CO2402 Assignment Checklist for Lehan De Silva

Please fill in the grid to indicate which features you have attempted, and (where appropriate) which code file we should look in to see the implementation of that feature. This will help us mark your work more efficiently and avoid the possibility of us missing something in your code.

|  |  |  |
| --- | --- | --- |
| **Feature** | **Attempted** | **Code file(s) (if appropriate)** |
| **Any Grade > 0%** | | |
| Video demo showing code compiling and running | Yes |  |
| Copy of console output | Yes |  |
| **Bare Pass 40% =** | | |
| Adherence to style guide | Yes |  |
| Code commented throughout | Yes |  |
| CSquare class | Yes | CSquare.hpp |
| Dice roll function | Yes | Monopoly.hpp |
| Console outputs for dice roll and square names | Yes | Monopoly.cpp |
| Passing Go and collecting £200 | Yes | Monopoly.hpp |
| Final money and winner output | Yes | Monopoly.hpp, Monopoly.cpp |
| **Third 40% +** | | |
| Collection of pointers to CSquares | Yes | Monopoly.hpp |
| CProperty class derived from CSquare | Yes | Property.hpp |
| Implemented rules for buying or renting properties | Yes | Monopoly.hpp |
| Output player balance at the end of each turn | Yes | Monopoly.hpp |
| **Lower Second 50% +** | | |
| CJail class (derived from CSquare) | Yes | Jail.hpp |
| CGoToJail class (derived from CSquare) | Yes | GoToJail.hpp |
| CFreeParking class (derived from CSquare) | Yes | FreeParking.hpp |
| CStation class (derived from CSquare) | Yes | Station.hpp |
| Square pointers all base class pointers, not derived | Yes |  |
| Over-ridden function for landing on a square in each of the derived classes | Yes |  |
| Output as expected from derived classes | Yes |  |
| **Upper Second 60% +** | | |
| Class diagram | Yes | (Attached below) |
| CPlayer class | Yes | Player.hpp |
| CBonus class (derived from CSquare) | Yes | Bonus.hpp |
| CPenalty Class (derived from CSquare) | Yes | Penalty.hpp |
| No global variables | Yes | Manager.cpp |
| No Memory Leaks (screenshot evidence required) | Yes | (Screenshot is attached below) |
| Genuine polymorphism  (no asking what type of square it is) | Yes |  |
| **First 70% +** | | |
| Colour grouping and rent doubling of properties | Yes | Monopoly.hpp |
| Use of typedef (or using) for vectors | Yes | Player.hpp |
| Fully OO solution including Game class | Yes |  |
| Smart pointers instead of new/delete | Yes | Monopoly.cpp |
| **High First 85% +** | | |
| Rules on mortgaging and redeeming properties | Yes | Monopoly.hpp |
| Players can become bankrupt | Yes | Monopoly.hpp |
| Additional players | Yes | Monopoly.cpp |

**UML Diagram**

Diagram

Description automatically generated

**Memory Leaks**

**Text

Description automatically generated**

**Console Output**

Welcome to Monopol-ish

dog rolls 1

dog lands on Red Road

dog buys Red Road for £60

dog has £1440

car rolls 6

car lands on Jail

car is just visiting

car has £1500

shoe rolls 3

shoe lands on Bonus

Receive a bequest. Gain £200

shoe has £1700

hat rolls 6

hat lands on Jail

hat is just visiting

hat has £1500

dog rolls 6

dog lands on Brown Road

dog buys Brown Road for £140

dog has £1300

car rolls 5

car lands on Orange Street

car buys Orange Street for £180

car has £1320

shoe rolls 4

shoe lands on Brown Road

shoe pays £20

shoe has £1680

hat rolls 6

hat lands on Orange Way

hat buys Orange Way for £200

hat has £1300

dog rolls 6

dog lands on Free Parking

dog is resting.

dog has £1320

car rolls 1

car lands on Orange Way

car pays £25

car has £1295

shoe rolls 6

shoe lands on Free Parking

shoe is resting.

shoe has £1680

hat rolls 3

hat lands on Yellow Street

hat buys Yellow Street for £240

hat has £1060

dog rolls 4

dog lands on Green Road

dog buys Green Road for £260

dog has £1085

car rolls 1

car lands on Free Parking

car is resting.

