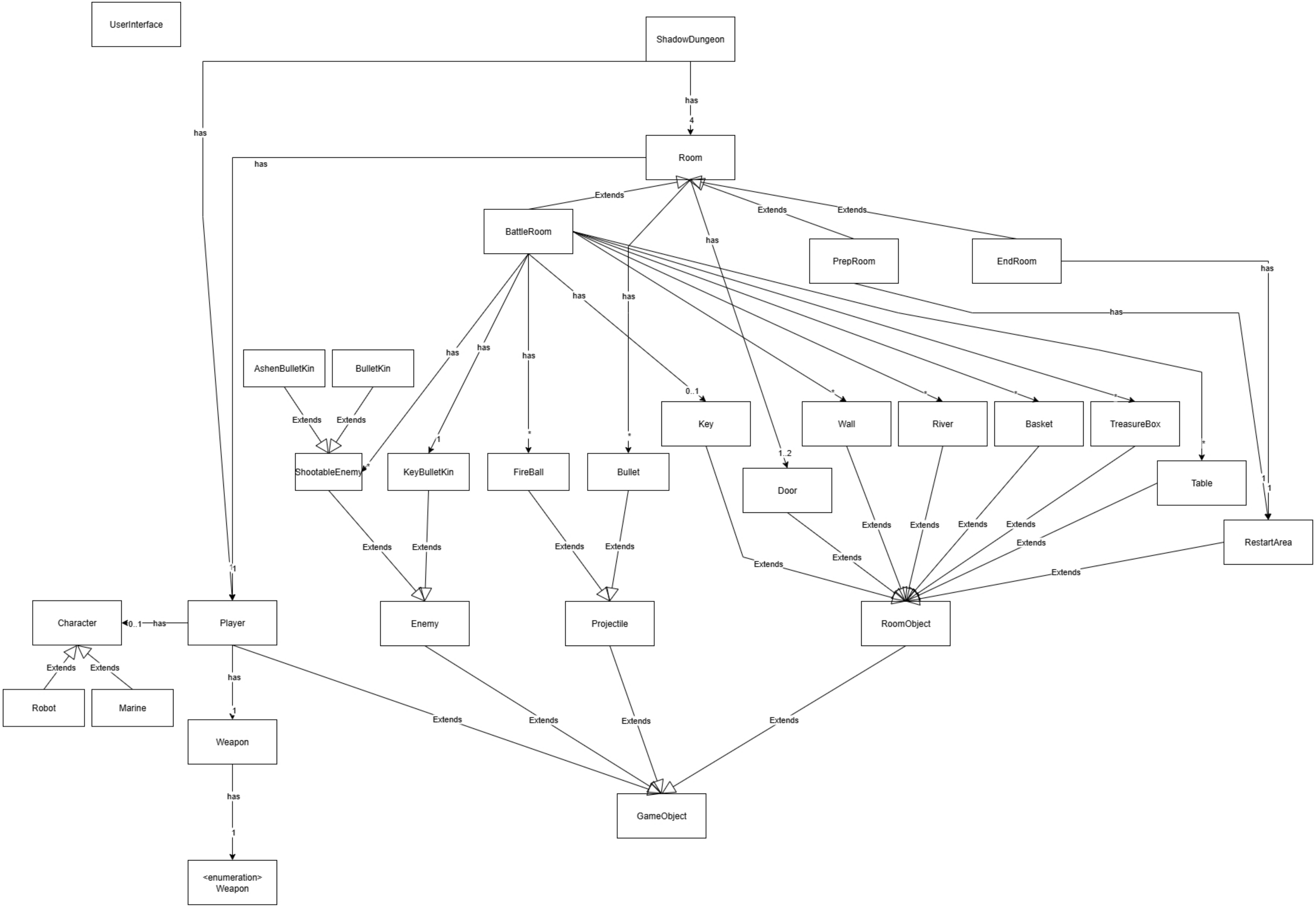
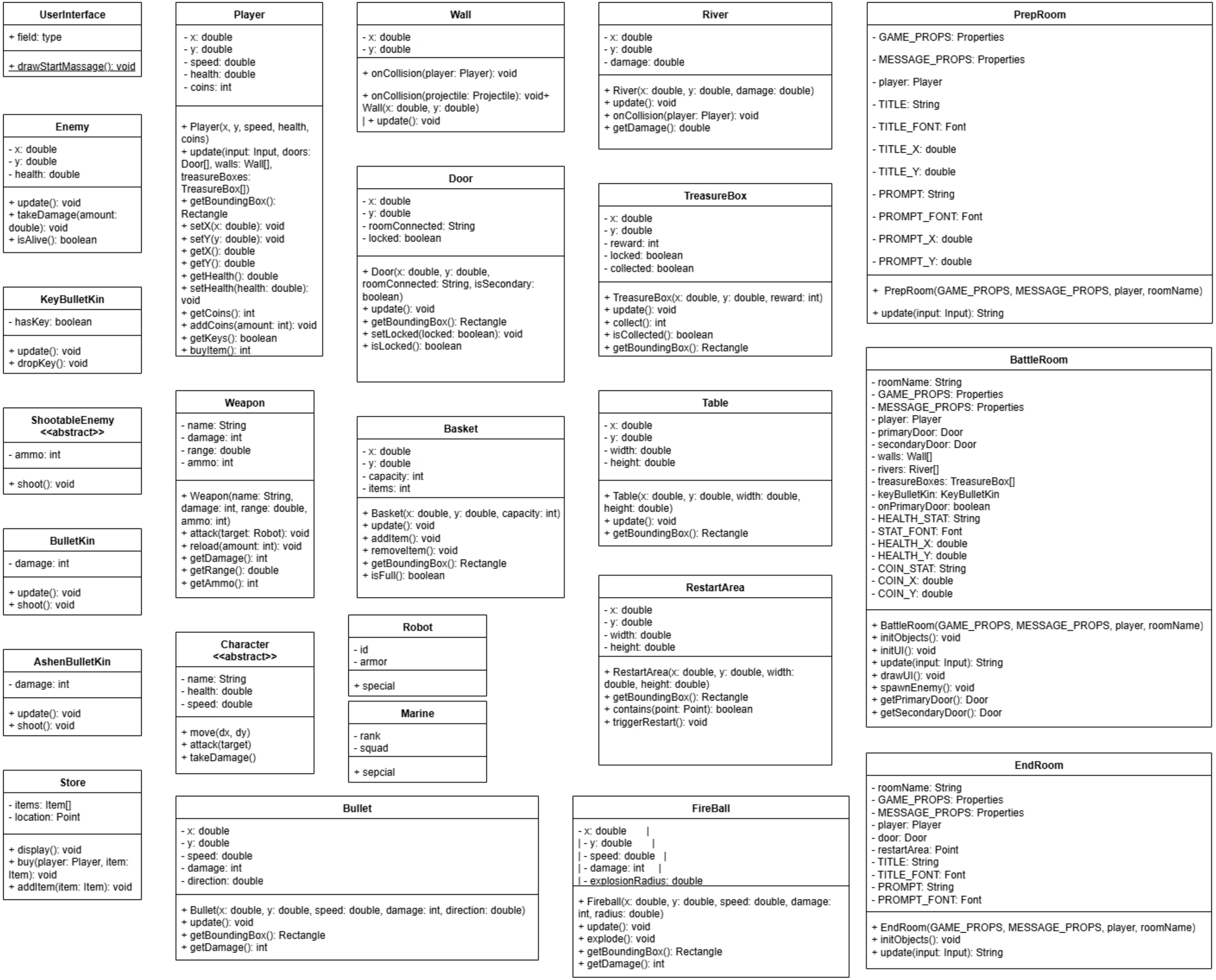

