CS101 Project 2015

BRAND MONOPOLY BOARD GAME

GROUP CUSE

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PROBLEM STATEMENT & DESCRIPTION

PROBLEM STATEMENT : To make a Monopoly Board game for 2 or 4 players using C++ and simplecpp graphics library
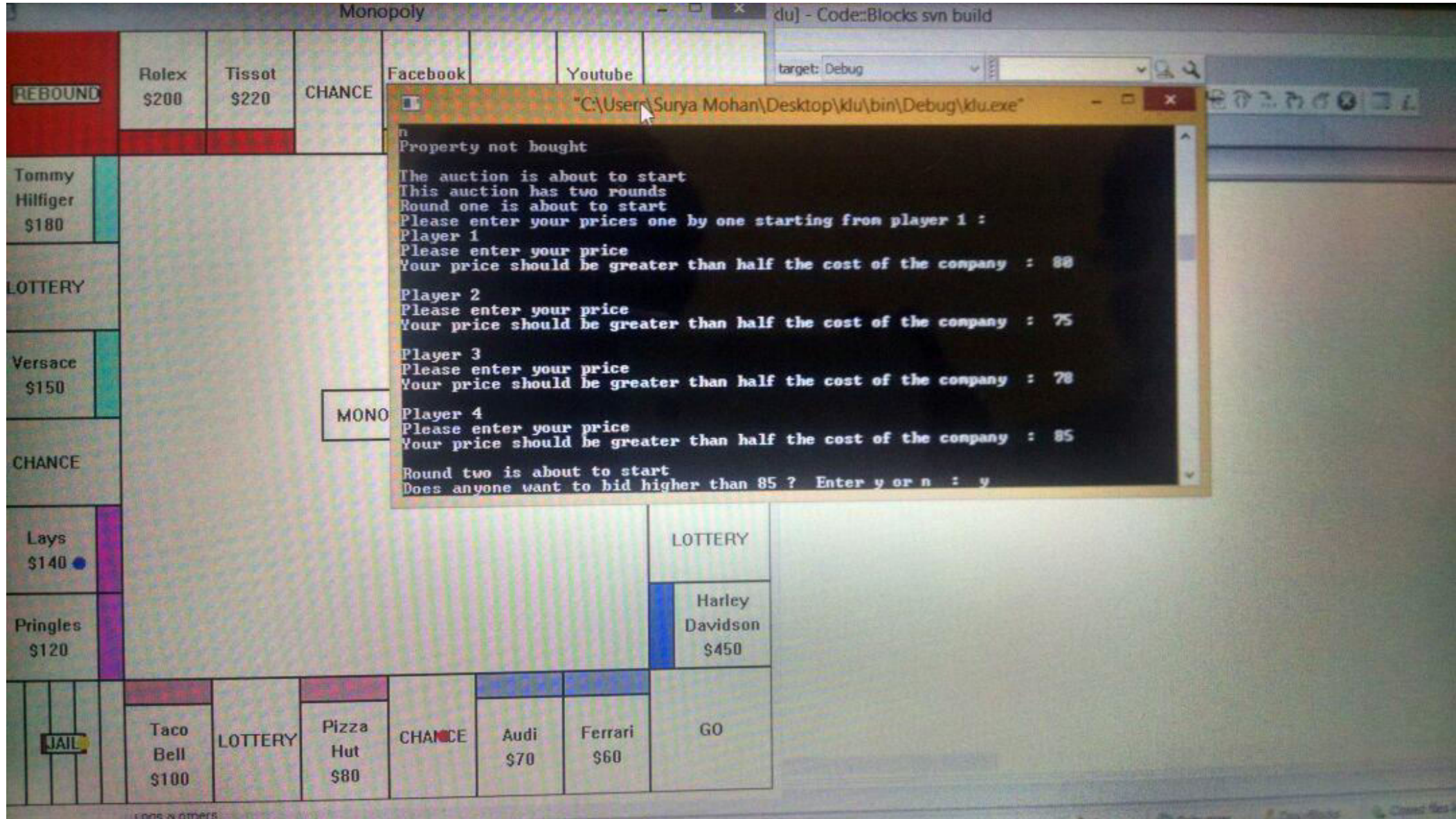
GOALS :

- To first make a two player game (Completed)

- To extend it to four players, with proper end sequence (Completed)

