

Lab 04

JAVA TCP Socket Programming

Introduction

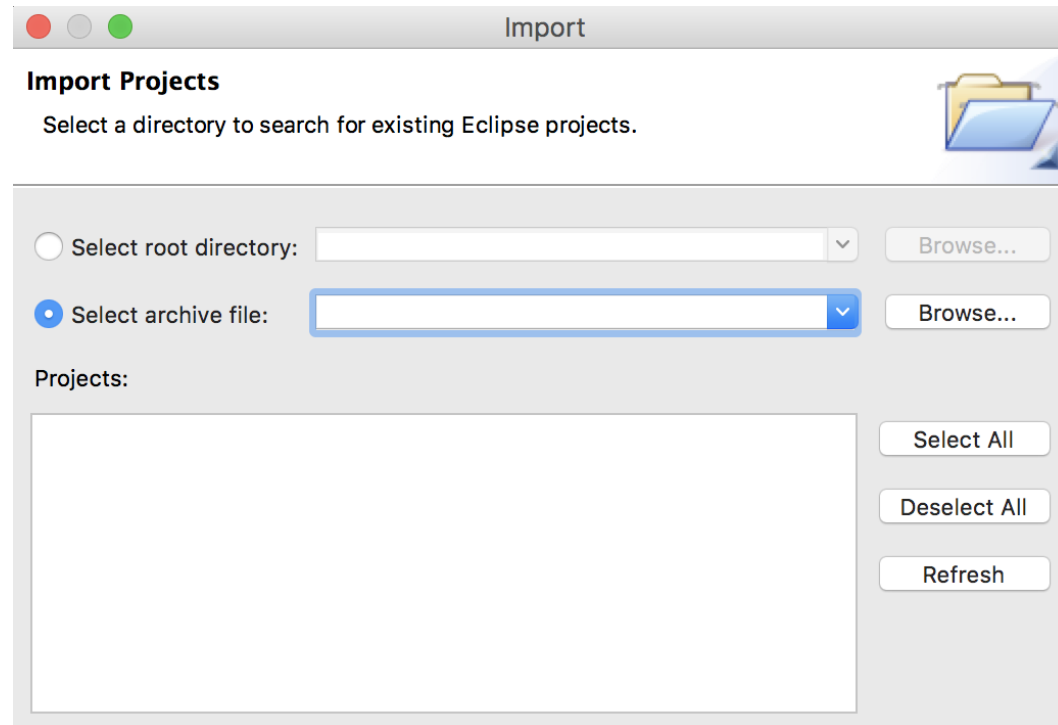
- Before beginning this lab, you'll probably want to review section 2.7 in Lecture 5 materials (Chapter 2).
- Download the Lab3 Project in the Brightspace.
- Lab3 project implement client/server pair that runs a simple TCP socket program as an Echo Server that only allows one client to connect to the server.
- Study the code for the project to understand how the TCP socket is implemented in JAVA.

Exercise 1

1. Downloads Lab4.zip
2. Import project Lab4

- - Select File > Import
- - Select “Existing Project into Workspace”

- Select archive file and browse for Lab4.zip
- Click Finish
- Run the EchoServer first
- Then run EchoClient
- From the EchoClient send messages to theEchoServer!



Exercise 2

Q1. Improve the project Lab4 client/server pair to allow multiple clients to connect to the server.

Q2. Improve the Echo Server after you answer the Q1 of project Lab4 to allow the "connection thread" of the server to stop executing via a command sent from the client.

Q3. Improve the Echo Server after you answer the Q2 of project Lab4 to use a time out on the server's connection TCP socket to continuously check if it should stop the "connection thread" of the server from executing.