



**UNO**

A'Myah Temple

# HOW TO PLAY

- 1 CHOOSE ONE CARD THAT MATCHES THE TOP CARD.**
- 2 IF YOU CAN'T DRAW A CARD**
- 3 FIRST TO EMPTY THEIR HAND WINS**

# Overview

**Developed a Java-based UNO game using Object-Oriented Programming principles.**

**The game supports 1 human player and multi AI players.**

**Includes Number cards (0-9) and Speciality cards (Skip, Draw 2, Draw 4, Wild-Card).**

```
Top Card:  
Type: Number Color: Blue Number: 2  
-----  
amyah's Deck:  
1: Type: Special Color: Any Effect: WildCard  
-----  
2: Type: Number Color: Blue Number: 3  
-----  
3: Type: Number Color: Yellow Number: 0  
-----  
4: Type: Special Color: Blue Effect: Skip  
-----  
5: Type: Number Color: Yellow Number: 2  
-----
```

# Objectives

**IMPLEMENT PLAYABLE UNO MECHANICS.  
DESIGN AI PLAYERS WITH BASIC DECISION-MAKING.  
HANDLE SPECIAL EFFECTS (SKIP, DRAW 2, DRAW 4, WILDCARD)**

```
amyah's turn
Pick a card to play {1 to 4}
1
amyah played
Type: Special Color: Any Effect: WildCard
-----
WildCard Chosen! Choose a color:
Red, Green, Blue, or Yellow
Yellow
Color has been changed to: Yellow
Hit enter to end turn
```

# Gameplay Logic

**Each Player's turn: select or draw card.**  
**AI choose playable card automatically.**  
**Specialty cards trigger effects on next player.**  
**Checks for UNO or winning condition.**

```
-----  
Type: Special Color: Red Effect: Skip  
-----  
amyah's Deck:  
1: Type: Special Color: Blue Effect: Skip  
-----  
amyah's turn  
Pick a card to play (1 to 1)  
1  
amyah played  
Type: Special Color: Blue Effect: Skip  
-----  
amyah has won!  
BUILD SUCCESSFUL (total time: 2 minutes 11 seconds)
```

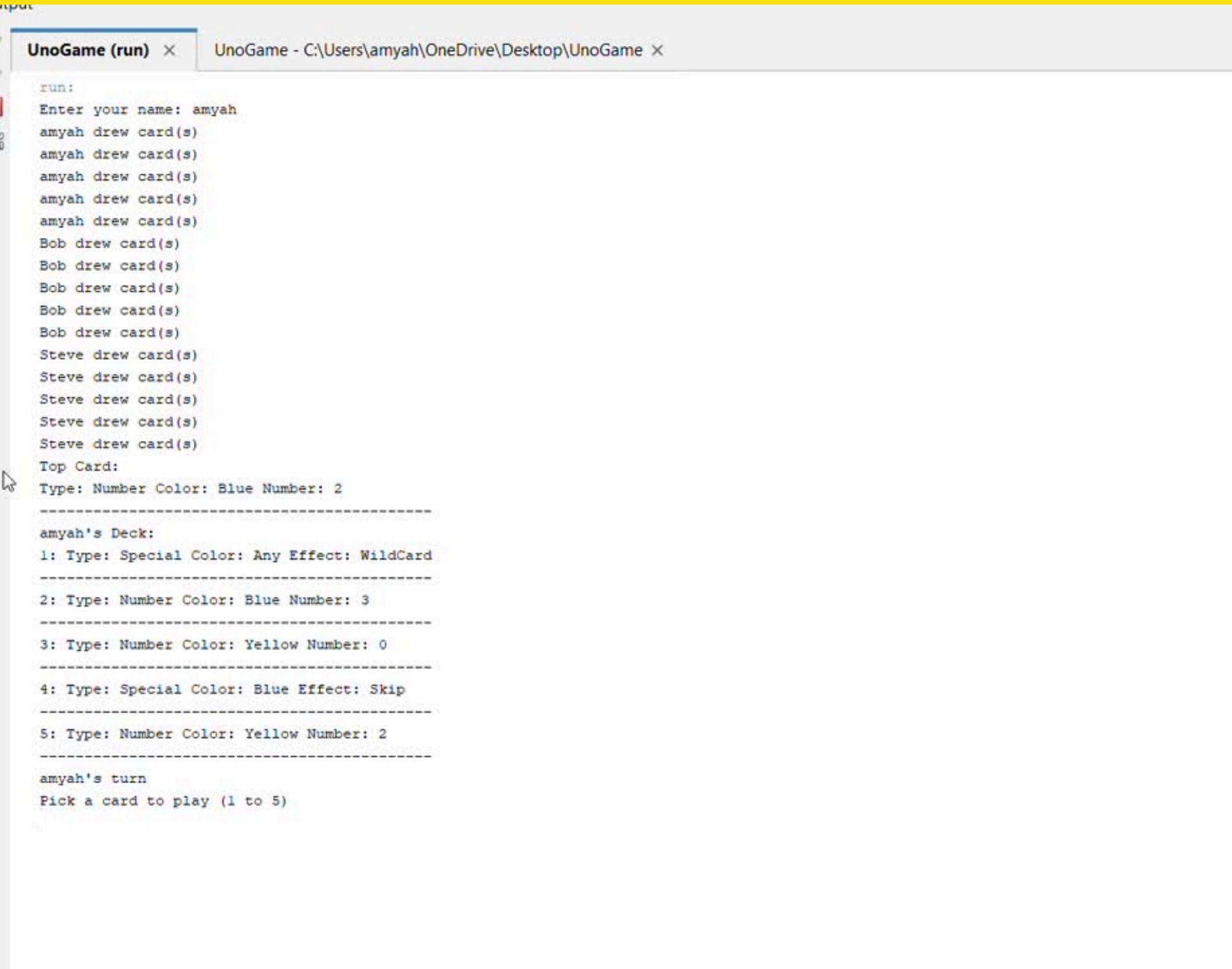
# AI Behavior

**RANDOMLY SELECTS A PLAYABLE CARD FROM HAND.  
CHOSES A RANDOM COLOR WHEN WILDCARD IS PLAYED.  
HANDLES SKIPPING, DRAWING FOR THE NEXT PLAYER.**

```
Bob's turn
Bob played:
Type: Special Color: Red Effect: Skip
-----
Steve is skipped
Hit enter to end turn

Steve's turn
Steve has been skipped!
Hit enter to end turn
```

# Video Demo



The screenshot shows a terminal window titled "UnoGame (run)" with the path "UnoGame - C:\Users\amyah\OneDrive\Desktop\UnoGame". The window displays the output of the UnoGame application. The output starts with "run:" followed by several lines of text indicating that players are drawing cards. It then shows the top card, which is a blue number 2. The next section shows "amyah's Deck" with five cards: a wild card, a blue number 3, a yellow number 0, a skip card, and a yellow number 2. Finally, it prompts "amyah's turn" and "Pick a card to play (1 to 5)".

```
run:  
Enter your name: amyah  
amyah drew card(s)  
Bob drew card(s)  
Steve drew card(s)  
Top Card:  
Type: Number Color: Blue Number: 2  
-----  
amyah's Deck:  
1: Type: Special Color: Any Effect: WildCard  
-----  
2: Type: Number Color: Blue Number: 3  
-----  
3: Type: Number Color: Yellow Number: 0  
-----  
4: Type: Special Color: Blue Effect: Skip  
-----  
5: Type: Number Color: Yellow Number: 2  
-----  
amyah's turn  
Pick a card to play (1 to 5)
```

<https://youtu.be/C1ahXVmBOC4>



THANK  
YOU