- To add new features such as sell , auction after the above mentioned goals are achieved   (Completed)

PROJECT SCREENSHOTS
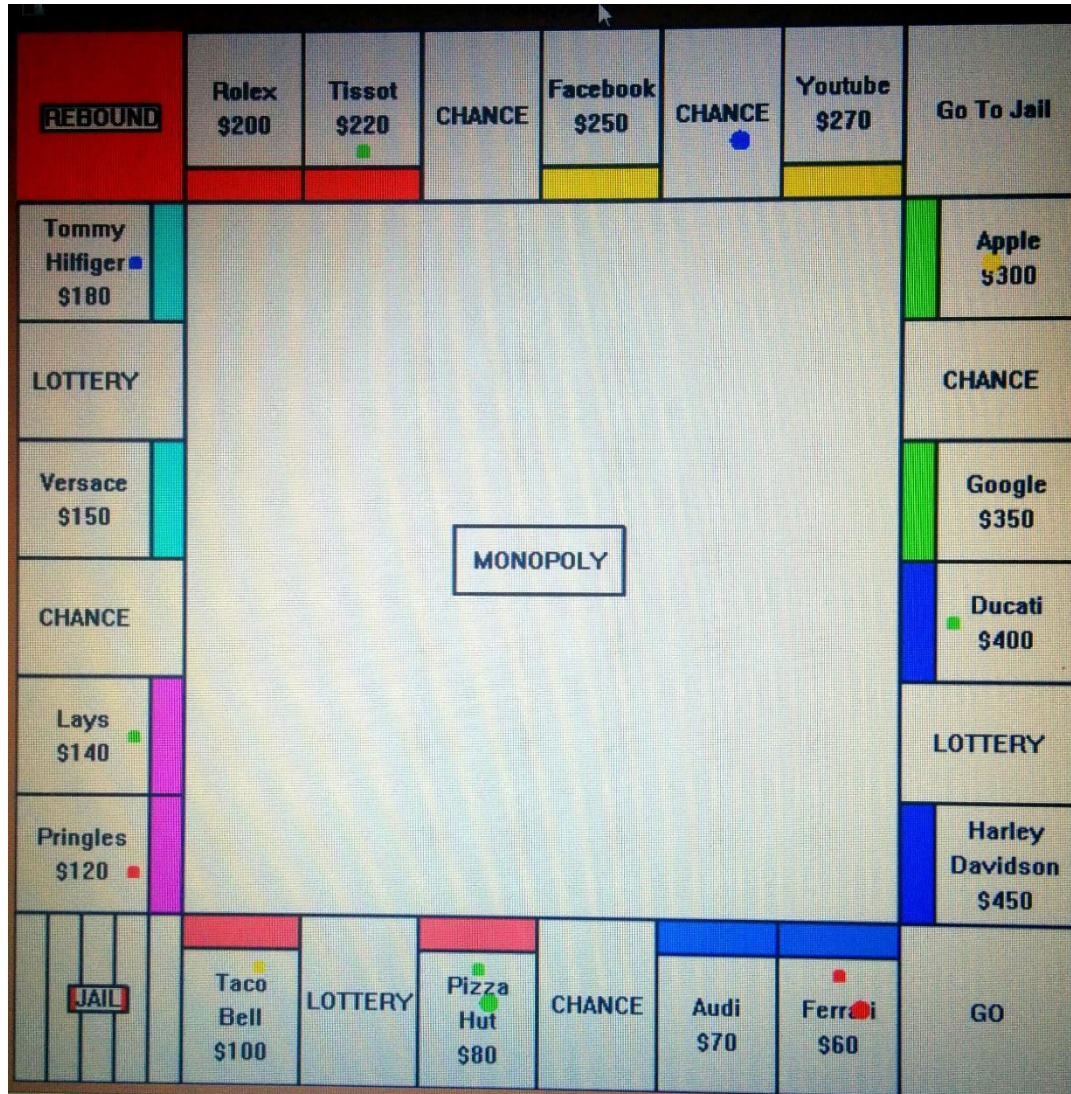
PROJECT SCREENSHOTS

```
 Your dice numbers are 3  and  3

You Have Gone to Jail. $150 have been spent to come out
Balance has now become 720
Do you want to see your account information?
