Assignment 1

Object Composition

The purpose of this project is to implement both physically contained and dynamically presented objects inside objects which is known as object composition.

You are required classes are as followings

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| **SimpleTime** |
| -int hour  -int minute  -int Second  -string Zone |
| +SimpleTime()  +Simpletime(int,int,int, string)  +SimpleTime(SimpleTime\*) or SimpleTime(SimpleTime&)  +setTime(int,int,int, string):void  +setHour(int):void  +getHour():int  +setMinute(int):void  +getMinute():int  +setSecond(int):void  +getSecond():int  +setZone(String):void  +getZone():String  +printCivilian():void  +printMilitary():void  +printZulu():void  -checkTime(int, int, int):bool  -checkHour(int):bool  -checkMinute(int):bool  -checkSecond(int):bool |

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| --- |
| **SimpleDate** |
| -int day  -int month  -int year  -string dayofweek |
| +SimpleDate()  +SimpleDate(int,int,int, string)  +SimpleDate(SimpleDate\*) or +SimpleDate(SimpleDate&)  +setDate(int,int,int, string):void  +setDay(int):void  +getMonth():int  +setYear(int):void  +getDay():int  +setMonth(int):void  +getYear():int  +setDOW(String):void  +getDOW():String  +print():void  -checkDate(int, int, int):bool  -checkDay(int):bool  -checkMonth(int):bool  -checkYear(int):bool |

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| **Transaction** |
| -int amount  -string acountType  -SimpleDate \*date or  -SimpleTime time |
| +Transaction()  +~Transaction  +Transaction(int, string, SimpleTime, SimpleDate)  +Transaction(Transaction\*) or Transaction(Transaction &)  +setTransaction(int, string, SimpleTime, SimpleDate):void  +setAmount(int):void  +getAmount():int  +setAccountType(string):void  +getAccountType():String  +setTime(SimpleTime \*):void  +setTime(int, int, int, string):void  +getTime():SimpleTime:string  +setDate(SimpleDate \*):void  +setDate (int, int, int, string):void  +getDate():SimpleDate  +print():void  -checkAmount(int):bool  -checkAccountType(string):bool |

You also need to create a driver that shows your classes are working correctly.

Rubrics:

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| 3 classes separation in .h and .cpp | 3 constructors  for each class | Access functions 3 classes | Utility Functions 3 classes | Driver |
| Well implemented %20 | Well implemented 5% | Well implemented 30% | Well implemented 30% | Well implemented 25% |
| Have bugs 10% | Have bugs 2% | Have bugs  15% | Have bugs 15% | Have bugs 15% |
| Not compiling  0% | Not compiling  0% | Not compiling  0% | Not compiling  0% | Not compiling  0% |