car has £1295

shoe rolls 1

shoe lands on Yellow Road

shoe buys Yellow Road for £220

shoe has £1460

hat rolls 3

hat lands on Green Street

hat buys Green Street for £280

hat has £780

dog rolls 4

dog lands on Blue Street

dog buys Blue Street for £300

dog has £785

car rolls 3

car lands on Penalty

Buy a coffee in Starbucks. Lose £20

car has £1275

shoe rolls 3

shoe lands on Green Road

shoe pays £35

shoe has £1425

hat rolls 3

hat lands on Blue Street

hat pays £45

hat has £735

dog rolls 6

dog passes GO and collects £200

dog lands on Red Road

dog has £1065

car rolls 6

car lands on Blue Way

car buys Blue Way for £320

car has £955

shoe rolls 5

shoe lands on Blue Way

shoe pays £45

shoe has £1380

hat rolls 5

hat passes GO and collects £200

hat lands on GO

hat has £935

dog rolls 1

dog lands on Red Street

dog buys Red Street for £80

dog has £1030

car rolls 4

car passes GO and collects £200

car lands on GO

car has £1155

shoe rolls 5

shoe passes GO and collects £200

shoe lands on Red Road

shoe pays £5

shoe has £1575

hat rolls 1

hat lands on Red Road

hat pays £5

hat has £930

dog rolls 4

dog lands on Jail

dog is just visiting

dog has £1040

car rolls 2

car lands on Red Street

car pays £10

car has £1145

shoe rolls 1

shoe lands on Red Street

shoe pays £10

shoe has £1565

hat rolls 3

hat lands on Grey Road

hat buys Grey Road for £100

hat has £830

dog rolls 2

dog lands on Brown Street

dog buys Brown Street for £160

dog has £900

car rolls 3

car lands on Grey Street

car buys Grey Street for £120

car has £1025

shoe rolls 1

shoe lands on Bonus

Receive a rent rebate. Gain £100

shoe has £1665

hat rolls 1

hat lands on Grey Street

hat pays £15

hat has £815

dog rolls 3

dog lands on Orange Street

dog pays £25

dog has £915

car rolls 5

car lands on Orange Road

car buys Orange Road for £180

car has £845

shoe rolls 5

shoe lands on Brown Street

shoe pays £20

shoe has £1645

hat rolls 3

hat lands on Brown Street

hat pays £20

hat has £795

dog rolls 3

dog lands on Yellow Road

dog pays £30

dog has £955

car rolls 6

car lands on Penalty

Pay your broadband bill. Lose £50

car has £795

shoe rolls 5

shoe lands on Free Parking

shoe is resting.

shoe has £1645

hat rolls 3

hat lands on Orange Street

hat pays £25

hat has £770

dog rolls 3

dog lands on Green Road

dog has £980

car rolls 6

car lands on Blue Way

car has £795

shoe rolls 6

shoe lands on Go to Jail

shoe goes to jail

shoe pays £50

shoe has £1595

hat rolls 4

hat lands on Yellow Street

hat has £770

dog rolls 3

dog lands on Blue Road

dog buys Blue Road for £300

dog has £680

car rolls 3

car lands on Purple Street

car buys Purple Street for £420

car has £375

shoe rolls 1

shoe lands on Brown Road

shoe pays £20

shoe has £1575

hat rolls 4

hat lands on Go to Jail

hat goes to jail

hat pays £50

hat has £720

dog rolls 5

dog lands on Purple Street

dog pays £50

dog has £700

car rolls 4

car passes GO and collects £200

car lands on Bonus

ItÆs your birthday. Gain £300

car has £875

shoe rolls 5

shoe lands on Orange Way

shoe pays £25

shoe has £1550

hat rolls 2

hat lands on Brown Street

hat pays £20

hat has £700

dog rolls 5

dog passes GO and collects £200

dog lands on Grey Road

dog pays £15

dog has £945

car rolls 1

car lands on Grey Road

car pays £15

car has £860

shoe rolls 1

shoe lands on Free Parking

shoe is resting.

shoe has £1550

hat rolls 3

hat lands on Orange Street

hat pays £25

hat has £675

dog rolls 4

dog lands on Brown Street

dog has £985

car rolls 3

car lands on Brown Road

car pays £20

car has £840

shoe rolls 6

shoe lands on Go to Jail

shoe goes to jail

shoe pays £50

shoe has £1500

hat rolls 2

hat lands on Free Parking

hat is resting.

hat has £675

dog rolls 3

dog lands on Orange Street

dog pays £25

dog has £1005

car rolls 3

car lands on Orange Road

car has £840

shoe rolls 1

shoe lands on Brown Road

shoe pays £20

shoe has £1480

hat rolls 6

hat lands on Go to Jail

hat goes to jail

hat pays £50

hat has £625

dog rolls 6

dog lands on Green Road

dog has £1025

car rolls 6

car lands on Penalty

Visit the SU shop for food. Lose £100

car has £740

shoe rolls 6

shoe lands on Free Parking

shoe is resting.

shoe has £1480

hat rolls 3

hat lands on Railway Station

hat buys Railway Station for £200

hat has £425

dog rolls 2

dog lands on Go to Jail

dog goes to jail

dog pays £50

dog has £975

car rolls 3

car lands on Go to Jail

car goes to jail

car pays £50

car has £690

shoe rolls 6

shoe lands on Go to Jail

shoe goes to jail

shoe pays £50

shoe has £1430

hat rolls 4

hat lands on Free Parking

hat is resting.

hat has £425

dog rolls 2

dog lands on Brown Street

dog has £975

car rolls 2

car lands on Brown Street

car pays £20

car has £670

shoe rolls 5

shoe lands on Orange Street

shoe pays £25

shoe has £1405

hat rolls 2

hat lands on Yellow Street

hat has £425

Game Over

dog has £1020

car has £670

shoe has £1405

hat has £425