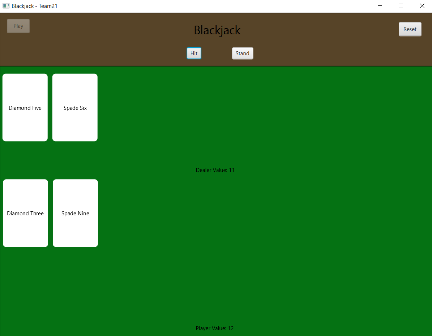
Peer Review: Blackjack / Team21Project

All suggestions and criticisms in this peer review refer to the code of 14.01.2022 20:30. Therefore, points can be objected to which have been dealt with by the team in the meantime and therefore lose their effect/recommendation. This includes bugs, styling conventions and generally everything related to code.

# General:

# The game has a very simple graphic user interface, which, however, seems understandable at first glance and is sufficient for the game in almost all cases.

# Source Code:

|  |  |  |  |
| --- | --- | --- | --- |
|  | PASS | FAIL | Comment(s) |
| Is the code readable for outstanding/ external persons? |  |  |  |
| Are comments used to simplify the code? |  |  | a.) |
| Are the naming convention of variables correct? |  |  |  |
| Have the correct data types & modifiers been selected? |  |  | b.) |
| Styling conventions |  |  | c.) |
| Main-Class can be easily identified |  |  |  |
| Check if unexposed instance variables are present in form objects. |  |  | d.) |
| Array bounds are checked. |  |  |  |
| Does the configuration get applied to all classes? |  |  |  |
| Does the (centralized) validation get applied to all requests? |  |  | e.) |
| Is logging used? E.g., log4J2 |  |  | f.) |
| Is there any unhandled race condition? |  |  |  |
|  |  |  |  |

a.) even though the code is easy to read, it is recommended to add comments if this is to be reviewed by others  
b.) In Card.java, the variable suit can be set to private without any problems, as it is only needed in the class Card. However, the other two variables number and worth should also be set to private and called via getter/setter methods.  
c.) It is right and good that you have used enums for the various enumerations of the map names  
d.) Most instance variables are set to private. In Card.java the instance variables are set public. It is to be recommended to use private modifiers with getter/setter-methods.  
e.) Since only buttons are used, no input validation is required.  
f.) Since log4j/log4j2 is not requested and it is not needed here it is not implemented.

# Flow Control / Structure:

|  |  |  |  |
| --- | --- | --- | --- |
|  | PASS | FAIL | Comment(s) |
| Are there backdoor/unexposed logic classes? |  |  | g.) |
| Are there unused configurations related to logic? |  |  | h.) |
|  |  |  |  |

g.) Since the method restartGame() only calls the methdoe startGame(), it would make sense to rename the method startGame() to newGame() and delete restartGame().  
h.) The method getCardCount() in the Class Hand.java is not needed and can be removed easily.

# Error Control / Handling:

|  |  |  |  |
| --- | --- | --- | --- |
|  | PASS | FAIL | Comment(s) |
| Is the execution flow correct in failure cases? |  |  | i.) |
| Is the execution stopped/terminated after/for invalid request/s? |  |  | j.) |
| Are the checks correct implemented? Is there any backdoor parameter? |  |  | k.) |
| Are security checks placed before processing inputs? Input data is constrained and validated for type, length, format, and range. |  |  | l.) |
| Is the program designed to fail gracefully? |  |  | m.) |
|  |  |  |  |

i.) no errors can occur, as the input is only via buttons  
j.) no errors can occur, as the input is only via buttons  
k.) No backdoor parameters  
l.) no text input  
m.) Main.java Line 70: Exception should be changed to IOException[[1]](#footnote-1)

# Usability / Bugs:

A small bug is present with the reset button after the play button has been pressed. This makes it possible to deal a new hand before the current one is finished. Also, the basic sense of the reset button is not obvious, as the basic rules are covered with the play, hit and stand buttons. The easiest way to fix this is to delete the reset button completely.

Normally, the dealer's second card is not revealed until all players have closed their turn (hit/stand).

# Recommendations:

The only case where the game ends before this is when the dealer has 21 points (BlackJack) with the first two cards.

When a player has two cards with the same value, it is also possible to split them, which means that the player then has two independent games in front of him.

Ein Bild, das Pfeil enthält.

Automatisch generierte BeschreibungIt would be nice to see card symbols instead of text.

1. <https://rollbar.com/blog/java-exceptions-hierarchy-explained/> (as of 17.01.2022) [↑](#footnote-ref-1)