

CRC Cards

Class Name: GridInterface

Responsibilities:

- Start and manage the game.
- Display the game grid.
- Handle user input for moving, casting spells, and making choices.
- Check for game over and victory conditions.
- Use the TokimonGridState class to manage the game state.

Collaborators:

TokimonGridState: Collaborates to manage the game state.

UserMoveInput: Collaborates to handle user input.

Class Name: TokimonGridState

Responsibilities:

- Generate and manage the game grid state, including user and NPC positions.
- Randomly generate Tokimons and Fokimons on the grid.
- Check if a user is on a Fokimon's location.
- Keep track of collected Tokimons and revealed Fokimons.
- Provide getters and setters for various properties like Tokimons, Fokimons, user position, and cheating status.

Collaborators:

NpcPlace: Collaborates to represent locations consisting of rows and columns.

UserMoveInput: Collaborates for managing user's game actions.

Class Name: UserMoveInput

Responsibilities:

- Handle user input for the initial position on the grid.
- Handle user input for moving in the grid (up, down, left, right).
- Handle user input for casting spells.
- Handle user input for making choices (e.g., moving, casting spells, or exiting).
- Organize argument inputs for game settings.
- Keep track of the number of spells left.

Collaborators:

TokimonGridState: Collaborates to update the game state based on user input.

ErrorHandler: Collaborates for error checking.

Class Name: ErrorHandler

Responsibilities:

- Check command-line arguments for errors.
- Validate user input for initial positions, moves, spells, and choices.
- Handle errors and provide error messages.
- Check for duplicates and excessive arguments.
- Parse and validate argument inputs for quantity.

- Define and provide checkers for expected argument inputs.

Collaborators:

UserMoveInput: Collaborates for handling and checking user input.

Class Name: NpcPlace

Responsibilities:

- Represent NPC locations with rows and columns.
- Provide getters and setters for row and column attributes.

Collaborators:

TokimonGridState: Collaborates with the parent class for managing game state and NPC locations.