

Milestone 4: CRC Cards

The Quintet

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game

- Initializes player and bot
- Passes player and bot to Player for ship placement
- Runs game loop
- Delegates player turn
- Receives attack choice from Player
- Determines outcome of attack
- Gets current grid from Player for display
- Ends game

- player
- notAlBot

player

- Builds available fleet
- Gets player input for ship placement
- Places ship choice on grid
- Gets player attack choice and coordinates
- Gets player move choice
- Passes move choice to Grid
- Passes attack choice to Attack
- Receives attack specifics from Attack
- Returns attack specifics to Game

Subclasses: notAlBot

- game
- ship
- grid
- attack

notAlBot

- Builds available fleet
- Places bot fleet on grid
- Gets bot attack choice
- Passes attack choice to Attack
- Receives attack specifics from Attack
- Returns attack specifics to Game

Superclass: Player

- game
- ship
- grid
- attack

grid

- Instantiates board game grid
 - Establishes Captain's Quarters information
 - Performs legal checks on coordinate input
 - Prints board game grid
 - Manipulates grid space based on attacks
 - Manipulates grid space for ship placement
 - Handles ship movement, undo, and redo
 - Checks outcome of a hit
 - Handles Captain's Quarters hits
 - Gets outcome of attack
 - Returns attack outcome to Player
- player
 - notAIBot

ship

- Instantiates ships with length/shape, name, direction, and Captain's Quarters
- Returns ships information via Ship_LUT delegation

- player
- notAlBot

attack

- Receives attack choice from Player
- Determines attack specifics
 - Space laser/sonar/normal
- Passes attack choice to respective subclass
- Receives attack specifics from respective subclass
- Returns attack specifics to Player

Subclasses: sonarAttack,
spaceLaserAttack, coordAttack

- player
- notAIBot

coordAttack

- Receives attack choice from Attack
- Returns name and coordinates to Attack

Superclass: attack

- player
- notAlBot

sonarAttack

- Receives attack choice from Attack
- Creates coordinates for sonar area of effect
- Gets name of attack
- Returns name and coordinates to Attack

Superclass: Attack

- player
- notAlBot

spaceLaserAttack

- Receives attack choice from Attack
- Gets attack coordinates and name
- Returns coordinates and name to Attack

Superclass: attack

- player
- notAlBot

moveFleet

- Receives attack choice from Attack
- Gets direction to move and name
- Returns direction and name to Attack

Superclass: attack

- player
- notAlBot