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OBJECT ORIENTED PROGRAMMING
dkBjack Project by using Classes

OBJECTIVES

The main purpose of this project is to use classes and objects in C++ by creating our own project. In this project, I focused on the steps for creating the class interface, class implementation, and driver program. I tried to program the popular Blackjack game in this project.

INFORMATION

The name of the project is "dkBjack". Purpose of the project is to determine a maximum budget and bet value for both sides (PC and user). Depends on the random cards who is closer to number 21 will be the winner in this game however if the total value of the card's is greater than 21 for either pc or user will lose the game.
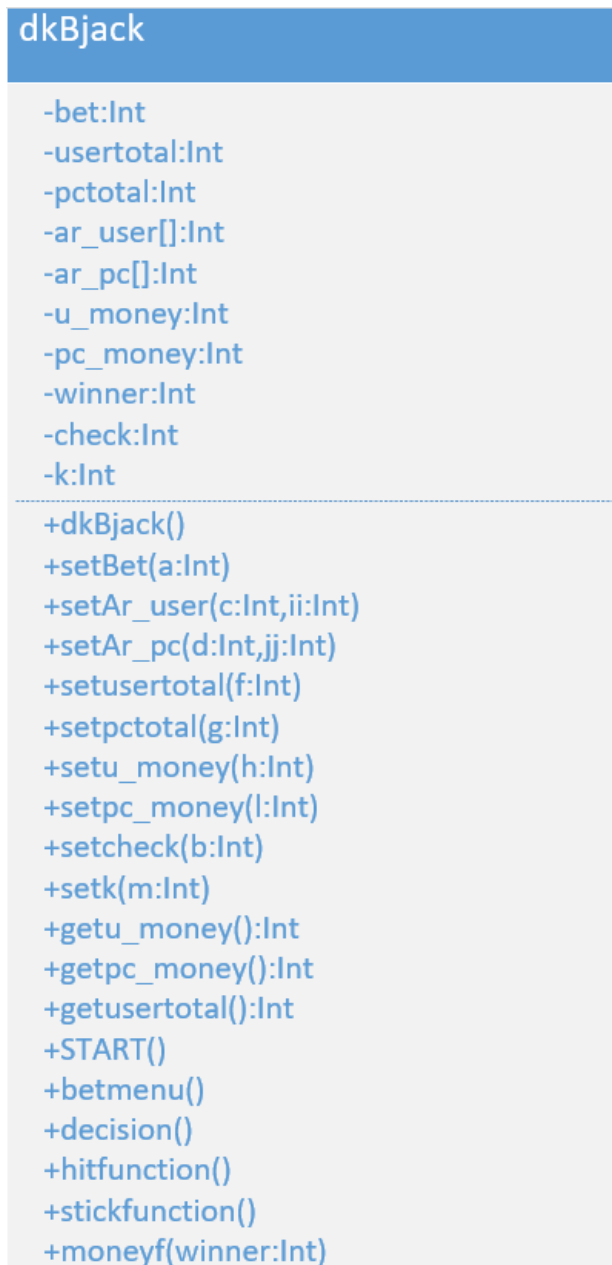


```
dkBjack

-bet:Int
-usertotal:Int
-pctotal:Int
-ar_user[]:Int
-ar_pc[]:Int
-u_money:Int
-pc_money:Int
-winner:Int
-check:Int
-k:Int

+dkBjack()
+setBet(a:Int)
+setAr_user(c:Int,ii:Int)
+setAr_pc(d:Int,jj:Int)
+setusertotal(f:Int)
+setpctotal(g:Int)
+setu_money(h:Int)
+setpc_money(l:Int)
+setcheck(b:Int)
+setk(m:Int)
+getu_money():Int
+getpc_money():Int
+getusertotal():Int
+START()
+betmenu()
+decision()
+hitfunction()
+stickfunction()
+moneyf(winner:Int)
```

Fig1: UML for dkBjack

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dkBjack is our constructor function that sets0 as a default value for the inputs.

set… functions are using for setting the private input z values.

get… functions helps us to call private input values.

START function is giving information about the program and getting value for the budget private input.

betmenu function is getting the bet value for the game.

decision function is deciding which method will be used in the following step either hit or stick.

hitfunction function is giving a new card for both user and pc. Then calculating the total value of cards and checking if someone get 21 score or greater than that. Depends on the result it decides the loser.

stickfunction function works when user decided to get results of the round, function checks the total card values and who is closer to 21 score will win.

moneyf function is calculating the budgets and giving the bet value to who deserved.

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