ESE 224 Computer Techniques for Electronic Design Project

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# Introduction

This project is a simple take on the well-known board game Monopoly®. There are four players—three computers and the user.

Rules of the game:

Each player starts with $10,000.

Each player rolls two dice and move their respective markers to that rolled amount of spaces. Player 1 (user) goes first, player 2 second, so on and so forth. When the player lands on a city that does not belong to any other player, they have the choice to buy the city or not. If a player lands on a city owned by another player, they must pay the owner of the city 1/5 of what the city is worth.

Additionally, there are three types of cities—the good, the bad, and the neutral.

If a player lands on a good city, they get to play a mini-card game.

The mini-card game is a simple game that entails the random drawing of 2 cards from a deck. If the cards have different colors, the player wins 100 times the sum of the two cards, where:

Jack = 11

Queen = 12

King = 13

Ace = 14

If a player lands on a bad city, the player loses $500, even if the player owns that city.

The winner is the player with the most money in their pocket. This means we do not take into account the cities owned.

# Design

## Card.h

## Card.cpp

## CardDeck.h

## CardDeck.cpp

## City.h

## City.cpp

## Player.h

## Player.cpp

## MonopolySource.cpp