## Game class Global Variables directory Global Variables directory Class: Game # screen variables Components: SCREEN\_WIDTH + dark\_mode SCREEN\_HEIGHT + background\_color : arcade.color (tuple) SCREEN\_COLOR\_LIGHT : Ship + ship SCREEN\_COLOR\_DARK : On\_Screen\_Text + score : On\_Screen\_Text + level # on-screen text variables + bullets : list[] of Bullets TEXT\_NORMAL\_FONT\_SIZE : list[] of Rocks + rocks TEXT\_NORMAL\_COLOR\_LIGHT + state : int TEXT\_NORMAL\_COLOR\_DARK + held\_keys + release\_kraken # score variables : bool + hints SCORE\_INIT SCORE\_X Methods: SCORE\_Y Initialize + \_\_init\_\_(width, height) # level variables + initialize\_background\_color() LEVEL\_COLOR\_LIGHT LEVEL\_COLOR\_DARK LEVEL\_INIT + on\_draw() LEVEL\_X + draw\_all\_objects() LEVEL\_Y + draw\_rifle() LEVEL\_FONT\_SIZE + draw\_bullets() + draw\_rocks() # ship variables + draw\_score() SHIP\_X\_INIT + draw\_level() SHIP\_Y\_INIT + draw\_on\_screen\_text(on\_screen\_text) SHIP\_RADIUS + draw\_main\_menu\_screen() SHIP\_ANGLE\_ROTATE\_AMOUNT + draw\_game\_over\_info() SHIP\_THRUST\_ACCELERATE\_AMOUNT + display\_hints() SHIP\_ANGLE\_INIT + draw\_new\_level\_screen() SHIP\_TEXTURE\_FILENAME SHIP\_TEXTURE State SHIP\_TEXTURE\_SCALE + resume() SHIP\_TEXTURE\_ALPHA + pause() + main\_menu() # rifle variables + new\_level() RIFLE\_WIDTH + game\_over() RIFLE\_HEIGHT + initialize\_state() RIFLE\_X\_INIT + troll() RIFLE\_Y\_INIT + hints() RIFLE\_ANGLE\_INIT RIFLE\_COLOR\_LIGHT Dark Mode RIFLE\_COLOR\_DARK + is\_dark\_mode() + set\_dark\_mode() # bullet variables + set\_light\_mode() BULLET\_RADIUS + toggle\_dark\_mode() BULLET\_SPEED BULLET\_TIMER BULLET\_COLOR\_LIGHT + toggle(condition) BULLET\_COLOR\_DARK BULLET\_TEXURE\_FILENAME Advance BULLET\_TEXURE + update(delta\_time) BULLET\_TEXTURE\_SCALE + advance\_targets() BULLET\_TEXTURE\_ALPHA + advance\_bullets() # BULLET\_X\_INIT # BULLET\_Y\_INIT Events (Handle Input) + on\_mouse\_motion(x: float, # rock variables y: float, ROCK\_DEFAULT\_RADIUS dx: float, ROCK\_DEFAULT\_SPEED dy: float) ROCK\_DEFAULT\_SPIN + on\_key\_press( key: int ROCK\_DEFAULT\_POINTS\_AWARDED