# BlackJack Game using socket programming in C

Chikkeri Chinmaya 211IT017

Information Technology Department
National Institute of Technology
Karnataka
Surathkal, India
chikkerichinmaya.211it017@nitk.
edu.in

Umesh 211IT073

Information Technology Department
National Institute of Technology
Karnataka
Surathkal, India
umeshpawargmailcom.211it073@n
itk.edu.in

Vishwa Mohan Reddy G 211IT082

Information Technology Department
National Institute of Technology
Karnataka
Surathkal, India
vishwa.211it082@nitk.edu.in

Abstract—The goal of this project is to develop a Blackjack game that can be played over a network using socket programming in the C programming language. The game will feature a server and client application, with the server handling game logic and the client providing a graphical user interface for players. Players will be able to connect to the server and play against each other in real time.

#### I. INTRODUCTION

Blackjack is a popular card game that is played all over the world. The game is also known as 21, as the goal is to get a hand value of 21 or as close to 21 as possible without going over. Blackjack has simple rules and is easy to learn, making it an appealing choice for a networked game. The game should allow for multiple players to connect to the server and play against each other in real-time.

Socket programming involves the utilization of network sockets to transmit and receive data via a network connection. These sockets, serving as points of communication, allow for programs to exchange data over a network connection through a standardized interface. As a method of network communication, socket programming is frequently employed in the development of various types of applications, including web servers, chat applications, and online games. Its effectiveness and reliability make socket programming a valuable tool for building networked applications, and it will likely provide a stable and efficient platform for the Blackjack game.

### II. PROBLEM STATEMENT

Design and implementation of a Blackjack game in C using socket programming.

#### III. IMPLEMENTATION

To achieve the objectives of this project, the following methods will be employed:

- 1. Research and familiarization with the rules of Blackjack and socket programming in C.
- 2. Development of a server application that handles game logic and communication with clients.
- 3. Development of a client application that provides a graphical user interface for players and communicates with the server.
- 4. Testing and debugging of the server and client applications.
- 5. User testing and feedback to ensure the game is enjoyable and free of errors.

## IV. EXPECTED RESULTS

Upon completion, it is expected that the Blackjack game will be fully functional and able to be played over a network. Multiple players should be able to connect and play against each other in real time. This game has the potential to provide players with a fun and engaging networked experience. We will have gained valuable experience in socket programming and the development of networked applications by the time of completion of this project.