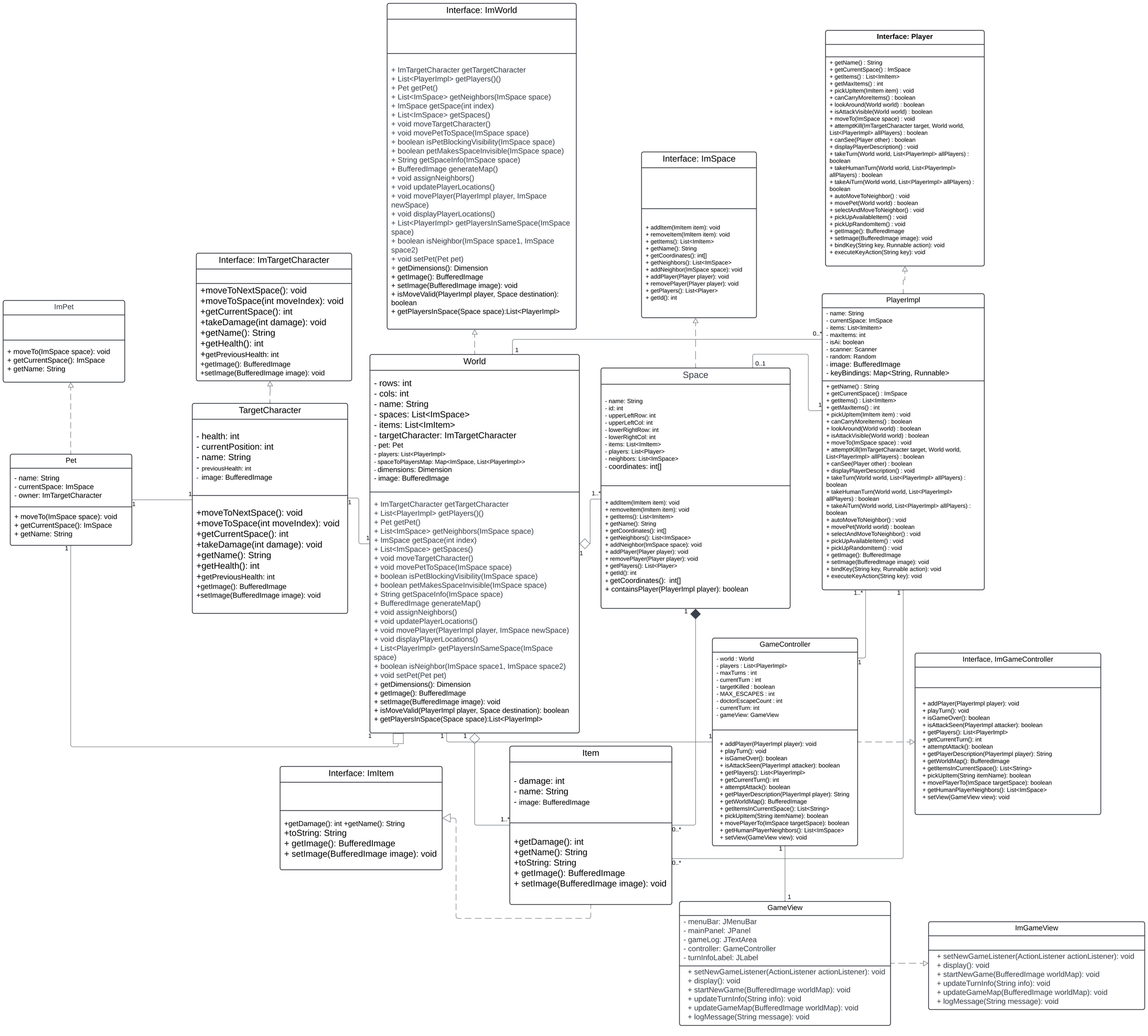
Interface: ImWorld
+ ImTargetCharacter getTargetCharacter
+ List<PlayerImpl> getPlayers()()
+ Pet getPet()
+ List<ImSpace> getNeighbors(ImSpace space)
+ ImSpace getSpace(int index)
+ List<ImSpace> getSpaces()
+ void moveTargetCharacter()
+ void movePetToSpace(ImSpace space)
+ boolean isPetBlockingVisibility(ImSpace space)
+ boolean petMakesSpaceInvisible(ImSpace space)
+ String getSpaceInfo(ImSpace space)
+ BufferedImage generateMap()
+ void assignNeighbors()
+ void updatePlayerLocations()
+ void movePlayer(PlayerImpl player, ImSpace newSpace)
+ void displayPlayerLocations()
+ List<PlayerImpl> getPlayersInSameSpace(ImSpace space)
+ boolean isNeighbor(ImSpace space1, ImSpace space2)
+ void setPet(Pet pet)
+ getDimensions(): Dimension
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
+ isMoveValid(PlayerImpl player, Space destination): boolean
+ getPlayersInSpace(Space space):List<PlayerImpl>
Interface: Player
+ getName() : String
+ getCurrentSpace() : ImSpace
+ getItems() : List<ImItem>
+ getMaxItems() : int
+ pickUpItem(ImItem item) : void
+ canCarryMoreItems() : boolean
+ lookAround(World world) : boolean
+ isAttackVisible(World world) : boolean
+ moveTo(ImSpace space) : void
+ attemptKill(ImTargetCharacter target, World world, List<PlayerImpl> allPlayers) : boolean
+ canSee(Player other) : boolean
+ displayPlayerDescription() : void
+ takeTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ takeHumanTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ takeAiTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ autoMoveToNeighbor() : void
+ movePet(World world) : boolean
+ selectAndMoveToNeighbor() : void
+ pickUpAvailableItem() : void
+ pickUpRandomItem() : void
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
+ bindKey(String key, Runnable action): void
+ executeKeyAction(String key): void
Interface: ImSpace
+ addItem(ImItem item): void
+ removeItem(ImItem item): void
+ getItems(): List<ImItem>
+ getName(): String
+ getCoordinates(): int[]
+ getNeighbors(): List<ImSpace>
+ addNeighbor(ImSpace space): void
+ addPlayer(Player player): void
+ removePlayer(Player player): void
+ getPlayers(): List<Player>
+ getId(): int
Interface: ImTargetCharacter
+moveToNextSpace(): void
+moveToSpace(int moveIndex): void
+getCurrentSpace(): int
+takeDamage(int damage): void
+getName(): String
+getHealth(): int
+getPreviousHealth: int
+getImage(): BufferedImage
+setImage(BufferedImage image): void
ImPet
+ moveTo(ImSpace space): void
+ getCurrentSpace(): ImSpace
+ getName: String
PlayerImpl
- name: String
- currentSpace: ImSpace
- items: List<ImItem>
