Aktivitätsdiagramm

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| Wolken-Bewegung |

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| 1. Aktualisiere die X-Position der Wolke |

| - this.x += this.speed |

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| 2. Überprüfe, ob die Wolke die rechte Grenze des Canvas |

| überschritten hat |

| - if (this.x - this.width > canvasWidth) { |

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| 3. Setze die X-Position der Wolke auf die linke Grenze des |

| Canvas zurück |

| - this.x = -this.width |

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| 4. Ende der Methode |

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| Enten-Bewegung |

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| 1. Aktualisiere die X-Position der Ente basierend auf der |

| aktuellen Richtung und Geschwindigkeit |

| - if (this.direction === 'right') { |

| this.x += this.speed; |

| } else { |

| this.x -= this.speed; |

| } |

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| 2. Überprüfe, ob die Ente die rechte Begrenzung des Teiches |

| überschritten hat |

| - if (this.direction === 'right' && this.x > this.pondBounds.maxX) { |

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| 3. Drehe die Ente um (Richtung ändern zu 'left') |

| - this.direction = 'left' |

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| 4. Überprüfe, ob die Ente die linke Begrenzung des Teiches |

| überschritten hat |

| - if (this.direction === 'left' && this.x < this.pondBounds.minX) { |

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| 5. Drehe die Ente um (Richtung ändern zu 'right') |

| - this.direction = 'right' |

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| 6. Ende der Methode |

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| Vögel-Bewegung |

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| 1. Aktualisiere die X-Position des Vogels |

| - this.x += this.speed |

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| 2. Überprüfe, ob der Vogel die rechte Grenze des Canvas |

| überschritten hat |

| - if (this.x > canvasWidth + 10) { |

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| 3. Setze die X-Position des Vogels auf die linke Grenze des |

| Canvas zurück |

| - this.x = -10 |

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| 4. Ende der Methode |

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| Bienen-Bewegung |

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| 1. Aktualisiere die X-Position der Biene |

| - this.x += (Math.random() - 0.5) \* this.speed; |

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| 2. Aktualisiere die Y-Position der Biene |

| - this.y += (Math.random() - 0.5) \* this.speed; |

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v

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| 3. Überprüfe, ob die Biene die rechte oder linke Grenze des |

| Canvas überschritten hat |

| - if (this.x < 0) { |

| this.x = canvasWidth; |

| } else if (this.x > canvasWidth) { |

| this.x = 0; |

| } |

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| 4. Überprüfe, ob die Biene die obere oder untere Grenze des |

| Canvas überschritten hat |

| - if (this.y < 0) { |

| this.y = canvasHeight; |

| } else if (this.y > canvasHeight) { |

| this.y = 0; |

| } |

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| 5. Ende der Methode |

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