

ATHENS - TUD15

Assignment 2

Group Z4QQQ

1. Write a natural language description of why and how the pattern is implemented in your code.

We used the Iterator Pattern.

WHY: We wanted to put the logic for the collision detection out of the `PlayingState` to the `BorderElements`. Therefore, we had to refactor some parts of the application. Afterwards, it made sense to use the iterator pattern to iterate over all border elements. We call the `interact` method for each element and check if there was a collision with the ball. If there was a collision, depending on the element, various methods are called (e.g., bouncing of the ball, increase score of player).

HOW: Since Java has built in support of the Iterator pattern within the Collections we used the iterator of the `ArrayList` Collection. The border container that has all `borderElements` stored in a list, delegates the iterator to our `PlayingState` object, where the iterator is used to check all `borderElements` for collision.