- maxItems: int
- isAi: boolean
- scanner: Scanner
- random: Random
- image: BufferedImage
- keyBindings: Map<String, Runnable>
+ getName() : String
+ getCurrentSpace() : ImSpace
+ getItems() : List<ImItem>
+ getMaxItems() : int
+ pickUpItem(ImItem item) : void
+ canCarryMoreItems() : boolean
+ lookAround(World world) : boolean
+ isAttackVisible(World world) : boolean
+ moveTo(ImSpace space) : void
+ attemptKill(ImTargetCharacter target, World world, List<PlayerImpl> allPlayers) : boolean
+ canSee(Player other) : boolean
+ displayPlayerDescription() : void
+ takeTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ takeHumanTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ takeAiTurn(World world, List<PlayerImpl> allPlayers) : boolean
+ autoMoveToNeighbor() : void
+ movePet(World world) : boolean
+ selectAndMoveToNeighbor() : void
+ pickUpAvailableItem() : void
+ pickUpRandomItem() : void
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
+ bindKey(String key, Runnable action): void
+ executeKeyAction(String key): void
World
- rows: int
- cols: int
- name: String
- spaces: List<ImSpace>
- items: List<ImItem>
- targetCharacter: ImTargetCharacter
- pet: Pet
- players: List<PlayerImpl>
- spaceToPlayersMap: Map<ImSpace, List<PlayerImpl>>
- dimensions: Dimension
- image: BufferedImage
+ ImTargetCharacter getTargetCharacter
+ List<PlayerImpl> getPlayers()()
+ Pet getPet()
+ List<ImSpace> getNeighbors(ImSpace space)
+ ImSpace getSpace(int index)
+ List<ImSpace> getSpaces()
+ void moveTargetCharacter()
+ void movePetToSpace(ImSpace space)
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+ void displayPlayerLocations()
+ List<PlayerImpl> getPlayersInSameSpace(ImSpace space)
+ boolean isNeighbor(ImSpace space1, ImSpace space2)
+ void setPet(Pet pet)
+ getDimensions(): Dimension
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
+ isMoveValid(PlayerImpl player, Space destination): boolean
+ getPlayersInSpace(Space space):List<PlayerImpl>
Space
- name: String
- id: int
- upperLeftRow: int
- upperLeftCol: int
- lowerRightRow: int
- lowerRightCol: int
- items: List<ImItem>
- players: List<Player>
- neighbors: List<ImSpace>
- coordinates: int[]
+ addItem(ImItem item): void
+ removeItem(ImItem item): void
+ getItems(): List<ImItem>
+ getName(): String
+ getCoordinates(): int[]
+ getNeighbors(): List<ImSpace>
+ addNeighbor(ImSpace space): void
+ addPlayer(Player player): void
+ removePlayer(Player player): void
+ getPlayers(): List<Player>
+ getId(): int
+ getCoordinates(): int[]
+ containsPlayer(PlayerImpl player): boolean
Pet
- name: String
- currentSpace: ImSpace
- owner: ImTargetCharacter
