Tambola/ Housie Project

Documentation

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• Encapsulate what Varies

Encapsulation is followed, like in Tambhola class finishedNumbers, randomGenerator , etc. , in Ticket class TicketId , String Numbers follow encapsulation because they are private thus they can only be accessed using class functions.

• Favour composition over Inheritance

Yes, this is followed. The Thambola class contains a TicketGenerator object as its data member, thus there is no inheritance used but Thambola contains TicketGenerator in its composition.

• Classes should be open for extension and closed for modification

Classes are not very freely open for extension but they are closed for modification. It is possible to freely add features but it will require certain amount of change in the code.

• Depend on abstraction, do not depend on concrete classes

No, since we are creating objects of the classes in the program , we require concrete classes. There is no abstraction as all the classes used in the program have their objects created somewhere or another.

Design Pattern

Code is resembling to Prototype Pattern.

The prototype pattern is used when the Object creation is a costly affair and requires a lot of time and resources and you have a similar object already existing. So this pattern provides a mechanism to copy the original object to a new object and then modify it according to our needs. This pattern uses java cloning to copy the object.

Currently it is not implemented in the code but it can be implemented as when the moderator calls a number and it has to be cut in the ticket the ticket will be cloned and the number called will be cut and the modified ticket will be displayed.