Introduction

Our project, named **PopPuyo**, is a strategic tile-matching puzzle game. It challenges the player to score as many points as possible by clearing the board populated by colorful **Puyos**, while avoiding filling the third column, counting from left to right. Once this column is completely filled, the game ends.

Gameplay Overview

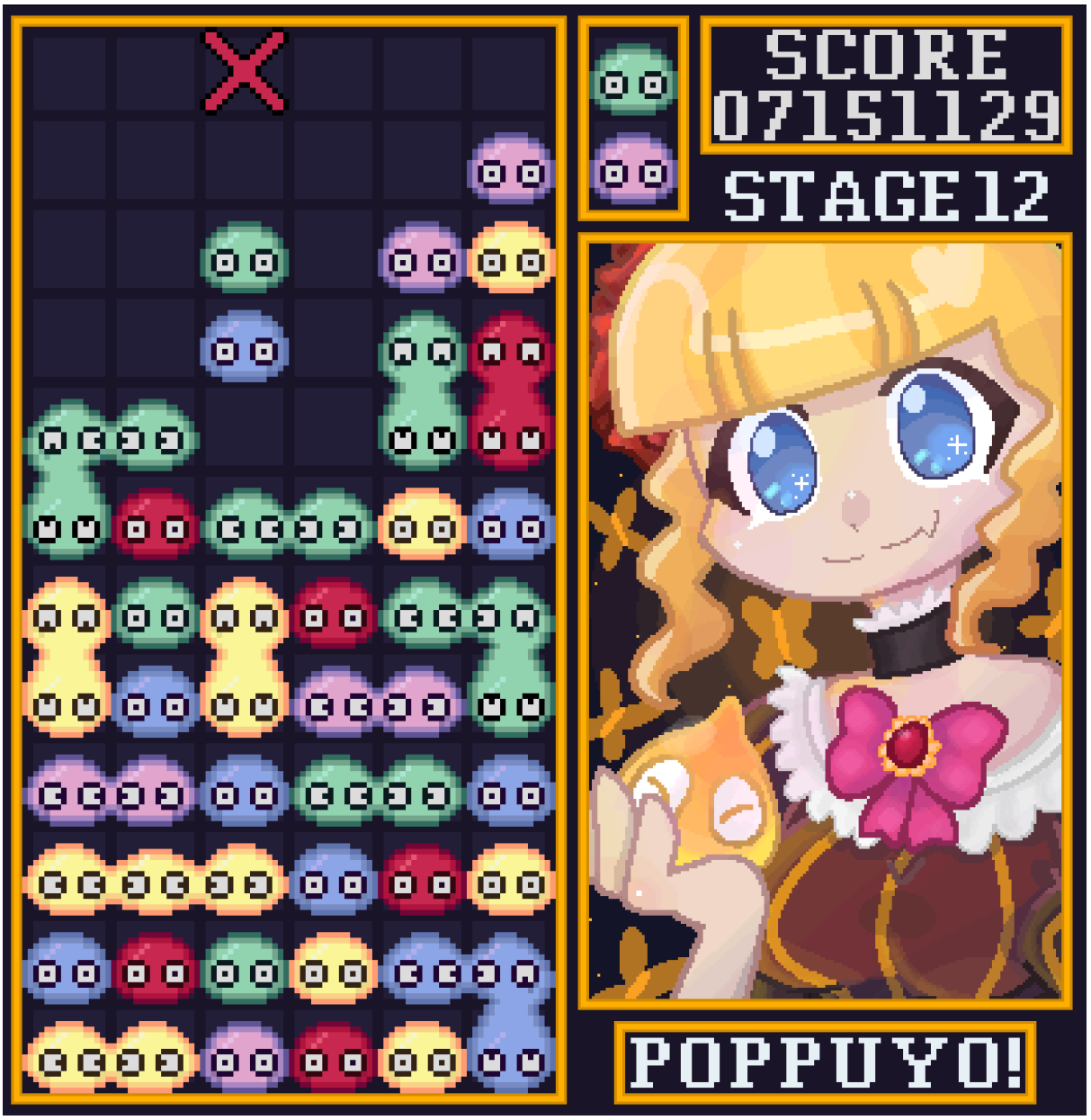
Puyos are small balls that fall in pairs from the top of the screen. They come in five distinct colors: **red, blue, green, yellow and purple,** and can be **moved** left or right or **rotated** clockwise or counterclockwise as they fall. The goal is to strategically position these pairs to **form groups of four or more adjacent Puyos of the same color**, making the groups pop and disappear from the board. When this happens, players are awarded points.