UserInterface
ShadowDungeon
has
4
has
Room
has
Extends
Extends
Extends
has
BattleRoom
PrepRoom
EndRoom
has
has
has
has
has
has
has
has
AshenBulletKin
BulletKin
Extends
Extends
0..1
Key
*
Wall
*
River
*
Basket
*
TreasureBox
*
1
*
*
ShootableEnemy
KeyBulletKin
FireBall
Bullet
1..2
Door
Table
1
1
RestartArea
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
Extends
1
1
Character
0..1
has
Player
Enemy
Projectile
RoomObject
Extends
Extends
Robot
Marine
has
1
Weapon
Extends
Extends
Extends
Extends
GameObject
has
1
<enumeration>
Weapon



UserInterface

+ field: type

+ drawStartMassage(): void

Enemy

- x: double
- y: double
- health: double

+ update(): void
+ takeDamage(amount: double): void
+ isAlive(): boolean

KeyBulletKin

- hasKey: boolean

+ update(): void
+ dropKey(): void

ShootableEnemy <<abstract>>

- ammo: int

+ shoot(): void

BulletKin

- damage: int

+ update(): void
+ shoot(): void

AshenBulletKin

- damage: int

+ update(): void
+ shoot(): void

Store

- items: Item[]
- location: Point

+ display(): void
+ buy(player: Player, item: Item): void
+ addItem(item: Item): void

