

Lab 6: OOP Design Principles

Rick has a software that used to keep track with different types of football games, each football game has a name and a set of rules. The rules are (“match duration”, “team size”, “field size”, “number of referees”). And the software allowed the user to find the games based on a certain rule.

Since the outbreak of COVID 19 a lot of people are staying at home and aren’t playing football games anymore, so he decided to expand his software to include also some genres of computer games, can you help him with that?

Rick wants to add new games which are MOBA games (Multiplayer Online Battle Arena) each MOBA game has a name and a set of rules the rules are (“team size”, “lanes count”, “map size”, “champions count”). He also wanted another game which is MMORPG (Massively Multiplayer Online Role Playing Game) that has these rules (“max level”, “number of towns”, “inventory size”, “map size”).

Rick wants after adding these types of games to be able to search for any game based on a certain rule for example if a MOBA game has a map size of 3000 and also an MMORPG game has the same map size, the software should display to the user both of these games.

Based on your understanding of OOP design principles modify the given code so that it adds the new requirements in the best possible way. Don’t forget to test your code using FindGameTester.java