The program is a monopoly game developed with JavaFX. To compile and run it, please download and unzip the package “monopoly.zip”, and put the file “makefile” into the folder”m”, as indicated in the pic1.

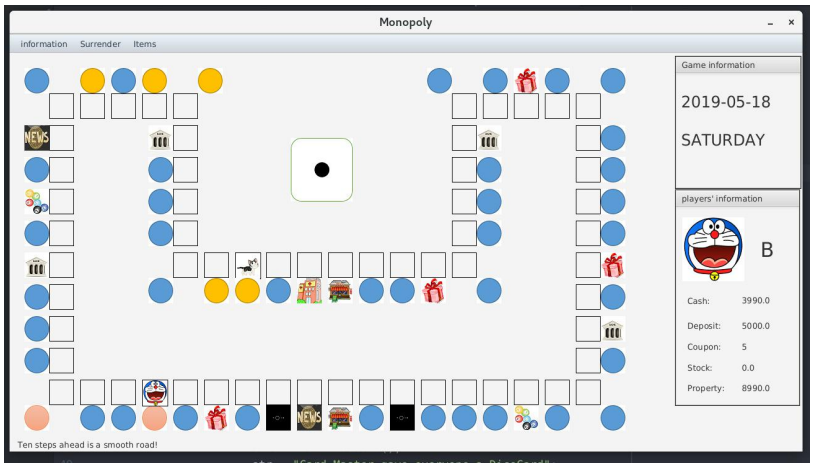
Pic 1

The program is developed with Scene Builder to design the layout. The JDK version I use is 1.8.0_162. Because different java version may cause problems in compiling the FX program, I have included the JDK I used and specify the java path of compile and run in the makefile.

In the application folder, the monopoly.java is the main program. The controller class controls the map. The layout the map, the player information, and the menu are also designed.

The card folder includes three different card class(DiceCard, BuyCard, RoadblockCard) and the method of giving card and coupons are also defined in this part.

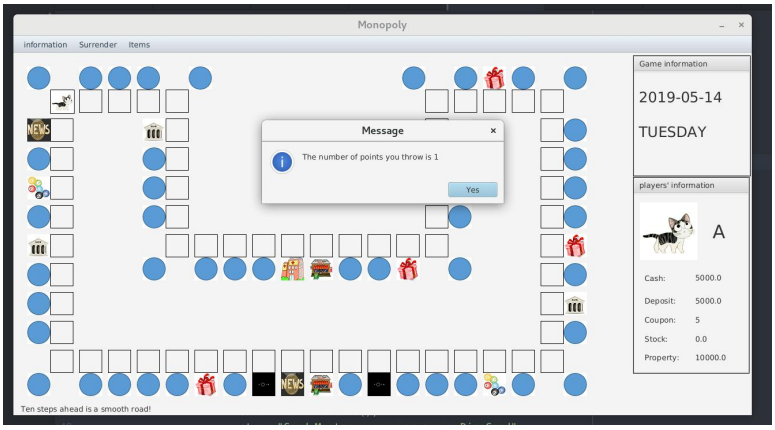
The location folder defines the places and its method in the map, including bank, store, hospital, vacuum space, road barricade, the place that show news and buy lottery, as well as the land which could be bought by players.



Pic2 the game interface

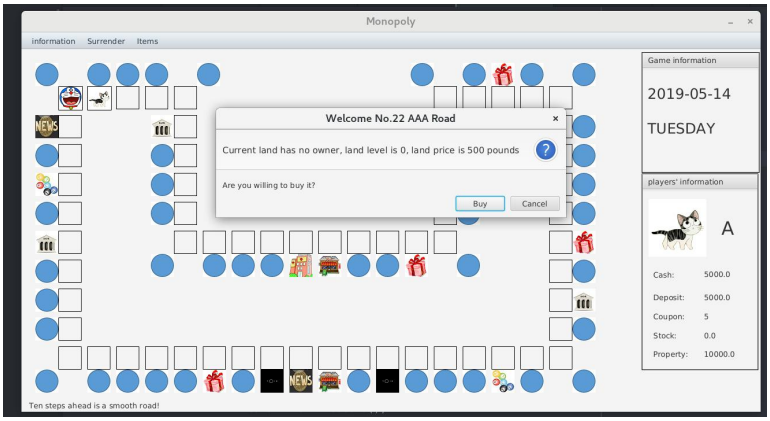
The menu on the top includes the information, surrender and item button. When clicking the information button, the user could check the player’s information or check the location information. When clicking the item button, the user could use an item card, drop item card, check the item card he has and checks all the item cards’ information.

