



Game handling

```

classDiagram
    ShootMeUp - Partial Class based on "Form"
    ShootMeUp {
        - WIDTH : int
        - HEIGHT : int
        - GAMESPEED : int
        - OBSTACLE_SIZE : int
        - DEFAULT_CHARACTER_SIZE : int
        - BORDER_SIZE : int
        - gamestate : enum
        - player : Character?
        - keyHeldDown : List<Keys>
        - InGame : bool
        - WaveNumber : int
        - titleLabel : Label?
        - playButton : Button?
        + obstacles : List<Obstacle>
        + characters : List<Character>
        + score : int
        + displayedControls : List<Controls>
    }
    ShootMeUp <|-- ShootMeUp - Partial Class based on "Form"

```

ShootMeUp - Partial Class based on "Form"

```

- ShootMeUp()
- Main()
-> ShowTitle()
-> DisplayStartMenu()
-> StartGame()
-> GenerateWorld()
-> DisplayControls()
-> StartWave
+ ShootMeUp()
+ Main()
+ ShowTitle()
+ DisplayStartMenu()
+ DisplayPauseMenu()
+ StartGame() : Task
+ GenerateWorld()
+ GenerateWaveData(int) : List<Enemies>
+ StartWaves() : async
+ IsOverlapping(CFrame, CFrame)
+ NewFrame(object, EventArgs)
+ ShootMeUp_KeyDown(object, KeyEventArgs)
+ ShootMeUp_KeyUp(object, KeyEventArgs)
+ ShootMeUp_MouseClick(object, MouseEventArgs)
+ DisplayControls()

```

