Main

SpaceInvaderController

Controller

SpaceInvaderListener SpaceInvaderButtonListener SpaceInvaderController

SpaceInvaderListener

-SpaceInvaderListener:listener

- SpaceInvaderListener()
- +get:listener
- +handleKeyEventOnPress()
- +handleKeyEventOnReleased()

SpaceInvaderButtonListener

-SpaceInvaderButtonListener:Buttonlistene

+get:Buttonlistener +handleButtonEvent()

SpaceInvaderController

-SpaceInvaderController : controller -SpaceInvaderListener : listener

-ViewManger : View

-InGameModel : gameModel

-boolean: soundOn

-boolean: gamePaused

-boolean : isShooting

-boolean: isMovingLeft

-boolean: isMovingRight

-boolean: isMovingUp

boolean: isMovingDown

-boolean: ultIsPressed

SpaceInvaderController(Stage)

+getter and setter()

int spawnWave

+resetController()

+pauseGame()

+checkWhatToSpawn()

-spawnMeteor()

-spawnEnemies(){return ArrayList}

+createHpUpHeart()

+moveHpUpHeart()

+moveMeteor()

+checkIfEnemyIsMoving()

+IBulletArrayList

checkIfEnemyIsShooting()

+IBullet checkIfPlayerIsShooting()

+updatePlayerMovment()

+updateBullets()

-boolean checkOutOfScreen()

+IbulletArrayList checkIfMeteorShoot()

+checkIfMeteorCollide()

+IBulletArraylist getBulletRemoveList

+EnemyShipArrayList getDeadEnemies()

+updateWeaponState()

-ultActivated() -distanceBetween()

SpaceInvaderInGameView

inGamePane : AnchorPane

inGameScene: Scene

-ImageView:hpUpHeart

-ImageView:secondBackGroundImage

-TextField:enterNameField

-int: ultTimer

-SubScene:deathSubScene

-updateAllModels()

-updateAllImageViews()

-updateUltImage()

-updatePointsLabel()

-updateHpUpHeart()

-updateIfPlayerIsShooting()

-initializeLevelToPane()

-initializeHighScorePointLabel()

-initializeBackGround()

-intializePlayerLifes()

+initializeHpUpHeart()

-initializeProgressBar()

-initializeUlt()

-initalizePlayer(

-intializeGameListener()

-createPlayerLifeImage()

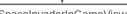
-createBullet(IBullet)

+setAnimationTimer(boolean)

+addToGamePane(Node)

-removeFromGamePane(ImageView)

Controller UMLSpaceShooter Mattias Frigren | January 14, 2020



gameView : SpaceInvaderGameView

-InGameModel:model

-SpaceInvaderController:controller

-ArrayList<ImageView>:enemiesImageList -ArrayList<ImageView>:bulletsImageList

-ImageView :meteorImage

-ImageView:playerImage

-ImageView:ultImage

-ImageView:firstBackGroundImage

-ArrayList<ImageView>:playerLifesImage

-Label:pointsLabel

-ProgressBar: ultBar

-AnimationTimer:inGameTimer

-SpaceInvaderInGameView()

+getters and setters()

+resetGame()

-createGameLoop()

-updateUltBar

-updateIfLevelIsDone()

-updateIfSpawnEnemies()

-updatePlayerLifeImages()

-updatePlayerImage()

-updateBulletsImage()

-updateMeteorImage()

-updateMeteorRotation()

-updateEnemyImages()

-updateIfEnemyIsShooting()

-updateBackGround()

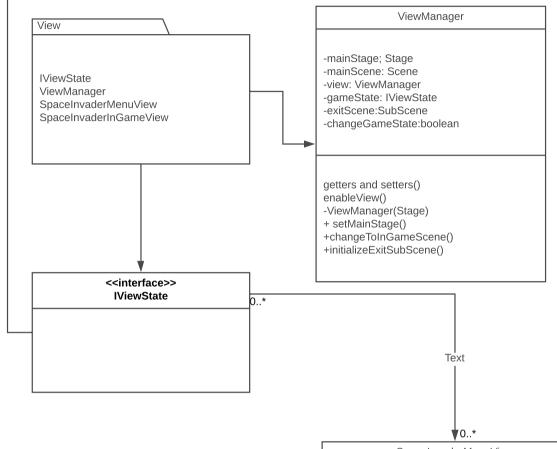
-initializePointsLabel()

+initializeMeteor()

-removeUlt()

-initializeEnemies()

+initializeDeathSubScene()



SpaceInvaderMenuView

- menuView · SpaceInvaderMenuView

- menuPane : AnchorPane

menuScene : Scene -ArrayList<Buttons>:buttonArrayList

-Button:button -SubScene:currentSubScene

-BackGroundImage:buttonOnClickImg

-BackGround:buttonOnClickBackGround -BackGroundImage:buttonOnReleasedImage

-BackGround:buttonOnReleasedBackGround -ArrayList<CheckBox>:pickBoxes

+getters and setters() -SpaceInvaderMenuView()

+getStage:inGameStage -createButtonToList()

+initializeHighScoreSubScene()

+initializeCreditSubScene()

+initializeSettingsSubScene() +initializeHelpSubScene()

+initializeChooseShipSubScene +closeCurrentSubScene()

+cleanCurrentSubScene() -createButton(String,double,double)

-createShipsToChoose(){return HBox} -initializeButtonListeners()