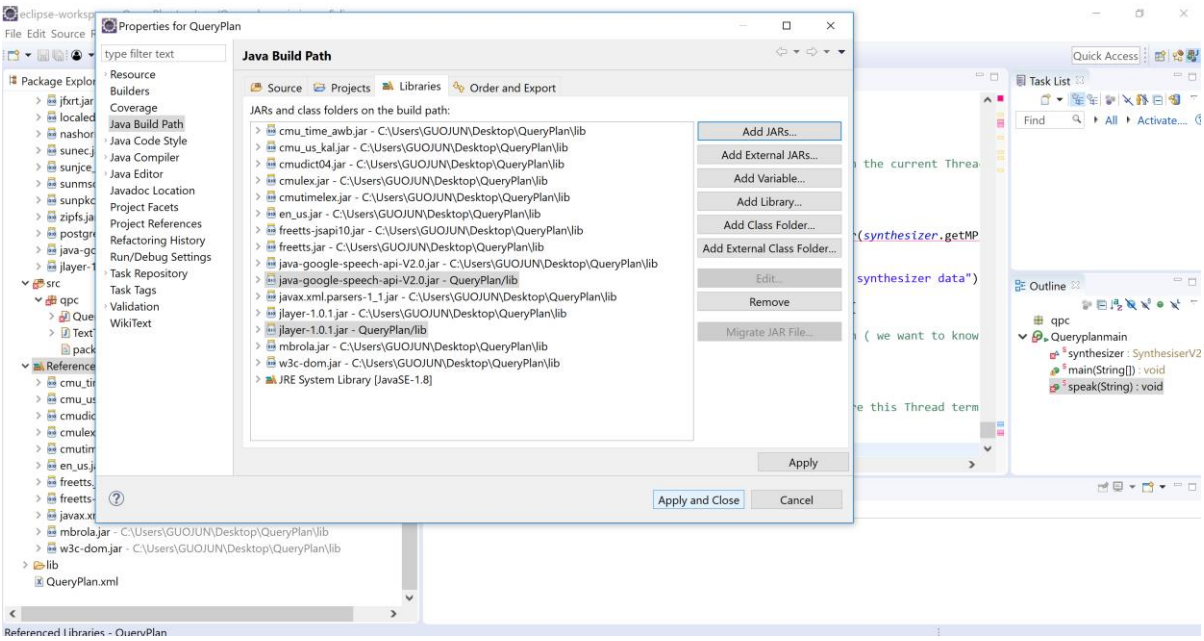
User click on “Add JARs…”



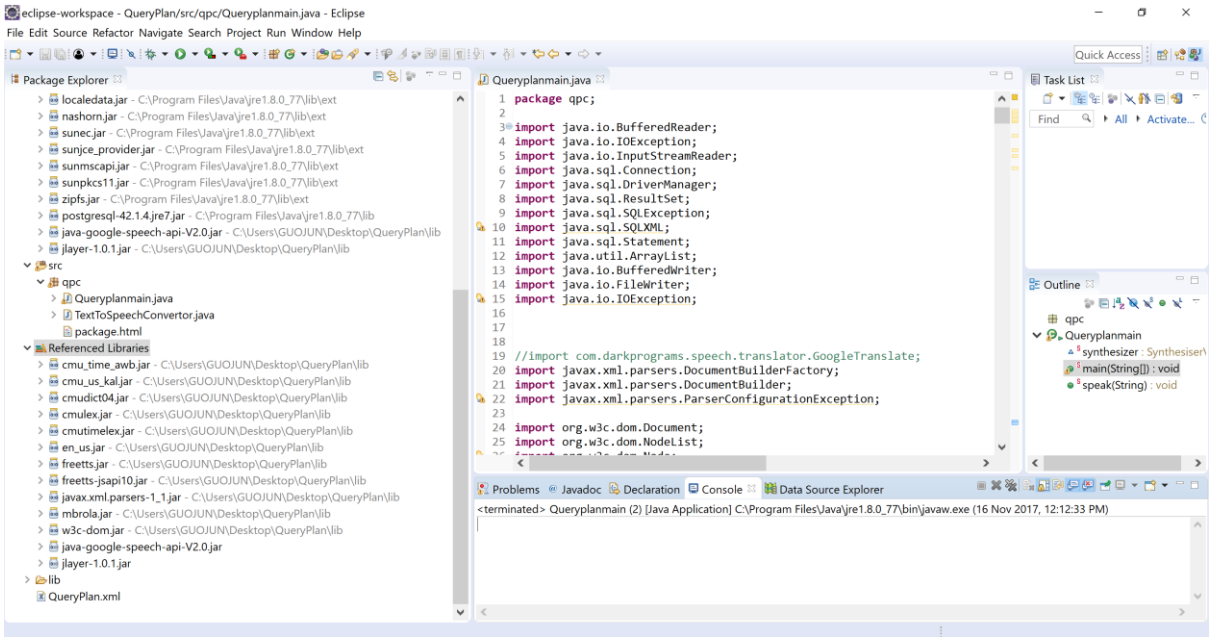
Upon clicking on “Add JARs…”, this screen below will pop out. User will then have to choose those 2 selected highlighted files: “java-google-speech-api-V2.0jar” and ” jlayer-1.01.jar” and click on “OK”.