The game could be played by up to 4 players. The player clicks the dice and moves as the number the dice shows. When the player goes to land without owner, the player could buy and own it. When the player goes to other players' land, he will pay the toll fees, which will add to the owners' cash balance.

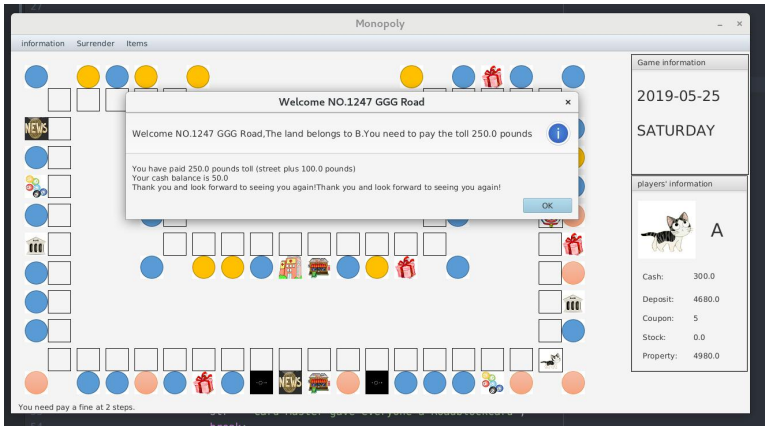


Pic 3 dice message

At the beginning of the game, each player has 5000 pounds cash and 5000 pounds balance in the bank as a deposit. Only cash could be used to buy land and pay toll fees. The deposit in the bank will receive interests every month. Each player also has 5 coupons which could be used to buy item cards in the store.



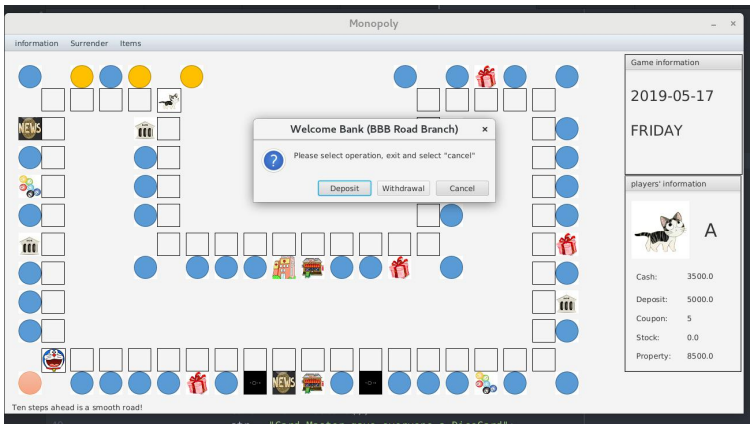
Pic 4 Buy land



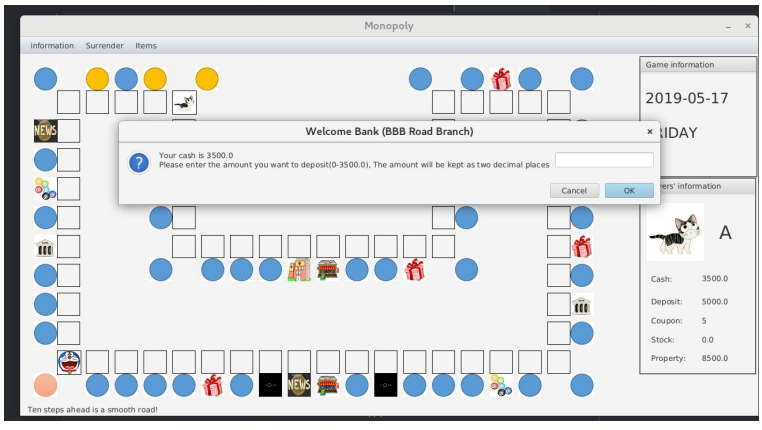
Pic5 Pay toll fee to other players

There are three types of cards in this game. The Buy card could buy other players' land with the current price. The remote dice card could specify the step you want to move. The roadblock card could set a roadblock on the place you want.

