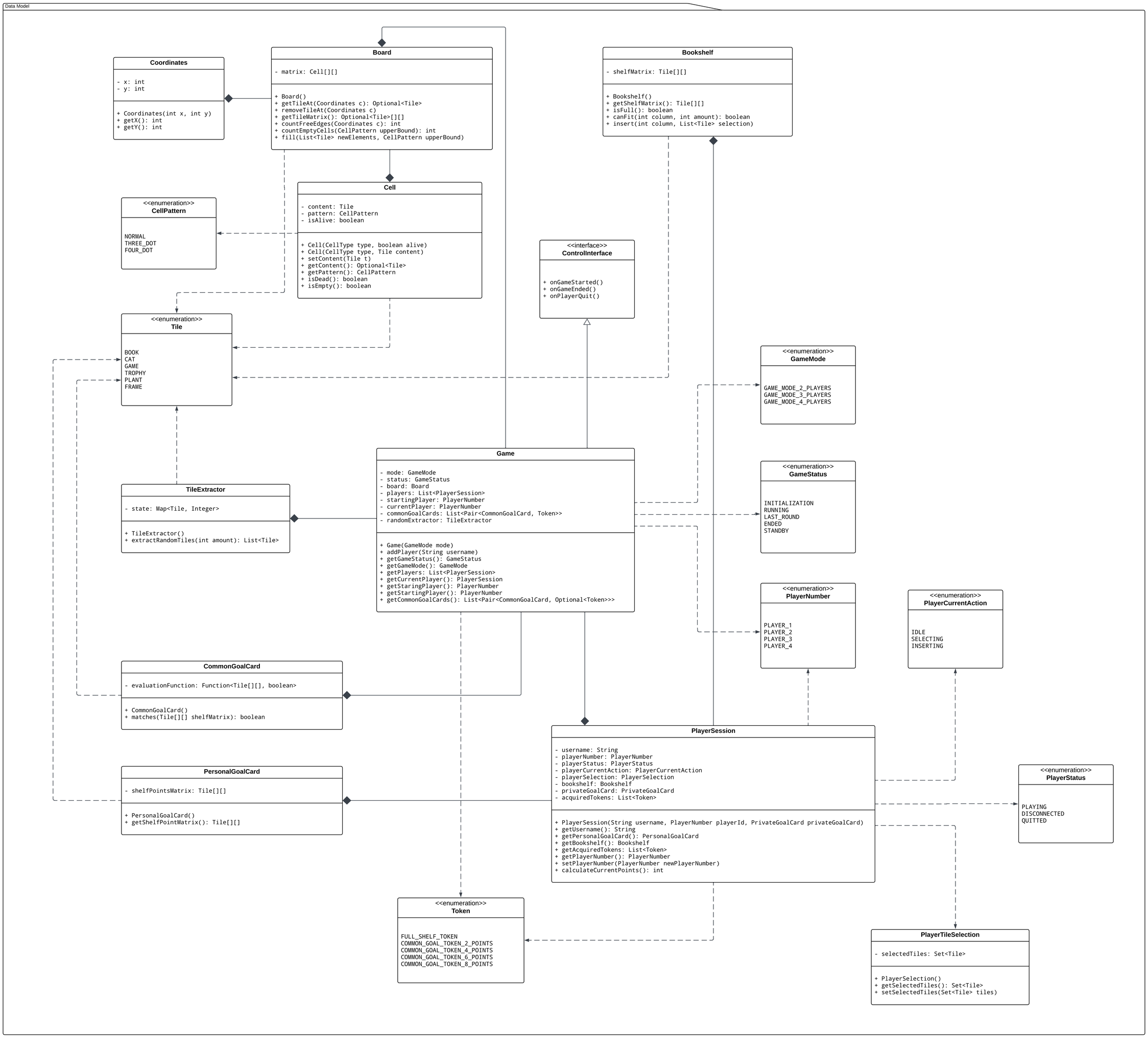
Data Model
Board
- matrix: Cell[][]
+ Board()
+ getTileAt(Coordinates c): Optional<Tile>
+ removeTileAt(Coordinates c)
+ getTileMatrix(): Optional<Tile>[][]
+ countFreeEdges(Coordinates c): int
+ countEmptyCells(CellPattern upperBound): int
+ fill(List<Tile> newElements, CellPattern upperBound)
Coordinates
- x: int
- y: int
+ Coordinates(int x, int y)
+ getX(): int
+ getY(): int
Bookshelf
- shelfMatrix: Tile[][]
+ Bookshelf()
+ getShelfMatrix(): Tile[][]
+ isFull(): boolean
+ canFit(int column, int amount): boolean
+ insert(int column, List<Tile> selection)
Cell
- content: Tile
- pattern: CellPattern
- isAlive: boolean
+ Cell(CellType type, boolean alive)
+ Cell(CellType type, Tile content)
+ setContent(Tile t)
+ getContent(): Optional<Tile>
+ getPattern(): CellPattern
+ isDead(): boolean
+ isEmpty(): boolean
<<enumeration>>
CellPattern
NORMAL
THREE_DOT
FOUR_DOT
<<interface>>
ControlInterface
+ onGameStarted()
+ onGameEnded()
+ onPlayerQuit()
<<enumeration>>
Tile
BOOK
CAT
GAME
TROPHY
PLANT
FRAME
<<enumeration>>
GameMode
GAME_MODE_2_PLAYERS
GAME_MODE_3_PLAYERS
GAME_MODE_4_PLAYERS
Game
- mode: GameMode
- status: GameStatus
- board: Board
- players: List<PlayerSession>
- startingPlayer: PlayerNumber
- currentPlayer: PlayerNumber
- commonGoalCards: List<Pair<CommonGoalCard, Token>>
- randomExtractor: TileExtractor
+ Game(GameMode mode)
+ addPlayer(String username)
+ getGameStatus(): GameStatus
+ getGameMode(): GameMode
+ getPlayers: List<PlayerSession>
+ getCurrentPlayer(): PlayerSession
+ getStaringPlayer(): PlayerNumber
