

JAVA FUNDAMENTALS

JANUARY 2021

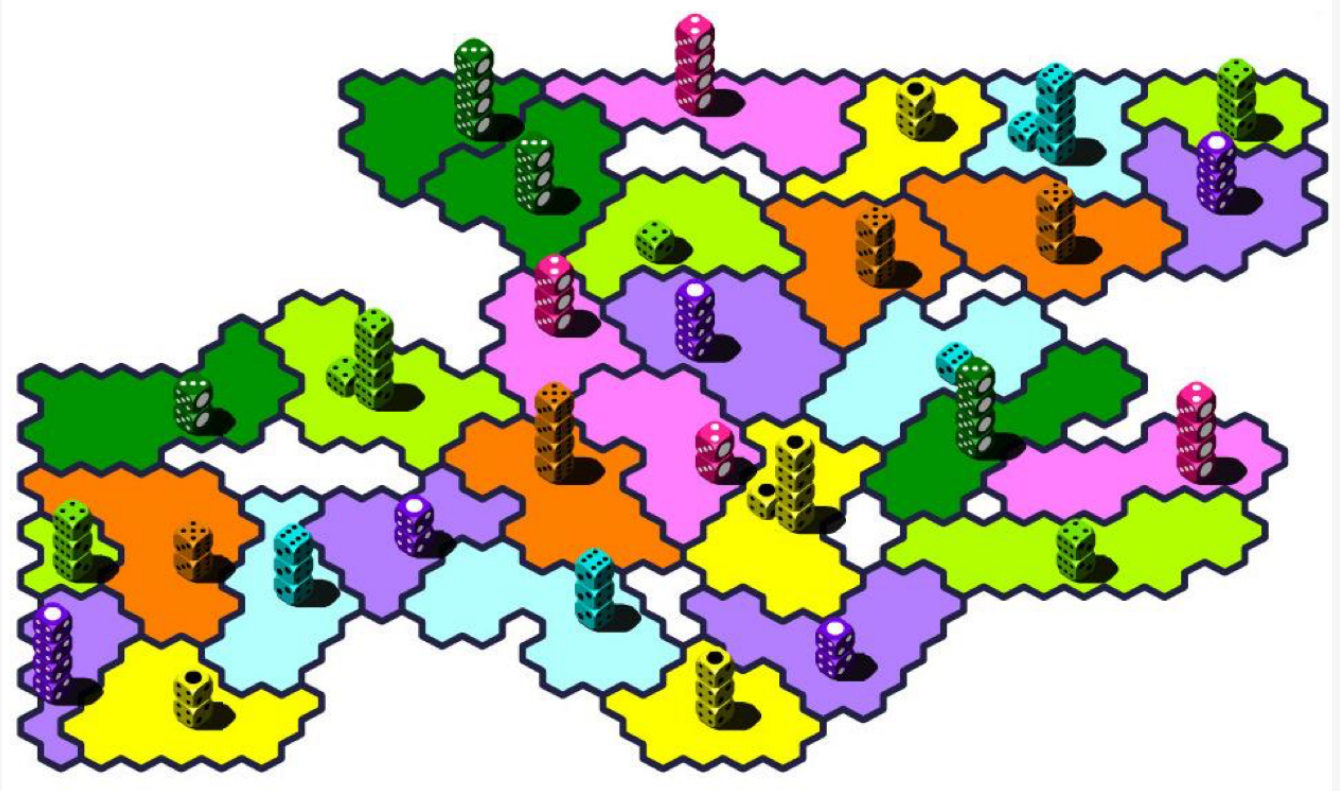
DICE WARS GAME



A PROJECT BY

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GENERAL DESCRIPTION



SOME INFO ON THE GAME

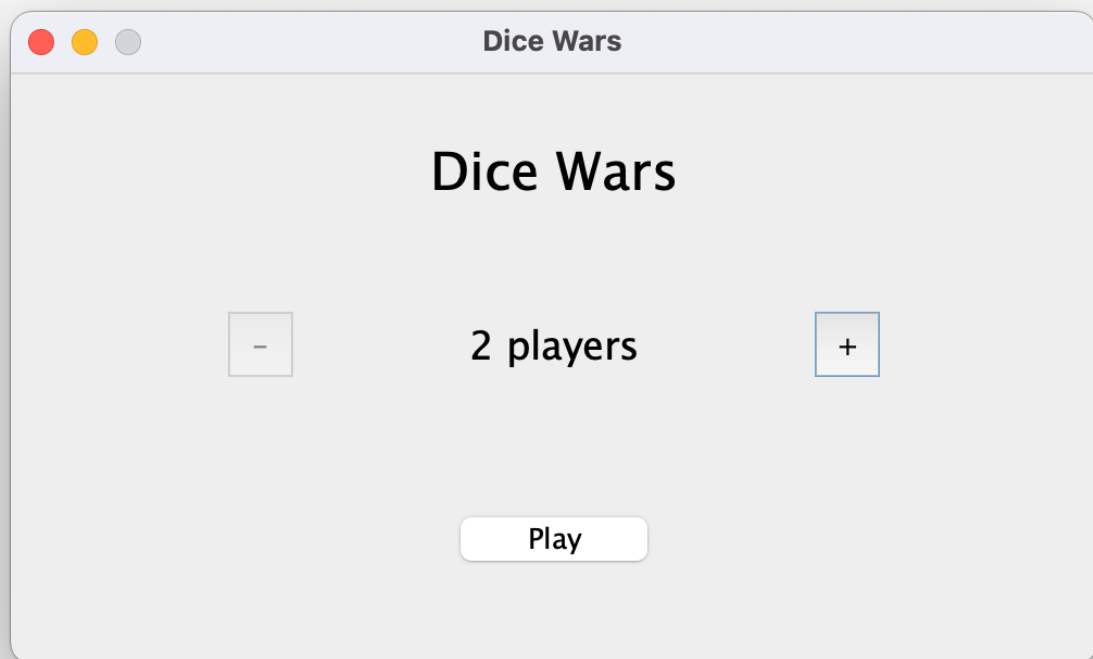
Dice Wars is a strategic game based on dices. It is composed of a map with several regions. Those regions can be conquered. But how? At each turn a player can attack. He has to choose among his regions one that he wants to expand. Then he rolls his dices from the selected region. The sum of his dices must be superior to the one of the attacked territory.

If superior, the player can retrieve the conquered region.

OUR STRUCTURE

As for the console version, our structure is divided in 5 parts. The first one handles all the exceptions (invalid territory, no neighbors, not contiguous and weak territory). The second one is simply the game. The third one controls the map which is followed by what fills the map, the player file and the territory file.

Next is the gui which handles the graphic interface. It is composed of the controllers which manage events, when we interact with the game interface. Then comes the models which deal with all the data as who plays, the number of dices on each territories etc.). Last we have the views allowing us to display the different windows of the game (game, menu, territory).



ID #7
Player 2
4 dice

ID #13
Player 4
2 dice

ID #2
Player 1
4 dice

ID #17
Player 5
4 dice

ID #6
Player 2
4 dice

ID #
Play
4 di

ID #
Play
4 di

ID #
Play
3 di

ID #
Play
5 di

ID #
Play
7 di

THE DIFFICULTIES

THESE ARE THE DIFFICULTIES THAN WE ENCOUNTERED

The trickiest parts:

- The graphical interface was not that easy. Implementing all the different windows with their controllers / actions was really interesting to do as we would create a way to play the game in a friendly manner.
- One other difficult thing was to deal with the MVC model. Linking every modules together is challenging. There are many Classes that need to interact with the same views. We needed to have a clear understanding of the overall structure.

CONCLUSION

WHAT WE LEARNED

This project allowed us to perfect our understanding of the Java language. As the project is of a big size compared to what we did in the TD's, we had the opportunity to master the MVC model. Moreover the gui part was quite challenging as we didn't practice it a lot before hand.

