

Project | Color Switch Game

CSE 201 : Advanced Programming

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Implementation

1. **Programming languages used** : Java, JavaFX

2. **Features:**

- a. **Save Game** : Save multiple games.
- b. **Load Game** : Retrieve a saved game and continue from where user left off.
- c. **Score** : This is a high score game. Collect stars to increase points.
- d. **Revive player** : If the player dies, user can revive it in exchange of points.
- e. **Pause Menu** : Options for User :
 - i. Resume Game
 - ii. Restart Game
 - iii. Save Game
 - iv. Exit Game
- f. **Current score** : This is a high scoring game. Current score is displayed on the game screen.

Design Patterns:

1. **Iterator** : Access *Collection* elements using *Iterator*.
2. **Factory** : Create new obstacles using '*ObstacleFactory*'
3. **Facade** : Menu based implementation.
4. **Chain of responsibility** : Assign tasks to different users.

Collaboration Tools:

- GitHub and Git for Version Control
- Telegram / GSuite
- Eclipse IDE

Challenges:

- Modelling behaviour of bouncing ball
- Modelling collision between Ball and Obstacle

Individual Contribution

Kushal Juneja

- Main Menu Page
- Obstacles
- Save Game
- Help Menu Page
- UML Diagram
- Model Bouncing Ball
- Collision detection

Rohan Hiranandani

- Pause Menu Page
- Obstacles
- Load Game
- Background Music
- Use Case Diagram
- Presentation
- Design and ideation

Bonus Features

- Background Music
- 4 Obstacles
- Attractive Home Page
- Help Page

