

Team GHOSTS

18/ENG/112 – P.D Uduwela
18/ENG/093 – B.C.U. Ranaweera
18/ENG/019 – S.S.V Fernando





INTRODUCTION

Uno is a popular card game played with a deck of 108 specialist cards and anywhere between two and 10 players. The aim is to discard all of your cards and score as few penalty points as possible. Uno was invented by an American named Merle Robbins, who conceived the idea in 1971.

UNO DECK

- ❑ Consists of 108 cards
- ❑ 25 Red cards
- ❑ 25 Blue cards
- ❑ 25 Green cards
- ❑ 25 Yellow cards
- ❑ 4 Wild cards
- ❑ 4 Wild-draw-four cards

How it's played...


- You must distribute cards to each player start the game
- If you don't have the same color or number, you must pick up one card
- You must not see your opponents cards
- When someone throws the card "4+" you have to take four cards of the pile
- When somebody throws the "reverse" card, you have to change the round orientation
- You don't have to throw a card with the same color or number because you can plan your strategy

CONCEPTS USED...

ENCAPSULATION

THE PROCESS OF COMBINING MEMBER DATA AND MEMBER FUNCTIONS AND PROTECT THEM FROM OUTSIDE ACCESS.

POLYMORPHISM



The process of calling a member function with the name that many member functions hold, but differ by type of arguments, number of arguments, and order of arguments.

INHERITANCE

The process in which one object acquires all the properties and behaviors of its parent object automatically

ABSTRACTION

The process of providing only essential information about the data to the outside world, hiding the background details or implementation

CHALLENGES FACED

- Most of the coding parts were done during the pandemic situation, so it was hard to virtually communicate with team members and build up the code.
- Inexperience in GUI's

Since C++ was used as the programming language, there were some difficulties in programming some of the operations. Which requires high number of lines of code.

- When the program crashed it didn't build again. So when developing we had to keep backup files constantly.

LIMITATIONS

- Complexity of classes and it's member data
- With C++, some library functions and external files could not operate
- Drag and drop GUI feature are not available so the coding of GUI was a little bit hard

FUTURE IMPROVEMENTS

- Develop this project as an android mobile application.
- Develop this project to be played by two persons using the same device.
- To create a database to store the data of the current player, the score of the player and retrieve data after ending the game.