Peer-Review of Workshop 3 (grade 2)

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Reviewer: **Mitja Tim Rijavec Bruneus**

Functionality

The program compiles and runs without a problem. All the required functionality seems to be present. The messages are printed out consistently and logically. The display of the new dealt card is a nice feature.

Agreement of the diagram with the implementation

The new hit strategy and rules for winning are included correctly. The Dealer class actually has a dependency on the IObserver interface and not the Observer class. The external dependencies (Card, Deck, Dealer, Player) of the classes in the rules package are not shown (maybe intentionally).

Implementation of Design Patterns

MVC

The model-view-controller pattern is implemented correctly. The model has no dependencies on the view and the controller. The view only depends on the model (Card, Game). The controller only depends on an abstraction of the view (IView interface) as well as the model. The hidden dependency between the view and controller has been removed.

The view responds directly to the user input and invokes game methods contained in the model. According to the Controller pattern (see Larman, p. 429-), it might be better if the controller handled the gameflow and updated the model.

Strategy Pattern

The soft17 hit rule and the new rule for winning are implemented correctly. The rule algorithms are interchangeable without the need to change the structure of the program (see e.g. Gamma, Helm, Johnson, & Vlissideses, p. 349-).

Observer Pattern

The Observer pattern is implemented correctly and the view is notified and updated automatically (see e.g. Gamma, Helm, Johnson, & Vlissideses, p. 326).

Code duplication

The code duplication in the implementations of the INewGameStrategy has not been removed.

There is a lot of code duplication in SimpleView and SwedishView, maybe the duplicated code could be extracted to a superclass or handled in another way (e.g. by using a resource bundle).

Overall evaluation

The solution fulfils most of the requirements for the pass grade. The code duplication for getting a card from the deck, show the card and giving it to a player in the implementations of the INewGameStrategy should be removed and the class diagram updated.

References

1. Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062

2. Gamma, E., Helm, R., Johnson, R., Vlissides, J., Design Patterns: Elements of Reusable Object-Oriented Software, ISBN:0-201-63361-2