CSE201 Advanced Programming Project – Chain Reaction Game

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Design and Implementation

- Inheritance is extensively applied while making Graphical Components of the Project.
- Usage of concepts related to JavaFx , Threading.
- Upto 8 players can play the game at a time, where each player can select his or her own color, and player names will be taken as input.
- **Making of Grid**: An array of Panes is used to make the grid for the game where all the actions are performed.
- Objects created representing the balls, functions like AddBalls, etc.
- Rotation of balls is accomplished by rotating the individual pane
- Parallel Threading used while splitting the balls.
- Serialization used for Resume, Undo and Pause functionalities.

Problems faced…

- Making of grid, we had many ideas to make the grid but none of them panned out, finally made a grid of panes and made it work fairly easily.
- Addition of spheres in a single, a small hiccup, reading some documentation helped us.
- Once the graphical components were made, conditions for splitting and adding the spheres were done, had some problems with splitting edge blocks and some recursive problems.

Individual Contribution

Dushyant - Grid Making and GUI components.

Aryan - Setting pages and presentation.

Special Feature

- Players can add their names before starting the game, after a game is finished, when the winner is declared, it is printed in the format "*PLAYERNAME* won the game".