#### MainMenu

- gamesPlayed: Text

- easyGamesWon: Text

- hardGamesWon: Text

- easyBestTime: text

- hardBestTime: Text

- NewEasyGame(): void

- NewHardGame(): void

- PrintStats(): void

- ResetStats(): void

- QuitGame(): void

### PauseMenu

- GameIsPaused: bool

- pauseMenuUI: GameObject

+ Update(): void

- Resume() : void

- Pause() : void

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- Restart() : void

- LoadMenu(): void

### Card

- cardBack: GameObject

- controller: GameManager

- \_id: int

+ id() : int

+ SetCard(id: int, image: Sprite): void

+ OnMouseDown(): void

+ Unreveal(): void

### GameManager

+ gameRunning: bool

- gridRows: int

- aridCols: int

- offsetX: float

- offsetY: float

- numbers: int[]

- originalCard: Card

- images: Sprite[]

- cardsBack: GameObject[]

- firstRevealed: Card

- secondRevealed: Card

- matches: int

- timeLabel: TextMesh

- healthBar: HealtBar

- maxHealth: int

- currentHealth: int

- loseMenu: GameObject

- winMenu: GameObject

+ Start() : void

+ CanReveal(): bool

+ CardRevealed(card: Card): void

- CheckMatch(): IEnumeratore

- CheckWin(matches: int): void

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- EasyGameInitialization(): void

- HardGameInitialization(): void

- CoverAllCards(): void

- ShuffleArray(numbers: int[]) : int[]

#### Timer

+ instance: Timer

+ Awake() : void

+ Start() : void

+ Update() : void + BeginTimer() : void

+ EndTimer() : void

+ CheckBestTime() : void

## SoundManger

- sounds: Sound[]

- instance: SoundManager

+ Awake() : void + Start() : void

- Play(name: string) : void

### HealthBar

- slider: Slider

+ SetMaxHealth(health: int): void

+ SetHealth(health: int) : void

### Sound

+ source: AudioSource

- name: string

- clip: AudioClip

- volume: float

- pitch: float

- loop: bool

# CardOrganizer

 $+ \underline{DisplayCards(originalCard: Card, healthBar; HealthBar, timeLabel: TextMesh, gridRows: int, gridCols: int, offsetX: float, offsetY: float, numbers: int[], images: Sprite[]): void \\$