CHAPTER IV

ANALYSIS AND DESIGN

4.1 Uno Game

4.1.1 House Rules

An uno game has many variation of rules depends on the agreements from the player. This rules usually call "House Rules", it can combine with official rules. Below are the additonal rules which has been set :

-If the entire deck is used during play, then the game automatically stop

-A player which has only one card automatically call "uno" as a warning to the others

-Player only can play one card each turn

-There are no scoring on the game
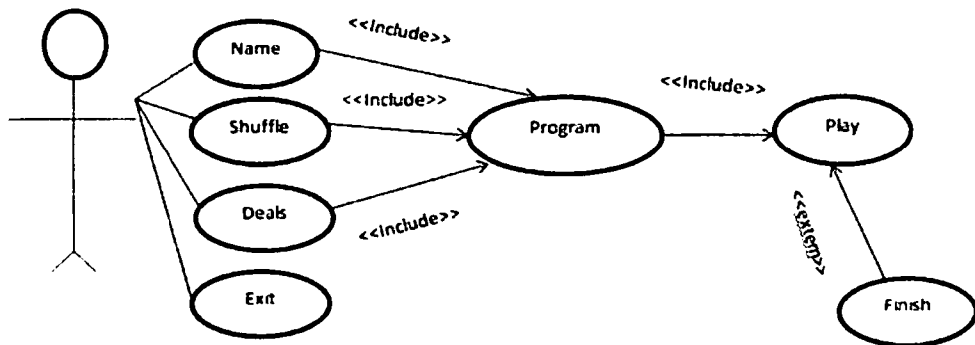
4.2 Use Case Diagram

Figure 4.1 Use Case Diagram

The user first input the name, data from user input recorded in main program. Then user choose shuffle, main program automatically shuffle the deck and wait user to choose deals card. After user choose deals then the play function will be called and game started immediately. The game will stop if the finish requirement fulfilled.
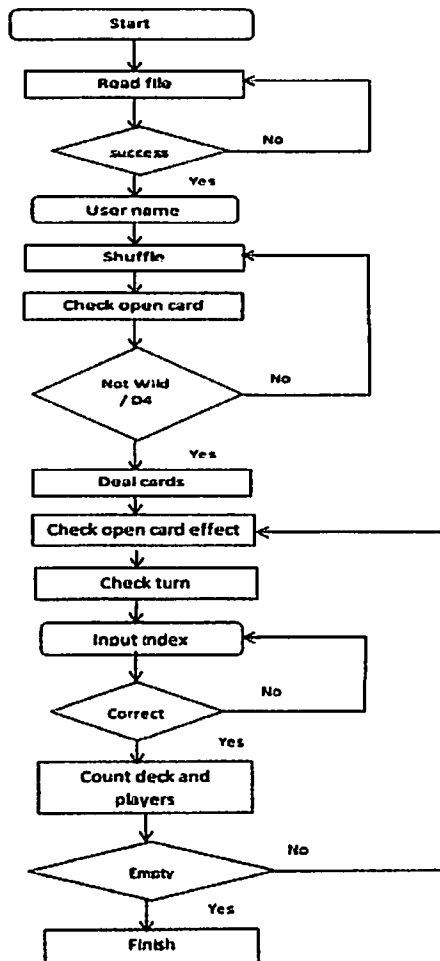
4.3 Flowchart

Figure 4.2 Flowchart of Uno

First, read cards from text file if success continue to input user name, if fail to read return to read function. Then deck will be shuffled and afterward card will be dealt to players.

In play function, first card will be check to know whether has an effect to determine direction / step of the play. Next, input index of the cards and if the card match with open card program will continue to count function. If the result of input index doesn't match with open card, it will be back to input index function.

The game will be end automatically if the deck or players card empty, if not it will be back to check open card and continue.