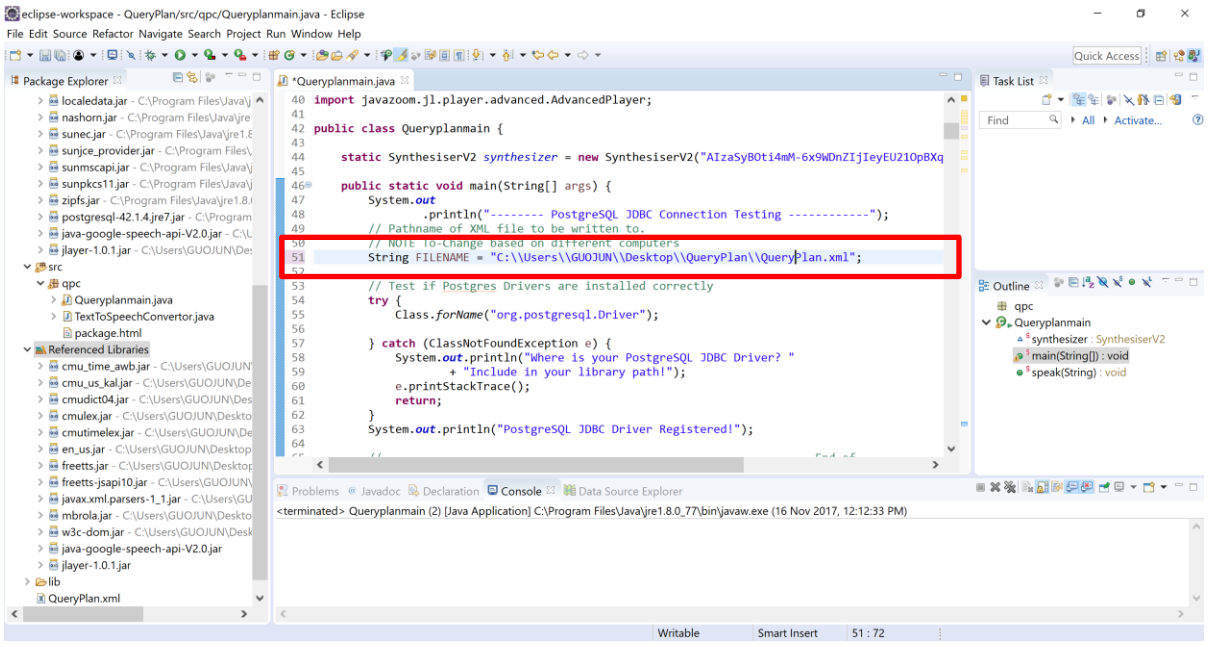
User then click on “Apply and Close”.