Player

- x: double
- y: double
- speed: double
- health: double
- coins: int

+ Player(x, y, speed, health, coins)
+ update(input: Input, doors: Door[], walls: Wall[], treasureBoxes: TreasureBox[])
+ getBoundingBox(): Rectangle
+ setX(x: double): void
+ setY(y: double): void
+ getX(): double
+ getY(): double
+ getHealth(): double
+ setHealth(health: double): void
+ getCoins(): int
+ addCoins(amount: int): void
+ getKeys(): boolean
+ buyItem(): int

Weapon

- name: String
- damage: int
- range: double
- ammo: int

+ Weapon(name: String, damage: int, range: double, ammo: int)
+ attack(target: Robot): void
+ reload(amount: int): void
+ getDamage(): int
+ getRange(): double
+ getAmmo(): int

Character <<abstract>>

- name: String
- health: double
- speed: double

+ move(dx, dy)
+ attack(target)
+ takeDamage()

Bullet

- x: double
- y: double
- speed: double
- damage: int
- direction: double

+ Bullet(x: double, y: double, speed: double, damage: int, direction: double)
+ update(): void
+ getBoundingBox(): Rectangle
+ getDamage(): int

Wall

- x: double
- y: double

+ onCollision(player: Player): void

+ onCollision(projectile: Projectile): void+ Wall(x: double, y: double)
| + update(): void

Door

- x: double
- y: double
- roomConnected: String
- locked: boolean

+ Door(x: double, y: double, roomConnected: String, isSecondary: boolean)
+ update(): void
+ getBoundingBox(): Rectangle
+ setLocked(locked: boolean): void
+ isLocked(): boolean

Basket

- x: double
- y: double
- capacity: int
- items: int

+ Basket(x: double, y: double, capacity: int)
+ update(): void
+ addItem(): void
+ removeItem(): void
+ getBoundingBox(): Rectangle
+ isFull(): boolean

Robot

- id
- armor

+ special

Marine

- rank
- squad

+ sepcial

River

- x: double
- y: double
- damage: double

+ River(x: double, y: double, damage: double)
+ update(): void
+ onCollision(player: Player): void
+ getDamage(): double

TreasureBox

- x: double
- y: double
- reward: int
- locked: boolean
- collected: boolean

+ TreasureBox(x: double, y: double, reward: int)
+ update(): void
+ collect(): int
+ isCollected(): boolean
+ getBoundingBox(): Rectangle

Table

- x: double
- y: double
- width: double
- height: double

+ Table(x: double, y: double, width: double, height: double)
+ update(): void
+ getBoundingBox(): Rectangle

RestartArea

- x: double
- y: double
- width: double
- height: double

+ RestartArea(x: double, y: double, width: double, height: double)
+ getBoundingBox(): Rectangle
+ contains(point: Point): boolean
+ triggerRestart(): void

FireBall

- x: double |
| - y: double |
| - speed: double |
| - damage: int |
| - explosionRadius: double

+ Fireball(x: double, y: double, speed: double, damage: int, radius: double)
+ update(): void
+ explode(): void
+ getBoundingBox(): Rectangle
+ getDamage(): int

PrepRoom

- GAME_PROPS: Properties
- MESSAGE_PROPS: Properties
- player: Player
- TITLE: String
- TITLE_FONT: Font
- TITLE_X: double
- TITLE_Y: double
- PROMPT: String
- PROMPT_FONT: Font
- PROMPT_X: double
- PROMPT_Y: double

+ PrepRoom(GAME_PROPS, MESSAGE_PROPS, player, roomName)
+ update(input: Input): String

BattleRoom

- roomName: String
- GAME_PROPS: Properties
- MESSAGE_PROPS: Properties
- player: Player
- primaryDoor: Door
- secondaryDoor: Door
- walls: Wall[]
- rivers: River[]
- treasureBoxes: TreasureBox[]
- keyBulletKin: KeyBulletKin
- onPrimaryDoor: boolean
- HEALTH_STAT: String
- STAT_FONT: Font
- HEALTH_X: double
- HEALTH_Y: double
- COIN_STAT: String
- COIN_X: double
- COIN_Y: double

+ BattleRoom(GAME_PROPS, MESSAGE_PROPS, player, roomName)
+ initObjects(): void
+ initUI(): void
+ update(input: Input): String
+ drawUI(): void
+ spawnEnemy(): void
+ getPrimaryDoor(): Door
+ getSecondaryDoor(): Door

EndRoom

- roomName: String
- GAME_PROPS: Properties
- MESSAGE_PROPS: Properties
- player: Player
- door: Door
- restartArea: Point
- TITLE: String
- TITLE_FONT: Font
- PROMPT: String
- PROMPT_FONT: Font

+ EndRoom(GAME_PROPS, MESSAGE_PROPS, player, roomName)
+ initObjects(): void
+ update(input: Input): String