

In-class Activity: Refactor Studio

Refactor the code of Tennis Game:

The tennis society has hired you to develop a scoreboard that can accurately present the current score in tennis games, considering the sport's somewhat unconventional scoring system that might be perplexing for newcomers.

You can read more about Tennis scores on [Wikipedia](#) which is summarized below:

1. The player who attains a minimum of four points in total, with a lead of at least two points over the opponent, wins a game.
2. Tennis employs a distinctive scoring system, labeling scores ranging from zero to three points as "Love", "Fifteen", "Thirty", and "Forty", respectively.
3. When both players have scored at least three points, and the scores are equal, the game is referred to as "Deuce".
4. If each player has scored a minimum of three points, and one player holds a single-point lead over the other, the game is designated as "Advantage" for the leading player.

Reporting the current game score is the only requirement; sets and matches are not considered in this context.

A simple version of the Tennis game scoring system in Java can be found here :

[Link to Tennis Game code](#)

It is now your responsibility to refactor and enhance the existing code, as it may not adhere to standard design and programming principles. Please proceed with the tennis project repo and provide a report on following questions:

1. What are some of the identified code smells?
2. Briefly mention what qualities these smells impact.
3. Could you identify some design smells from the identified code smells?
4. What is the suggested refactoring?
5. How do you justify this refactored version as better than the first version?