   Enter y or n y
Balance is 720
Current square on board is 8
Properties owned are -
Ferrari
Versace
Tissot
Apple
Enter 2 to end your turn
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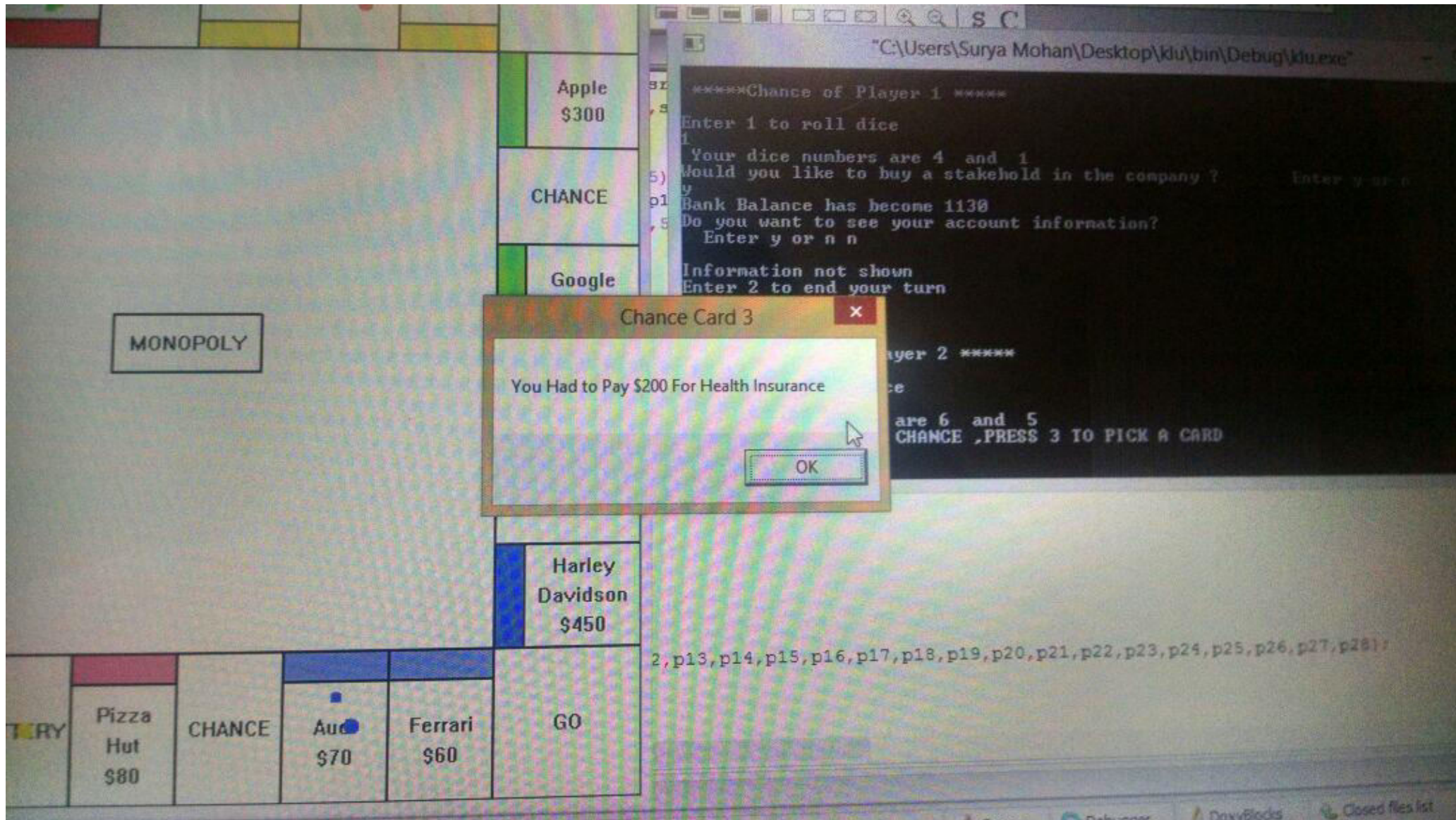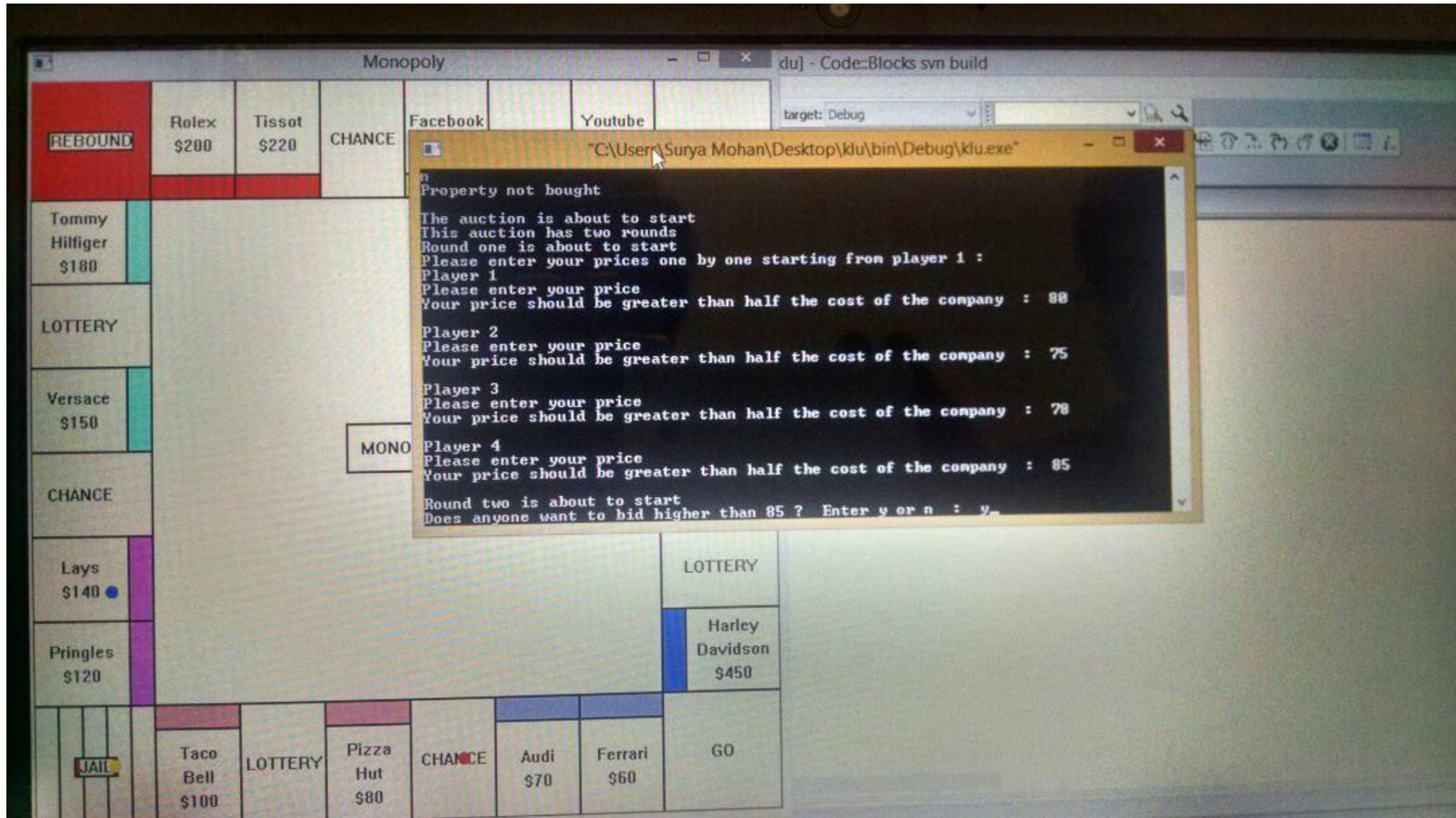
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PROJECT SCREENSHOTS

PROJECT SCREENSHOTS

CHALLENGES

In the code-
