

Assignment 2 Singleton Justification

Our application, Accord, uses a masterServer class to initialize new users from client requests. To ensure that no duplicate users are created, we create a MasterUserList class that implements the singleton design pattern. By using a getInstance() call from the masterServer to the masterUserList we can check the existing user list for an identical user before appending the potential new user. Furthermore, through the use of a singleton class we can ensure that the variable holding our users is multi thread safe.

As a final note, although we do not yet intend to implement multiple masterServer objects, the potential to do so is made possible by the singleton implementation. By abstracting the masterUserList to an independent class we can reference it within multiple masterServer instances.