modifiers: int) ROCK\_DEFAULT\_SCALE + on\_key\_release( key: int ROCK\_DEFAULT\_ANGLE modifiers: int) ROCK\_DEFAULT\_ALPHA + fire\_bullet() ROCK\_DEFAULT\_TEXTURE\_FILENAME ROCK\_DEFAULT\_TEXTURE Check Collisions # big rock variables + check\_collisions() ROCK\_BIG\_RADIUS + check\_too\_close(projectile1: Projectile ROCK\_BIG\_SPEED projectile2: Projectile) ROCK\_BIG\_SPIN + cleanup\_zombies() ROCK\_BIG\_TEXURE\_FILENAME + check\_off\_screen() ROCK\_BIG\_TEXURE + clear\_all\_objects() ROCK\_BIG\_TEXTURE\_SCALE + clear\_all\_bullets() ROCK\_BIG\_TEXTURE\_ALPHA + clear\_all\_rocks() # medium rock variables + \_get\_angle\_degrees( x: float, ROCK\_MEDIUM\_RADIUS ROCK\_MEDIUM\_SPEED ROCK\_MEDIUM\_SPIN ROCK\_MEDIUM\_TEXURE\_FILENAME ROCK\_MEDIUM\_TEXURE Return to Home Page ROCK\_MEDIUM\_TEXTURE\_SCALE ROCK\_MEDIUM\_TEXTURE\_ALPHA # small rock variables ROCK\_SMALL\_RADIUS ROCK\_SMALL\_SPEED ROCK\_SMALL\_SPIN ROCK\_SMALL\_TEXURE\_FILENAME ROCK\_SMALL\_TEXURE ROCK\_SMALL\_TEXTURE\_SCALE ROCK\_SMALL\_TEXTURE\_ALPHA # target variables TARGET\_DEFAULT\_RADIUS TARGET\_DEFAULT\_X\_INIT # default target TARGET\_STANDARD\_POINTS TARGET\_STANDARD\_COLOR\_DARK TARGET\_STANDARD\_COLOR\_LIGHT # strong target TARGET\_STRONG\_POINTS TARGET\_STRONG\_LIFE\_INIT TARGET\_STRONG\_LIFE\_TEXT\_SIZE TARGET\_STRONG\_LIFE\_TEXT\_OFFSET TARGET\_STRONG\_COLOR\_DARK TARGET\_STRONG\_COLOR\_LIGHT TARGET\_STRONG\_LIFE\_COLOR\_DARK TARGET\_STRONG\_LIFE\_COLOR\_LIGHT # safe target TARGET\_SAFE\_POINTS TARGET\_SAFE\_SIDE\_LENGTH TARGET\_SAFE\_TILT TARGET\_SAFE\_COLOR\_LIGHT TARGET\_SAFE\_COLOR\_DARK # meme guy target TARGET\_MEME\_GUY\_IMAGE\_SCALE TARGET\_MEME\_GUY\_IMAGE\_ANGLE TARGET\_MEME\_GUY\_IMAGE\_ALPHA # ball variables (pong) BALL\_RADIUS BALL\_X\_INIT BALL\_Y\_INIT BALL\_DX\_INIT BALL\_DY\_INIT # BALL\_DRAW BALL\_COLOR\_DARK BALL\_COLOR\_LIGHT # paddle variables PADDLE\_WIDTH PADDLE\_HEIGHT PADDLE\_X\_INIT PADDLE\_Y\_INIT PADDLE\_Y\_MIN PADDLE\_Y\_MAX # PADDLE\_DRAW PADDLE\_COLOR\_DARK PADDLE\_COLOR\_LIGHT # game state RESUME PAUSE MAIN\_MENU NEW\_LEVEL GAME\_OVER STATE\_INIT # STATE\_INIT