➢To continue the 4 player game, when a player was out
➢To add the rent, sell and auction function
➢To add the rectangles after a property was bought
➢To move the token without any error
➢To make the board itself
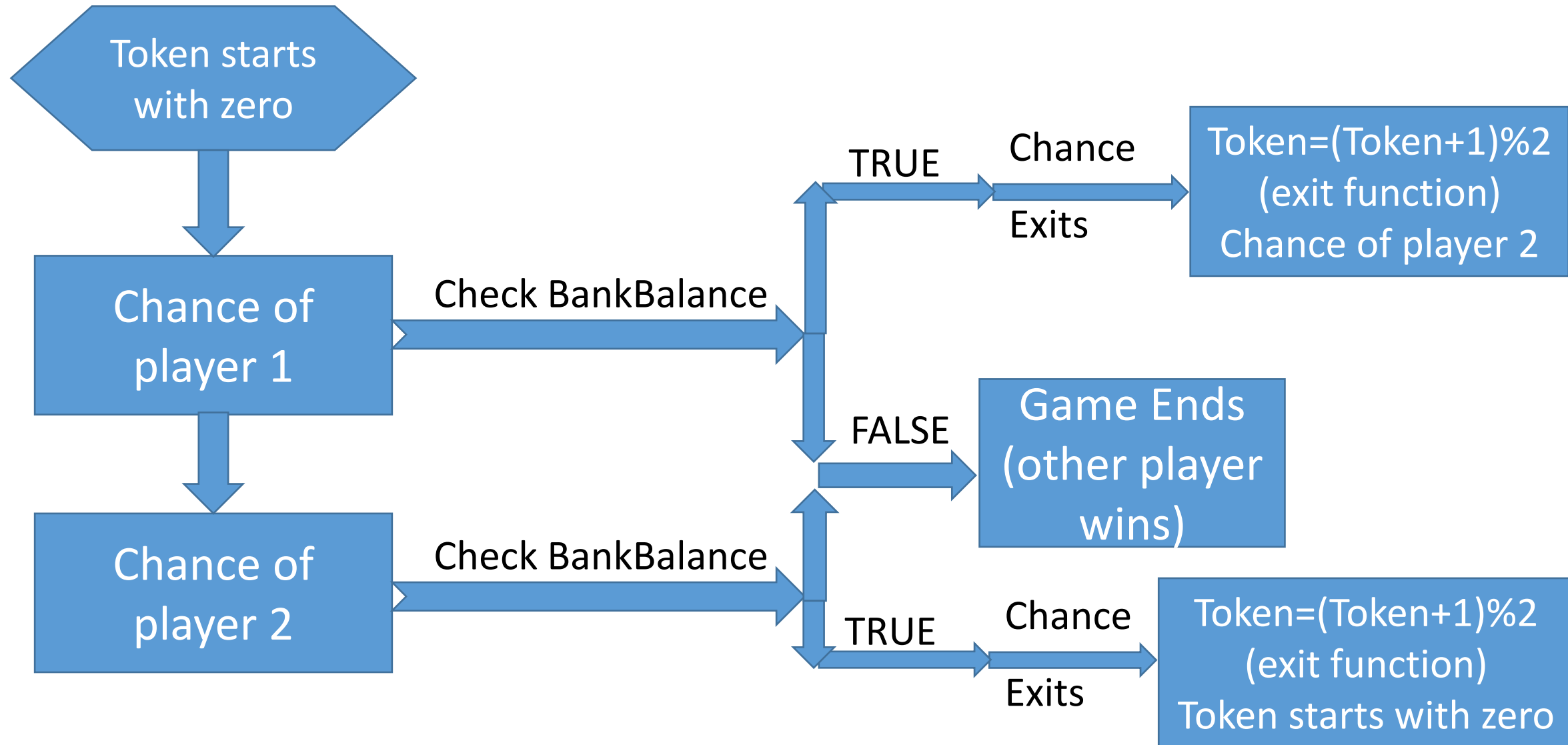➢To make the gameplay better by adding new elements

In real life -
➢To coordinate between all the members of our group and work distribution
➢To ensure that each member contributes in one way or another for the project

HOW WE TACKLED THE CHALLENGES -

- Work was distributed so that each member could contribute in a significant manner

- The movement of token was perfected by repeated testing

- The 4 player game was designed in a new way, as explained in the block diagram before

- The board was made by careful planning of the coordinates, and noting that each rectangle is uniform.