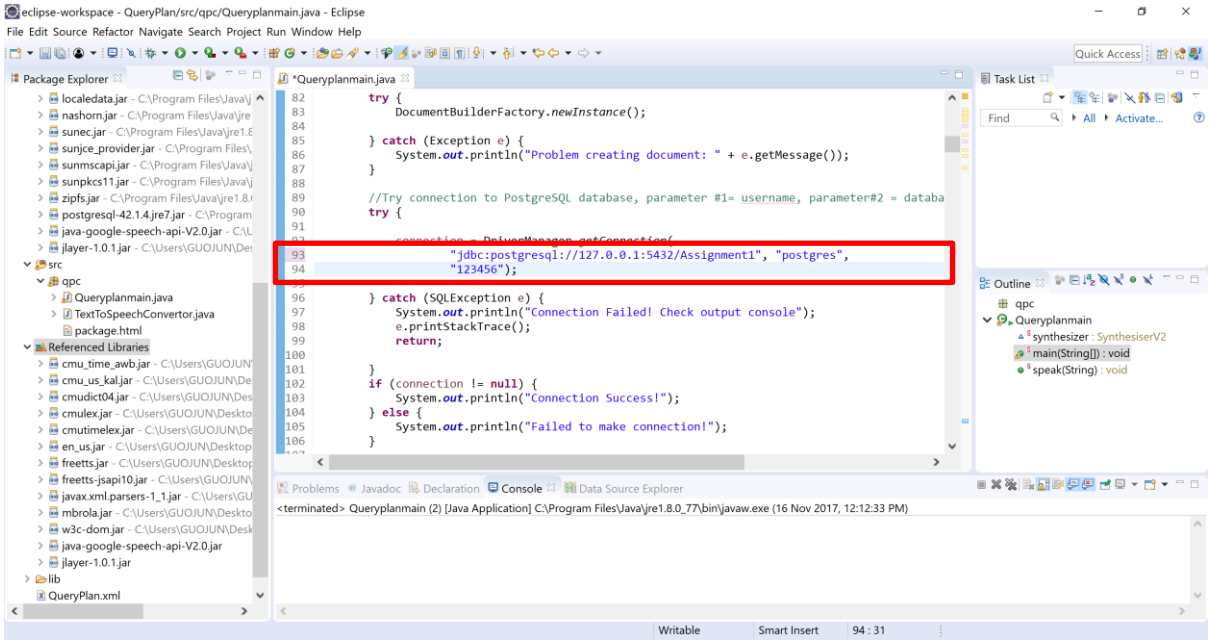
User will now see a screen that are of no errors after adding the libraries.



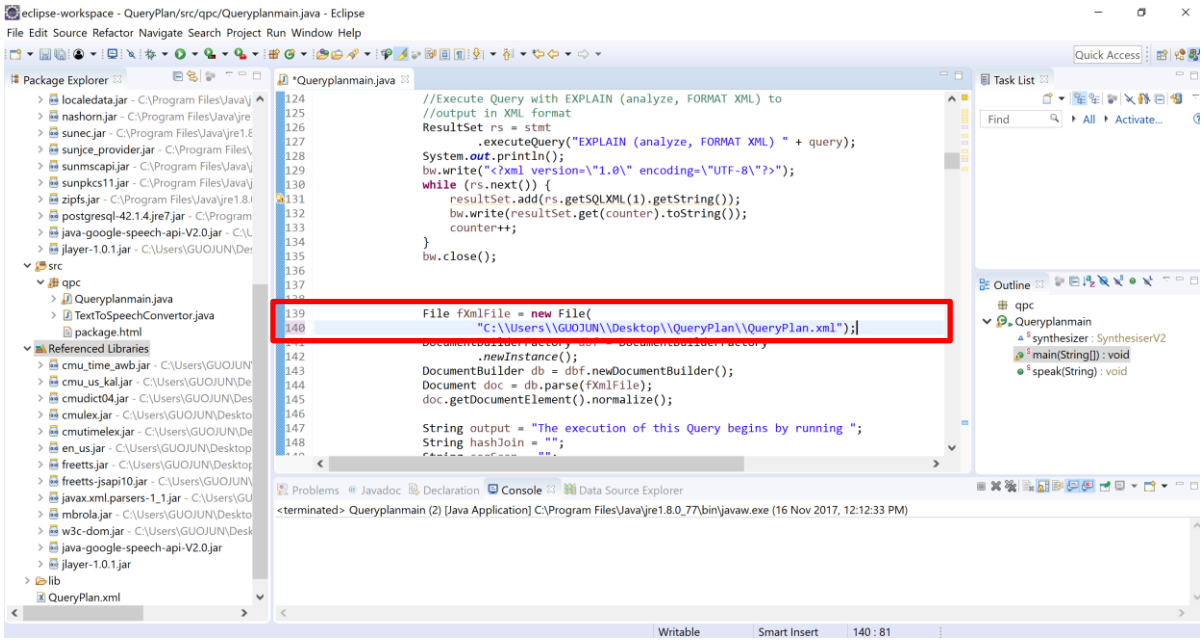
User will need to amend the code to his own directory for the JDBC Connection testing, in this case is "C:\\Users\\GUOJUN\\Desktop\\QueryPlan\\QueryPlan.xml"



