

## MainWindow -\*ui:MainWindow -\*b[10][10]:Blank -record\_R:int -record C:int -isClicked:bool -\*destroy:Destroy -score int:int -score\_str:QString -star int:int -star\_str:QString -time str:QString -\*game:GameOver -time = 60:int <<constructor>>MainWindow(\*parent = 0: Qwidget,) <<destructor>>~MainWindow() +GameStart() +setClickedPicture(\*a: Blank) +Judge(row1:int, column2:int, row2:int, column2:int):bool +JudgeStar(R:int, C:int):bool +RenewPicture(): void +JudgeNine(R: int, C: int): bool +JudgeHori(R:int, C:int):bool +JudgeVerti(R: int, C: int): bool +Done() +FillinZero() +Epossib() +SpawnZero() +SetScore() +SetTIme() +button\_clicked(R:int,C:int) +quit(star:int,score:int) +Time() -on\_restart\_clicked() Blank +row:const int +column:constint +number:int <<constructor>>Blank(\*parent:Qwidget, R:int, C:int) <<destructor>>~Blank()

+setButtonPicture() +setRandomNumber() +operator - (\*a:Blank) +operator | (\*a:Blank)

+Click()

## <<abstract>>Destroy GameOver -\*ui:GameOver -score\_str:QString <<constructor>>Destroy() -star\_str:QString <<destructor>>~Destroy() <<constructor>>Gameover(\*parent:Qwidget, score:int, +condition(\*a[10][10]: Blank, \*focus: Blank): int star:int) +spawn(\*a[10][10]: Blank, \*focus: Blank, mode: int) <<destructor>>~GameOver() +eliminate(\*a[10][10]: Blank, \*focus: Blank) Vertical NineBlock Horizontal <<constructor>>Star() <constructor>>Vertical() <constructor>>Horizontal() <<constructor>>NineBlock() <<destructor>>~Star() <<destructor>>~Horizontal() <<destructor>>~NineBlock() +condition(\*a[10][10]: Blank, \*focus: Blank): int +condition(\*a[10][10]: Blank, \*focus: Blank): int +spawn(\*a[10][10]: Blank, \*focus: Blank, mode: int) +eliminate(\*a[10][10]: Blank, \*focus: Blank) +condition(\*a[10][10]: Blank, \*focus: Blank): int +condition(\*a[10][10]: Blank, \*focus: Blank): int +spawn(\*a[10][10]: Blank, \*focus: Blank, mode: int) +spawn(\*a[10][10]: Blank, \*focus: Blank, mode: int) +spawn(\*a[10][10]: Blank, \*focus: Blank, mode: int) +eliminate(\*a[10][10]: Blank, \*focus: Blank) +eliminate(\*a[10][10]: Blank, \*focus: Blank) eliminate(\*a[10][10]: Blank, \*focus: Blank)