

```

classDiagram
    class MainScreen {
        -Stage stage
        -Texture background
        -Texture[] buttons
        -static boolean counter
        -Sound sound
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class GameScreen {
        -Stage stage
        -Texture background
        -Texture catapult
        -Texture[] birds
        -Texture[] blocks
        -Texture[] pigs
        -String[] structureMatrix
        -Sound sound
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
        -drawStructure(float, float, float, float, String[], double)
    }
    class LevelSelectScreen {
        -Stage stage
        -Texture background
        -Texture[] levelButtons
        -Texture menuButton
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class PauseScreen {
        -Stage stage
        -Texture background
        -Texture[] buttons
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class LoadLevel {
        -Stage stage
        -Texture background
        -Texture loadLevel
        -Texture homeButton
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class WinScreen {
        -Stage stage
        -Texture background
        -Texture[] buttons
        -Texture star
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class LoseScreen {
        -Stage stage
        -Texture background
        -Texture[] buttons
        +render(float)
        -drawButton(Texture, float, float, float, float, float, int, int, Runnable)
    }
    class OpeningScreen {
        -Stage stage
        -Texture background
        +render(float)
    }
    class AngryBirds {
        +SpriteBatch batch
        +create()
        +render()
    }
    class RedBird {
        -RedBird : Texture
        +launchBird() : void
        +attack() : void
        +useAbility() : void
    }
    class BlackBird {
        -BlackBird : Texture
        +launchBird() : void
        +attack() : void
        +useAbility() : void
    }
    class BlueBird {
        -BlueBird : Texture
        +launchBird() : void
        +attack() : void
        +useAbility() : void
    }
    class YellowBird {
        -YellowBird : Texture
        +launchBird() : void
        +attack() : void
        +useAbility() : void
    }
    class GreenBird {
        -GreenBird : Texture
        +launchBird() : void
        +attack() : void
        +useAbility() : void
    }
    class KingPig {
        -KingPig : Texture
        +getDamage() : void
    }
    class JuniorPig {
        -JuniorPig : Texture
    }
    class SeniorPig {
        -SeniorPig : Texture
    }
    class BabyPig {
        -BabyPig : Texture
    }
    class Catapult {
        -currentBird : birds
        -angle : int
        -Tension : int
        -maxTension : int
        -Catapult : Texture
        +Stretch() : void
        +reload() : void
        +launch(Bird : Birds) : void
    }
    class Wood {
        +impact(obj : object) : void
    }
    class TNT_block {
        +impact(obj : object) : void
        +blast() : void
    }
    class Stone {
        +impact(obj : object) : void
    }
    class Ice {
        +impact(obj : object) : void
    }
    class Blocks {
        -OrientationAngle : int
        -blockTexture : int
        -isDestroyed : boolean
        +getDamage(obj : object) : void
    }
    class Birds {
        -damage : int
        -speed : int
        -is_launched : boolean
        -is_abilityUsed : boolean
        +attack() : void
    }
    class Pigs {
        -weight : int
        +getDamage() : void
    }
    class PowerMenu {
        -Stage stage
        -Texture background
        -Texture resumbutton
        -int fac
        -Texture power1
        -Texture power2
        -Texture power3
        -Texture power4
        +PowerMenu(AngryBirds game, int fac)
        +show()
        +render(float)
        +drawButton(Texture, float, float, float, float, float, int, int, Runnable)
        +resize(int, int)
        +pause()
        +resume()
        +hide()
        +dispose()
    }

    MainScreen --|> GameScreen
    GameScreen --|> LevelSelectScreen
    GameScreen --|> PauseScreen
    GameScreen --|> LoadLevel
    GameScreen --|> WinScreen
    GameScreen --|> LoseScreen
    GameScreen --|> OpeningScreen
    GameScreen --|> AngryBirds
    AngryBirds --|> RedBird
    AngryBirds --|> BlackBird
    AngryBirds --|> BlueBird
    AngryBirds --|> YellowBird
    AngryBirds --|> GreenBird
    AngryBirds --|> KingPig
    AngryBirds --|> JuniorPig
    AngryBirds --|> SeniorPig
    AngryBirds --|> BabyPig
    AngryBirds --|> Catapult
    AngryBirds --|> Wood
    AngryBirds --|> TNT_block
    AngryBirds --|> Stone
    AngryBirds --|> Ice
    AngryBirds --|> Blocks
    AngryBirds --|> Birds
    AngryBirds --|> Pigs
    AngryBirds --|> PowerMenu
    
```