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Github Link: <https://github.com/ceilingcranes/TurtleGraphicsBattleRoyale>

Title: Turtle Graphics Battle Royale

Description: Turtle graphics is often used to teach beginners the basic concepts of programming. I will turn this into a game, where two or more players submit a series of moves for different colored turtles. These moves include turning, stepping forward x units, for-loops, and other options that help teach people about how programming works and what it can be used for. Each turtle leaves a trail over the play field, and if another turtle runs into that trail, that user loses. The players enter their moves with a simple programming language, and the program loops through the directions until there is only one player left, with occasional stops to allow users to modify their instructions.

Actors: Players

Functionality:

1. Have a screen that displays two turtles and their trailing lines
2. Process commands to control a turtle's movements
3. Pause after a set number of commands executed to allow users to modify their commands.
4. Check for win conditions and notify users
5. Accept commands via text input or file inputs
6. Verify command validity
7. Keep track of: number of moves, wins by either side, and other statistics about the game
8. Have the players enter their names and customize the play field

Stretch functionality:

1. Allow users to play over the web or from two different computers, rather than all locally
2. Allow users to manually pause, modify code, and resume the game
3. Add more than 2 players