UML CLASS DIAGRAM
CRAZY TANKS

GameScreen

game: crazytanks
cam: OrthographicCamera
-map: TiledMap
-tankscreen: ShowTanks
-player1: Player
-player2: Player
-weaponplayer1 : WeaponSelect
-weaponplayer2 : WeaponSelect
-tankplayer1 :Tank
-tankplayer2 : Tank

+GameScreen(crazytanks Game)
+fire()
+start()
+resume()
+exit()
+saveGame()
+showHealth() : int
+setHealth(int h): void
+setAngle(int a): void
+showAngle() : int
+showPower() : int
+setPower(int h): void
+moveTankforward()
+moveTankbackward()
+hitTarget() :boolean
+targetProximity(float x); void
+gameWinner(): Player

○ Serializable

crazytanks(MAIN)

-viewWidth : int
-viewHeight : int
-PPM : float

+spbatch: SpriteBatch
+ bitfont: BitmapFont
+manager : AssetManager
+screenport : Viewport

+setviewWidth(int width): void
+getviewWidth(): int
+setviewHeight(int height): void
+getviewHeight(): int
+setPPM(float PPM): void
+getPPM(): float

○ Serializable

○ Serializable

HomePage

game: crazytanks
-homebackimage: Texture
-homebacktexture: TextureRegion
cam: OrthographicCamera
-gamePort: Viewport

+homepage(crazytanks Game)
+gotoMenu()

MainMenu

game: crazytanks
-menubackimage: Texture
-menubacktexture: TextureRegion
cam: OrthographicCamera
-gamePort: Viewport

+mainmenu(crazytanks Game)
+newgame()
+settings()
+exitgame()
+resumegame()

○ Serializable

ShowTanks

game: crazytanks
cam: OrthographicCamera
-gamePort: Viewport
-player1: Player
-player2: Player
-tanks: ArrayList<Tank>

+showtanks(crazytanks Game)
+setPlayer1(String name): Player
+setPlayer2(String name): Player
+choosetankplayer1(tanks): void
+choosetankplayer2(tanks): void
+backtoMenu(): void

○ Serializable

Player

game: crazytanks
cam: OrthographicCamera
-gamePort: Viewport
+playername: String
+tankchoice: Tank
+playerHealth : Health

+player(crazytanks Game)
+back() : void
+showHealth() : Health
+setHealth(int h): void

○ Serializable

Abstract Weapon

-speciality: String
-hitXP : int

+getspeciality() : string
+setspeciality(String d) : void
+gethitXP() : int
+sethitXP(int p): void
+attack()

○ Serializable

SniperRifle

+attack() : void

BigShot

+attack() : void

FireBall

+attack() : void

SingleShot

+attack() : void

Abstract Tank

-speciality: String
-colour: String
-Extra_hitXP : int
-projAngle: int
-tankPositionX : int
-tankPositionY : int
-projPower : int

+setprojAngle(int i):void
+getprojAngle() : int
+setprojPower(int i):void
+getprojPower() : int
+moveTankforward()
+moveTankbackward()

Helios

+selectTank():boolean

Mark1

+selectTank():boolean

T-34

+selectTank():boolean

Blazer

+selectTank():boolean

Health

-totalHealth: int
-tankExtraXP: int
-hitTank: boolean
-weaponXP:int
:targetProximity: int

+health(crazytanks Game)
+totalhitXP(): int
+settotalHealth(): void
+gettotalHealth():int
+gameResult()

○ Serializable

MissileTurret

-turbullets : ArrayList<TurretBullet>

+attack() : void
+setTurretBullet(TurretBullet t)
+getTurretBullet()

IonCannon

-ionbullets : ArrayList<TurretBullet>

+attack() : void
+setIonBullet(Ion t)
+getIonBullet()

OilSlick

+attack() : void

TurretBullet

-hitXPbullet: int

+gethitXPbullet() : int
+sethitXPbullet(int p): void

Ion

-hitXPion: int

+gethitXPion() : int
+sethitXPion(int p): void

WeaponSelect

-weapon : Weapon

+selectWeapon()
+setWeapon(Weapon w)
+getWeapon()

○ Serializable