

## Programming1 Project

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**Habit:** <https://github.com/kretekarfolyam>

**Programming1 repo:** [https://github.com/NewStudy2024/Programming1\\_kretek](https://github.com/NewStudy2024/Programming1_kretek)

**Project:** <https://github.com/NewStudy2024/BluffOrBuff->

### Vision

The goal of this project is to create a text-based console poker game where a single human player competes against an AI opponent. The game will feature three difficulty levels (Beginner, Normal, Expert), providing different levels of assistance and AI sophistication to enhance both learning and challenge.

### Components:

- Card & Deck Classes: Handles card creation, shuffling, and dealing.
- Player Class: Stores player information, including hand, chips, and decisions.
- PokerAI Class: Implements AI strategies for different difficulty levels.
- GameManager: Manages game rounds, betting, and determines winners.

### Tech Stack

- Java: Core programming language.
- Object-Oriented Programming (OOP): Used for game structure.
- Algorithms & Logic: AI decision-making, probability calculations.
- Data Structures: Arrays, Lists, HashMaps for managing cards and players.

### Expected Result

- Hopefully a functional console-based poker game with:
  - A playable poker game with AI opponent.
  - Three difficulty levels affecting AI decisions and player assistance.
  - AI strategies, including bluffing and adapting to player behavior.
  - A user-friendly text interface guiding the player through the game.

### Concepts from Class and Beyond

- Core Java Concepts: Loops, Functions, Conditionals, Data Types.
- Object-Oriented Programming: Classes, Inheritance, Encapsulation.
- Algorithms: Probability calculations, AI decision-making.
- Game Theory: AI opponent behavior (bluffing, adapting to player strategies).