+ getStartingPlayer(): PlayerNumber
+ getCommonGoalCards(): List<Pair<CommonGoalCard, Optional<Token>>>
<<enumeration>>
GameStatus
INITIALIZATION
RUNNING
LAST_ROUND
ENDED
STANDBY
TileExtractor
- state: Map<Tile, Integer>
+ TileExtractor()
+ extractRandomTiles(int amount): List<Tile>
<<enumeration>>
PlayerNumber
PLAYER_1
PLAYER_2
PLAYER_3
PLAYER_4
<<enumeration>>
PlayerCurrentAction
IDLE
SELECTING
INSERTING
CommonGoalCard
- evaluationFunction: Function<Tile[][], boolean>
+ CommonGoalCard()
+ matches(Tile[][] shelfMatrix): boolean
PlayerSession
- username: String
- playerNumber: PlayerNumber
- playerStatus: PlayerStatus
- playerCurrentAction: PlayerCurrentAction
- playerSelection: PlayerSelection
- bookshelf: Bookshelf
- privateGoalCard: PrivateGoalCard
- acquiredTokens: List<Token>
+ PlayerSession(String username, PlayerNumber playerId, PrivateGoalCard privateGoalCard)
+ getUsername(): String
+ getPersonalGoalCard(): PersonalGoalCard
+ getBookshelf(): Bookshelf
+ getAcquiredTokens: List<Token>
+ getPlayerNumber(): PlayerNumber
+ setPlayerNumber(PlayerNumber newPlayerNumber)
+ calculateCurrentPoints(): int
<<enumeration>>
PlayerStatus
PLAYING
DISCONNECTED
QUITTED
PersonalGoalCard
- shelfPointsMatrix: Tile[][]
+ PersonalGoalCard()
+ getShelfPointMatrix(): Tile[][]
<<enumeration>>
Token
FULL_SHELF_TOKEN
COMMON_GOAL_TOKEN_2_POINTS
COMMON_GOAL_TOKEN_4_POINTS
COMMON_GOAL_TOKEN_6_POINTS
COMMON_GOAL_TOKEN_8_POINTS
PlayerTileSelection
- selectedTiles: Set<Tile>
+ PlayerSelection()
+ getSelectedTiles(): Set<Tile>
+ setSelectedTiles(Set<Tile> tiles)