



Ankara Yıldırım Beyazıt University
Department of Computer Engineering

CENG 206 – Programming Languages Course Project

Hide and Seek Project 2 Report

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1. Screenshots Of Use of Features

Inheritance

```

7
8 class CustomView : public QGraphicsView
9 {

```

The CustomView class inherits from the QGraphicsView class.

```

10
11 class Ghost : public QObject, public QGraphicsPixmapItem
12 {

```

The Ghost class inherits from both the QObject and QGraphicsPixmapItem classes.

```

8
9 class Player: public QGraphicsPixmapItem{
10

```

The Player class inherits from the QGraphicsPixmapItem class.

Default Parameter Constructor

```

10 public:
11     CustomView(QWidget* parent = nullptr, Player* player1 = nullptr, Player* player2 = nullptr);
12

```

Here the constructor of the CustomView class is defined. It takes three parameters as parent, player1 and player2 parameters. Each of these parameters is specified with a default value of nullptr.

Constructor

```

3 CustomView::CustomView(QWidget* parent, Player* player1, Player* player2)
4 : QGraphicsView(parent), player1(player1), player2(player2)
5 {
6 }

```

This constructor calls QGraphicsView's constructor.

```

3 CustomView::CustomView(QWidget* parent, Player* player1, Player* player2)
4 : QGraphicsView(parent), player1(player1), player2(player2)
5 {
6 }

```

This constructor function is a special function that is called when an object of the Player class is created. The function is used to initialize properties of the Player class.

Explicit Heap DynamicVariable

```
bool Ghost::active(){
    bool isActive = true;

    //hayaletin durma algoritmasi
    if (player1->getPosX() - 50 < this->getPosX()
        && player1->getPosY() + 114 > this->getPosY()
        && player1->getPosX() + 164 > this->getPosX()
        && player1->getPosY() - 50 < this->getPosY())
    {
        setVisible(true);
        isActive = false;
    }else
        setVisible(false);

    if (player1->getPosX() + 30 < this->getPosX()
        && player1->getPosY() + 64 > this->getPosY()
        && player1->getPosX() + 84 > this->getPosX()
        && player1->getPosY() < this->getPosY() )
    {
        timer->stop();
        int point ;
        point = player1->getScore();
        point = point+1;
        player1->setScore(point);
    }

    return isActive;
}
```

2. Screenshots of the Game