Puyos can connect **horizontally** or **vertically** but never diagonally. Once a group of Puyos pops, any Puyos above them fall, potentially creating new groups and causing **chain reactions**. With each pop, the amount of points added to the score multiplies.

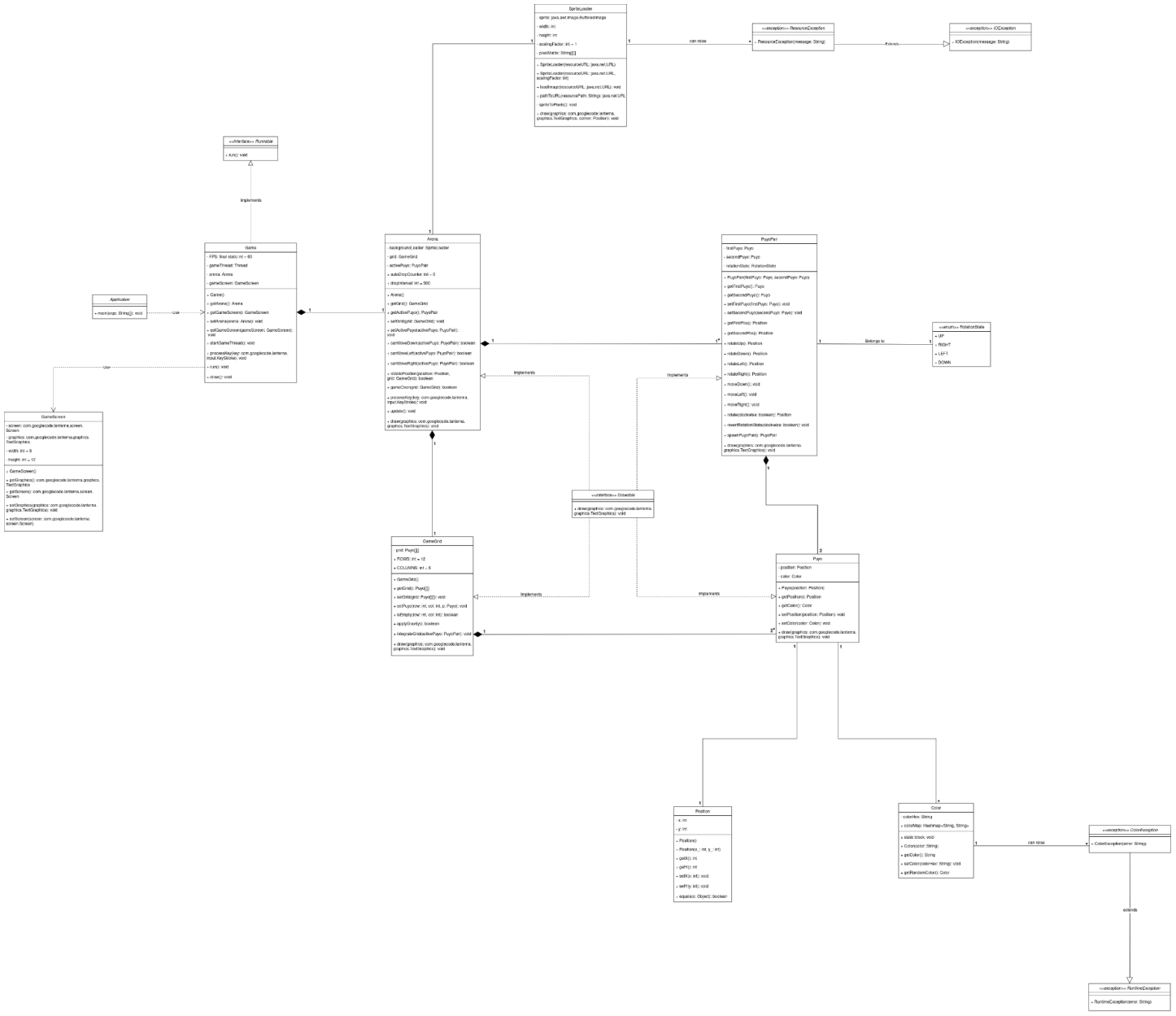
Core mechanics and Features

1. **Scoring System:** The game intends for the player to create larger chains and consecutive reactions. Each subsequent pop awards exponentially more points.
2. **Game Ending Condition:** The game ends specifically when the third column is filled. Players must maximize their score without neglecting the risk of game over.
3. **Controls:** Players can move and rotate falling Puyos with precision, allowing control of their board.
4. **Strategy:** The player must anticipate chain reactions and plan multiple moves ahead. Arranging Puyos to maximize future pops while maintaining control of the grid is key in gameplay.

Mockup



UML of the Current Implementation



To view the full image, click here.