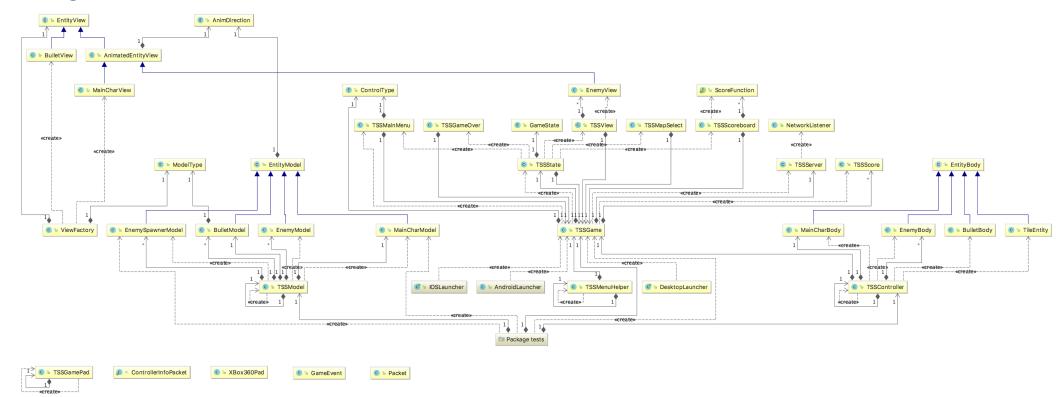
Package UML



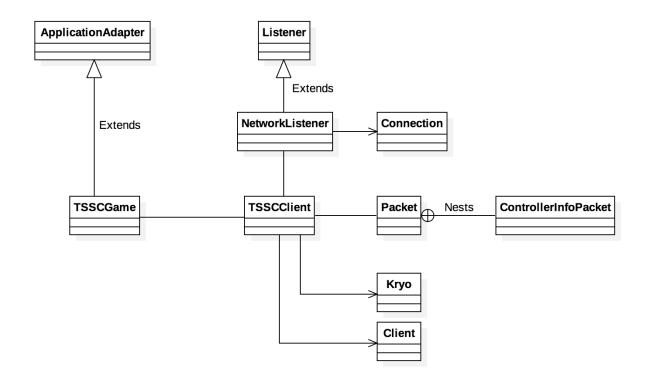
Class Diagram UML ScreenAdapter Game Extends Extends DroidStick TSSServer GameView Uses Uses EntityView Uses _ | GameController Uses , EntityBody GameModel GameState EntityModel

Concrete1

EnemyBehaviour

Concrete_N

Controller Class Diagram UML



Architectural Pattern

Model-view-controller

Used to separate concerns into modules so unit testing can be used with LibGDX. The Controller is supplemented by Box2D to manipulate the Model, where all data is stored. The View makes all the calls to OpenGL and creates the needed sprites to display the game.

Design Patterns

Singleton

Both TSSController and TSSModel use this pattern to guarantee only one instance of each is running at a time. This facilitates MVC usage.

Classes: TSSModel, TSSController

State

State machine pattern is used to control current game screen.

Classes: TSSState

Adapter

Adapter pattern is used to create the scoreboard of top 10 high scores. Each row is created from getting the 3 values that compose a TSSScore object, as such to avoid repeating the same lines of code for each

kind of getter for that object, 3 subclasses that implement an interface are used so that an array of that interface can be used to call different getters according to the current index on a for loop.

Classes: TSSScoreboard