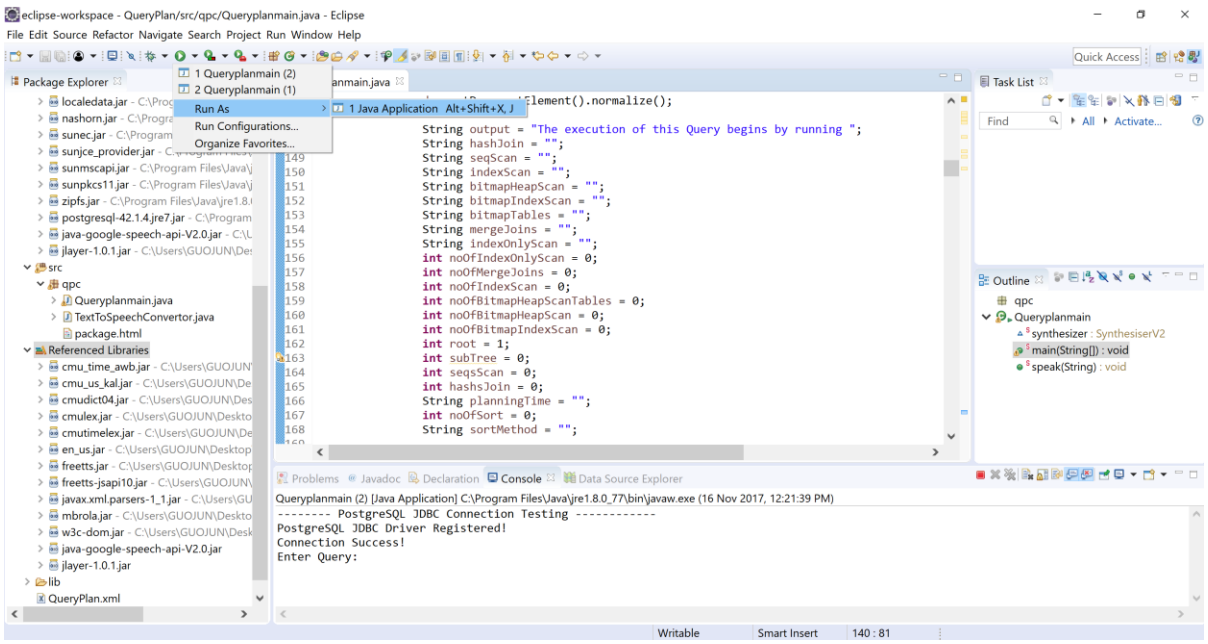
User will also need to amend the code to change to its own database directory in order to connect to the PostgreSQL. “Assignment1” in this case is our database name. “postgres” will be the username, and “123456” will be the password.



User will also have to amend the code to his own directory, in this case is “C:\\Users\\GUOJUN\\Desktop\\QueryPlan\\QueryPlan.xml”.

