

Project 2

Write Scala classes that provide a **playing card** abstraction that can be used to create card games.

Card games are played with a **deck** of cards with a given set of attributes. Your design should include [standard poker](#) cards, [UNO](#) cards, [Fit](#) cards, and at least one more game of your choice.

Pay careful attention to your design of the inheritance hierarchy that you create so that common abstractions are also represented by additional classes and sub-classes (for example, rank and suit). Also think about the appropriate use of companion classes and objects in your design.

In addition to having classes representing the cards themselves, you should include an abstraction for a deck that includes at least shuffling and dealing as behaviors.

Be creative and have fun!!

Your goals for this project should be prioritized as follows:

1. A working solution that satisfies the above specifications, that provides a useful API for client programs to implement a variety of card games, and that includes a test driver (a main method) that demonstrates its functionality.
2. Your program should be written in such a way as to blend the object oriented and functional aspects of the Scala language. You should utilize inheritance and composition appropriately and continue to avoid var and while as much as possible.
3. Formatting: your code should be readable, have clarity, and be well-documented. It should also have your name at the top in comments.

You may feel free to use Scala features we haven't yet covered. However, all code you submit should be your own. Do not look at or in any other way use other students' code.

DUE: Friday, February 26 by 11:59 pm