+ moveTo(ImSpace space): void
+ getCurrentSpace(): ImSpace
+ getName: String
TargetCharacter
- health: int
- currentPosition: int
- name: String
- previousHealth: int
- image: BufferedImage
+moveToNextSpace(): void
+moveToSpace(int moveIndex): void
+getCurrentSpace(): int
+takeDamage(int damage): void
+getName(): String
+getHealth(): int
+getPreviousHealth: int
+getImage(): BufferedImage
+setImage(BufferedImage image): void
GameController
- world : World
- players : List<PlayerImpl>
- maxTurns : int
- currentTurn : int
- targetKilled : boolean
- MAX_ESCAPES : int
- doctorEscapeCount : int
- currentTurn: int
- gameView: GameView
+ addPlayer(PlayerImpl player): void
+ playTurn(): void
+ isGameOver(): boolean
+ isAttackSeen(PlayerImpl attacker): boolean
+ getPlayers(): List<PlayerImpl>
+ getCurrentTurn(): int
+ attemptAttack(): boolean
+ getPlayerDescription(PlayerImpl player): String
+ getWorldMap(): BufferedImage
+ getItemsInCurrentSpace(): List<String>
+ pickUpItem(String itemName): boolean
+ movePlayerTo(ImSpace targetSpace): boolean
+ getHumanPlayerNeighbors(): List<ImSpace>
+ setView(GameView view): void
Interface, ImGameController
+ addPlayer(PlayerImpl player): void
+ playTurn(): void
+ isGameOver(): boolean
+ isAttackSeen(PlayerImpl attacker): boolean
+ getPlayers(): List<PlayerImpl>
+ getCurrentTurn(): int
+ attemptAttack(): boolean
+ getPlayerDescription(PlayerImpl player): String
+ getWorldMap(): BufferedImage
+ getItemsInCurrentSpace(): List<String>
+ pickUpItem(String itemName): boolean
+ movePlayerTo(ImSpace targetSpace): boolean
+ getHumanPlayerNeighbors(): List<ImSpace>
+ setView(GameView view): void
Interface: ImItem
+getDamage(): int +getName(): String
+toString: String
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
Item
- damage: int
- name: String
- image: BufferedImage
+getDamage(): int
+getName(): String
+toString: String
+ getImage(): BufferedImage
+ setImage(BufferedImage image): void
GameView
- menuBar: JMenuBar
- mainPanel: JPanel
- gameLog: JTextArea
- controller: GameController
- turnInfoLabel: JLabel
+ setNewGameListener(ActionListener actionListener): void
+ display(): void
+ startNewGame(BufferedImage worldMap): void
+ updateTurnInfo(String info): void
+ updateGameMap(BufferedImage worldMap): void
+ logMessage(String message): void
ImGameView
+ setNewGameListener(ActionListener actionListener): void
+ display(): void
+ startNewGame(BufferedImage worldMap): void
+ updateTurnInfo(String info): void
+ updateGameMap(BufferedImage worldMap): void
+ logMessage(String message): void
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0..*
0..1
1..*