



personajemov

```
-qreal x = 520;  
-qreal y = 327;  
-qreal xln, yln;  
-float velln, theta, dir;  
-float tiempoTrans;  
-const int maxInterval = 200;  
-QSize viewRect;  
-bool flag = true;  
-bool meta;  
-bool caer;  
- int cont = 0;  
-int spriteX = 0;  
-int spriteY = 120;  
-int spriteWidth = 40;  
-int spriteHeight = 20;  
-QPixmap sprite;  
-QPixmap spriteSheet;  
-QTimer *timer;  
-QTimer *timer1;  
-QSet<int> keysPressed;  
-QElapsedTimer TiempoA;  
-QElapsedTimer TiempoD;  
-QElapsedTimer TiempoW;
```

```
PersonajeMov(QGraphicsView *view, float velln, float +theta, QGraphicsItem* im = nullptr);  
+void keyPressEvent(QKeyEvent *event) override;  
+void moveBy(int dx, int dy);  
+void moveKy(int dx, int dy);  
+void keyReleaseEvent(QKeyEvent *event);  
+void movParabolico(float *dt);  
+int getPosicionX();  
+int getPosicionY();  
+bool getMeta();  
+bool getCaer();  
+void setSprite(int dir);  
+bool isOnGround();
```

MainWindow

```
-QGraphicsScene * scene1, * scene2, * scene3, * scene4;
-QGraphicsPixmapItem * fig1, * fig2, ... , * fig21;
-QGraphicsPixmapItem * balaEnSprite;
-QGraphicsPixmapItem * enemigo1, * enemigo2, ... , * enemigo9;
-QGraphicsPixmapItem * bala1, * bala2, ... , * bala9;
-QGraphicsLineItem * l1, * l2;
-QPointF center, balaDirection;
-QString nombre;
-QTimer * misilTimer, * launchTimer, * moveTimer, * balaTimer, * terminarLv12, jumpTimer, movOndularT, fig20Timer, enemyShootTimer;
-double reductionStep;
-int tiempoTotal ,misilCount ,lvl , intentos,cantidadEne , puntaje;
-double angle ,radius;
-qreal initialVelocity, gravity, jumpTime, startX, startY, velocityX, velocityY;
-bool pierde, canLaunch, isJumping, balaEnMovimiento, Municion;
-bool bala1Existe, bala2Existe, ... , bala9Existe;
-QList<QGraphicsRectItem> obst;
-QList<QGraphicsRectItem> muros;
-Jugador PP;
-PersonajeMov jug1;
```

```
-void launchMisil();
-void launchBala();
-void setupScene1();
-void setupScene2();
-void setupScene3();
-void setupScene4();
-void loadCurrentScene();
-void resetScene1();
-void resetScene2();
-void resetScene3();
-void checkCollisions();
-void startJump();
-void updateJump();
-void updateBala();
```