# other variables

MOVE\_AMOUNT

DELAY\_INIT

SCORE\_HIT

SCORE\_MISS

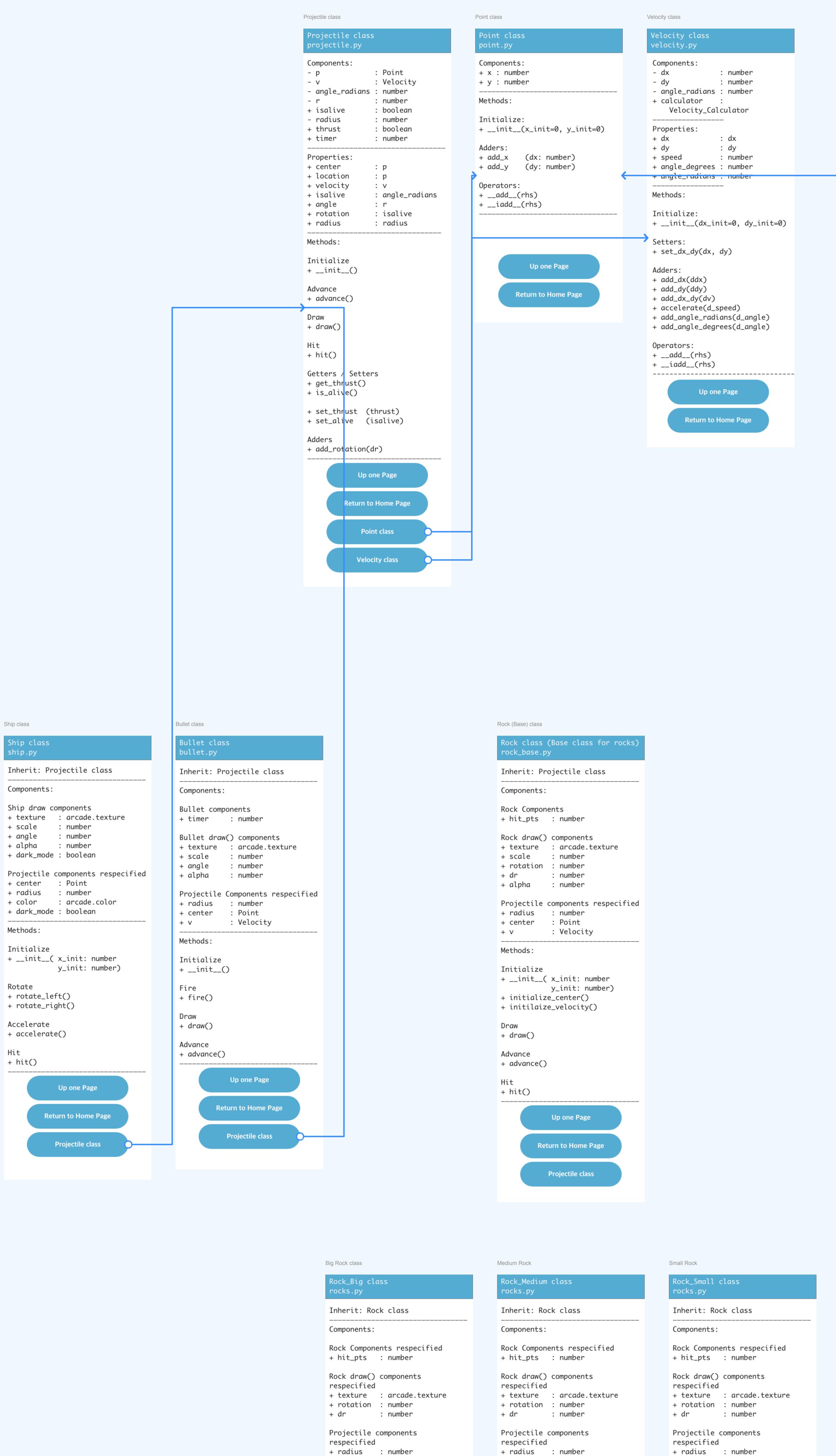
PI\_OVER\_2

DARK\_MODE\_INIT

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ALIVE

DEAD DEBUG



+ center

\_\_\_\_

Methods:

Initialize

+ V

: Velocity

y\_init: number)

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Rock base class

+ \_\_init\_\_( x\_init: number

+ initialize\_center()

+ initilaize\_velocity()

Ship class

Ship class

hip.py

Components:

+ scale

+ angle

+ alpha

+ radius

Methods:

Rotate

Hit

+ hit()

Initialize

Accelerate

+ rotate\_left()

+ accelerate()

+ rotate\_right()

Ship draw components

+ center : Point

: number

: number

: number

## + radius : number + center : Point : Velocity + V \_\_\_\_\_ Methods: Initialize + \_\_init\_\_( x\_init: number + \_\_init\_\_( x\_init: number y\_init: number) y\_init: number) + initialize\_center() + initilaize\_velocity() This class is identical to 'Rock\_Big' class Up one Page Return to Home Page Rock base class

: Point

: Velocity

This class is identical to

'Rock\_Big' class

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Return to Home Page

Rock base class

+ center

+ V

\_\_\_\_\_

Methods:

Initialize

+ initialize\_center()

+ initilaize\_velocity()

On\_Screen\_Text class

Components:

Text

+ p

Color

\_\_\_\_\_

Initialize

+ \_\_init\_\_(

text

font\_size : int

+ initialize\_color()

Methods:

Draw

+ draw(

text

Dark Mode

+ is\_dark\_mode()

+ set\_dark\_mode()

+ set\_light\_mode()

+ text

On\_Screen\_Text class

: Point

+ dark\_mode : arcade.color (tuple)

: string

: string

: Point

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Point class

on\_screen\_text.py

+ font\_size : int

Level class

level class

vel.py

Components:

Methods:

Draw

+ draw()

Operators

+ \_\_add\_\_(rhs)

+ \_\_iadd\_\_(rhs)

\_\_\_\_\_

Initialize

+ \_\_init\_\_(

text

+ level : int

Inherit: On\_Screen\_Text

font\_size : int

+ initialize\_color()

: string

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Score class

core class

ore.py

Components:

Properties:

\_\_\_\_\_

Initialize

Methods:

Draw

+ draw()

Operators

+ \_\_add\_\_(rhs)

+ \_\_iadd\_\_(rhs)

+ score : int

+ score\_text : string

+ initialize\_color()

+ \_\_init\_\_(score\_init : int)

\_\_\_\_\_

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Inherit: On\_Screen\_Text