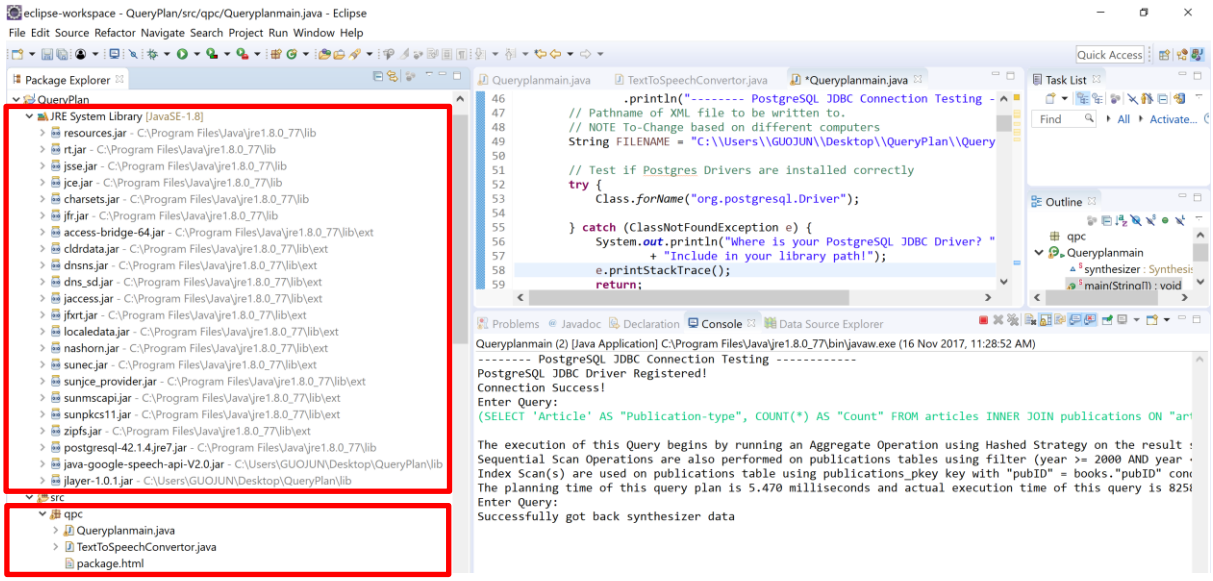


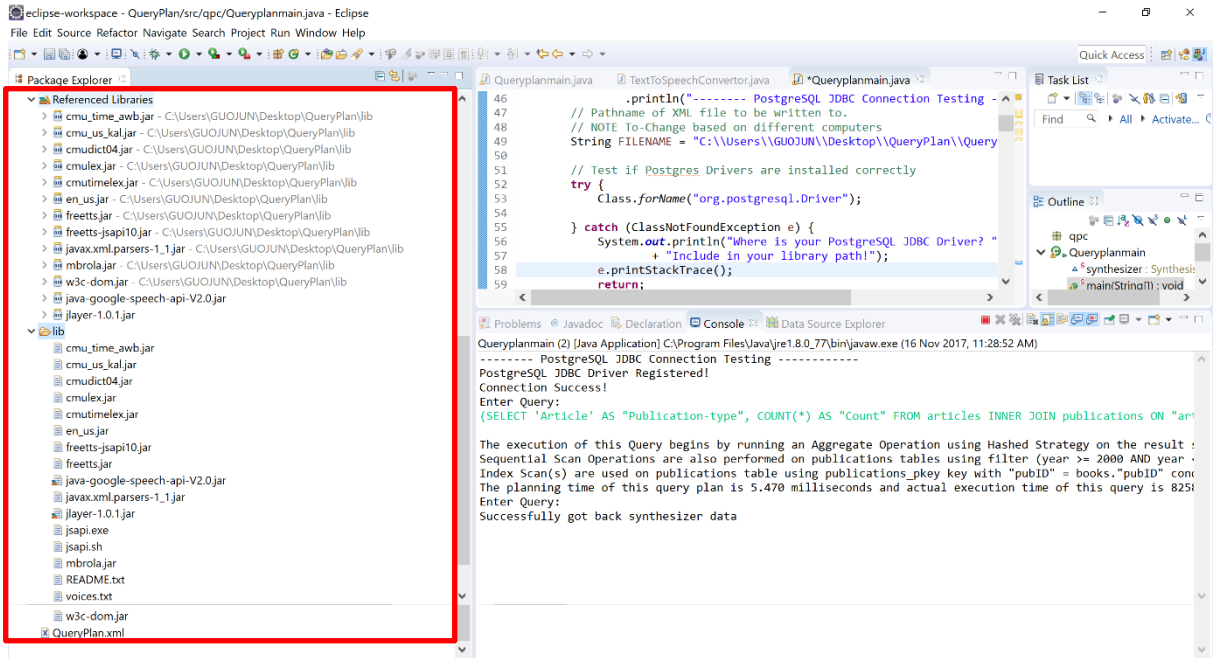
User will now be ready to run the Java Application by clicking on  and selecting “Run As” and “Java Application”. User will now see a screen that is ready to be run for the 10 queries.



User will need to copy and paste the query add a “;” behind, and tap on enter.

It will then show a successful query being run with the results and volume must be on at this point of time to be able to hear the text-to-speech voice.





On top of that, “JRE System Library”, ”qpc”, Referenced Libraries”, and “lib” folder must contain all the jar files as shown in the previous 2 screen shots.