When a player passes a bank, the player could choose to deposit money, withdraw money or do nothing.

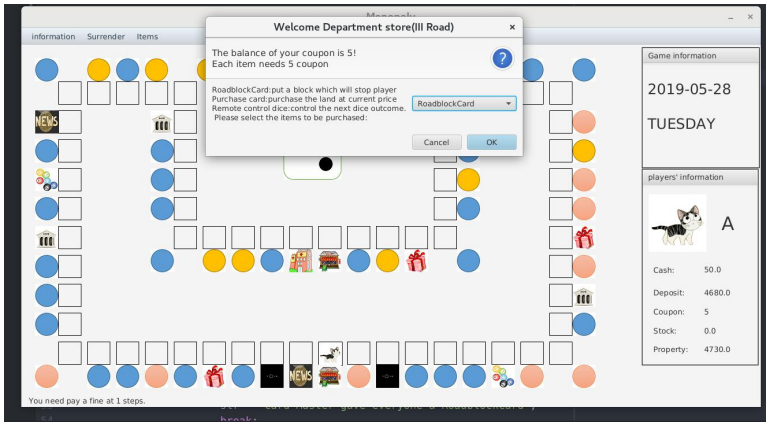


Pic 6 In the bank



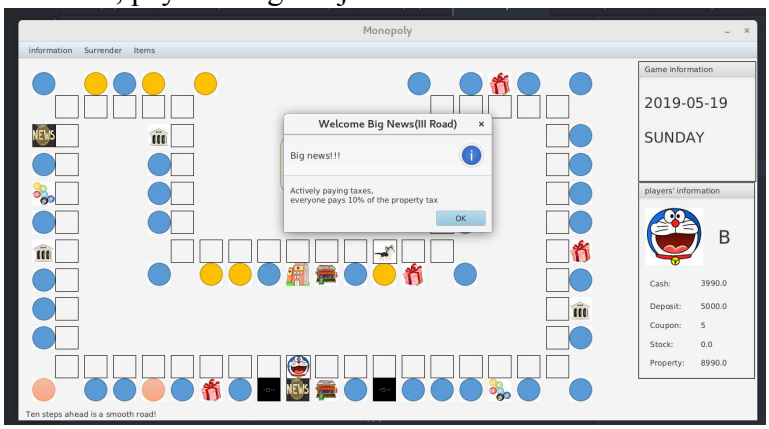
Pic 7 Deposit in bank

When a player stops at a store, the player could buy an item card with coupons



Pic 8 In-store

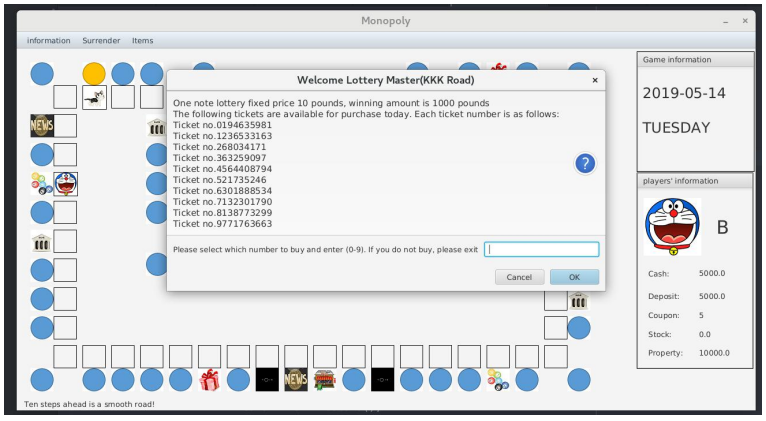
When a player stops at a news symbol, the random event will be triggered, such as to get cards, get interests, pay tax or get injured.



Pic 9 News

When a player stops at a vacuum place, nothing will happen.

When a player stops at the lottery symbol, the player could choose to buy a lottery with 10 pounds.



Pic 10 Lottery

*The icons used in this game is from the Internet.