4: A Game.

CSCI 6626 / 4526 Spring 2018

1 Goals

- To build Game, a shell class that eventually will become a Can't Stop game.
- To write a program with four interacting classes, a main module, and the tools.
- To define a function that delegates part of its action to another class.

2 The Game Class

Eventually the Game class will be the primary class of the Can't Stop application. Initially, it is mostly an empty shell to which parts will be added each week.

2.1 Instructions

Members for this week:

- A private Dice* that points at a set of 4 dice. Later this will be replaced by polymorphic dice.
- Two Players, with different names and colors input from the keyboard. Later, this will be replaced by a circular linked list of 2 to 4 players.
- Two Columns with different lengths. Later, this will be replaced by a Board that has an array of eleven columns.
- A Game constructor with no parameters. When construction is finished, your players, dice, and columns should be initialized .
- An appropriate Game destructor. Do you need to call delete or delete[]?
- A getNewPlayer() function that will input a player's data from the keyboard and call the Player constructor.

3 Testing

Do enough testing to test the interaction between Game and the three classes Dice, Player, Column.

- You know the Game constructor can construct the right kind of dice and that they can be rolled and printed.
- Make sure you can input data for and construct two Players, and that the second Player has a different name and color from the first.
- Call all the functions that you have defined so far.

There is very little other testing to do because most of the testing work is done in the unit tests for the other classes.

Due February 20. Note that you will begin implementing game logic next week.