- Rent, sell and auction functions were made using certain parameters defined in our code, namely balance and property-index

FORMAL SYSTEM DIAGRAM (2 PLAYERS)

MOVEMENT OF TOKEN

(Position<=7)
Token moves left

(8<=position<=15)
Token moves up

(16<=position<=22)
Token moves right

If token lands on 15,
It moves back due to
the rebound function

(If position>28)
bankbalance= bankbalance +200,
Position=Position%28

(23<=position<28)
Token moves down
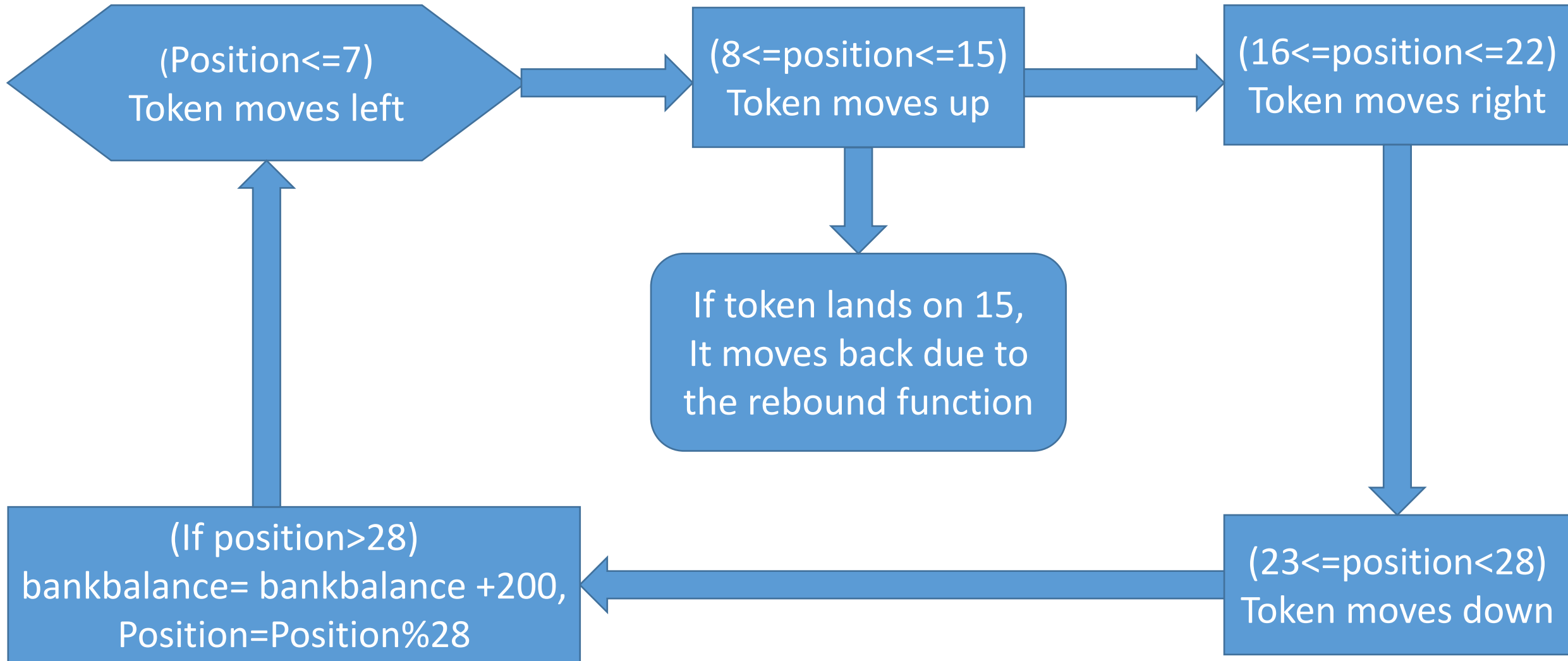
FORMAL SYSTEM DIAGRAM (4 PLAYERS)

Token starts with zero

Chance of player 1

Check BankBalance of next player

FALSE - player 2 eliminated
Token=(Token+2)%4
Chance of player 3

TRUE

Token=(Token+1)%4
(exit function)
Chance of player 2

+

— Check BankBalance of next player

Chance of player 4

Chance of player 2

+

Chance of player 3

— Check BankBalance of next player

Chance of player 1

+

Chance of player 4

— Check BankBalance of next player

Chance of player 2

+

Token starts with zero

FUTURE ENHANCEMENTS

- This game represents what this team could do best, in the finite resources and knowledge that the members have acquired over the whole CS 101 course

- However, the game could be improved by using a better graphics library thus improving the visual appeal of the game

- More of mouse and less of keyboard user interface could be made, using that better graphics library

- The working may be subjected to more stringent rules in the game

THANK YOU !