

Hw3 Write Up

The existing code has the ServerConnection implementation tightly coupled and low cohesive with the Client. This causes the developer to explicitly implement the ServerConnection every time in the Client with any kind of changes. With more than one Server Connection needed, developers have to manually make the exact number of objects in the Client class which defeats the purpose of object-oriented programming. This also inhibits the ability to scale and maintain the program. To fix all these problems, I have implemented the external factory method where made a createServerConnection method taking a ServerConnection type argument and initialize the Client ServerConnection type "conn" variable to the passed argument. This has decoupled the creation of ServerConnection inside the requestFile method in the Client. Developers do not have to explicitly implement the ServerConnection in the request File. In the case of more than one ServerConnection, developers can pass any specific without manually making any changes to the Client. In last, this also enables Client to choose ServerConnection dynamically during the runtime.