Obstacle Game UML

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Passes User instance

MainAtivity

Mutates User Instance

CustomizationActivity

ObstacleGameRulesActivity

ObstacleGameIntroActivity

ObstacleGameActivity

ObstacleGameEndActivity

SpaceShip

+ maxJumpDuration: int
+ jumpDurationLeft: int
+ lives: int
+ invincibleTime: int
+ outTime: int
+ gameOver: boolean

- getInvincibleTime(): int
- setInvincibleTime(): int
- getLives(): int
- setLives(): int
- getGameOver(): boolean
- getOutTime(): int
- outOfScreen(): void
- checkHit:() boolean
- checkGameOver(): void
- jump(): void
- move(): void

extends

SpaceItem

+ hitbox: Rect

- setHitBoxTo()
- move()

ObstacleGamePanel extends GamePanel

+ drawer:Drawer
+ manager: AdventureManager
+ Mode: playerMode

- update()
- draw(Canvas)
- onTouchEvent()

SinglePlayerMode

- addSpaceShip(AdventureManager)
- respondTouch(MotionEvent, AdventureManager)

<<interface>> Mode

<<interface>> Drawer

<<interface>> Observer

AndroidDrawer

+ spaceShipList: List<SpaceShip>
+ spaceObstacles: LIst<Obstacle>
+ startGameCountDown: int
+ gameOver: boolean

- update(Observable, argument): void
- draw(Canvas): void

Observes

AdventureManager

+ observers: List<Observer>
+ startGameCountDown: int
+ endGameCountDown: int
+ spaceShipList: List<SpaceShip>
+ spaceObstacles: List<Obstacle>
+ obstacleGenerator: ItemGenerator<Obstacle>
+ score: int
+ gameOver: Boolean

- addSpaceShip(Spaceship): void
- getSpaceShipList(): List<SpaceShip>
- getObstacles(): List<Obstacle>
- getGameOver(): boolean
- getStartGameCountDown(): int
- getEndGameCountDown(): int
- getScore(): int
- respondTouch(): void
- update(): void

Obstacle extends SpaceItem

+ speed: int

- move()
- outofScreen()

extends

Observable

+ observers: List<Observer>

- setChanged(): void
- notifyObservers(): void

ObstacleGenerator

+ screenWidth: Int
+ screenHeight: Int
+ randGenerator: Random
+ lastObstacle: Obstacle

- checkGeneration(): Obstacle

<<interface>> ItemGenerator<T>

- checkGeneration(): T