

Ocean Explorer

- dimension: int
- scale: int
- oceanMap: OceanMap
- ship: Ship
- shipImage View: ImageView
- island Image View: ImageView
- pirates: List<PirateShip>
- pirate Views: List<ImageView>
- root: Anchor Pane
- scene: Scene

+ start(Stage): void

- drawMap(): void

- loadShipImage(): void

- loadPirates(): void

- startSailing(): void

+ main(String[]): void

Ocean Map

- oceanGrid: boolean[][]
- dimension: int
- random: Random

+ OceanMap(int)

- generateIslands(int): void

+ getMap(): boolean[][]

+ getDimension(): int

+ island(int, int): boolean

+ getRandomEmptyCell(): Point

Ship

- currentLocation
- gridSize: int
- oceanMap: OceanMap

+ Ship(OceanMap)

+ getShipLocation(): Point

- notifyPirates(): void

Pirate Ship

- pirateLocation: Point
- oceanMap: OceanMap

+ PirateShip(Point, OceanMap)

+ getPirateLocation(): Point

+ update(Observer, Object)

Application

(from javafx.application)