

Class name: game_menu**Class Attributes:**

- self.difficultySettingOption #Holds radio button
- self.startGameButton #Button element
- self.titleLabel #Label element

- self.root.title #Window title
- self.root.minsize #Window min size
- self.root.maxsize #Window max size
- self.root #TKinter class inherit

Class Collaborations (other classes):

- TKinter

Class Methods:

- __init__ #Sets up the menu elements
- create_difficultySettingOption #Creates radio buttons for selecting difficulty
- create_startGameButton #Creates the start game button
- create_titleLabel #Creates the label for game title
- startGameHandler #Handler for when the start game button is pressed

Class Collaborations (other classes):

- TKinter

Class name: game**Class Attributes:**

- self.screen #Gameplay screen
- self.running #True if game isn't over
- self.player #Holds player variable
- self.thedoomship #Holds enemy object
- self.clock #update speed

Class Collaborations (other classes):

- Player
- Doomship_npc
- game_menu

Class Methods:

- __init__ #Sets up the screen as well as the sprite positions
- run #runs the game and keeps it running

Class Collaborations (other classes):

- Player
- Doomship_npc
- game_menu

Class name: player_npc**Class Attributes:**

- self.screen_size #Sets screen size
- self.surf #Sets the image for sprite
- self.rect #Sets the prite hitbox

Class Collaborations (other classes):

- PyGame sprite
- bullet

Class Methods:

- __init__ #Creates a sprite and sets upthe hitbox and image
- movement #Control player movement
- attack #Shoot at the enemy

Class Collaborations (other classes):

- PyGame sprite
- bullet

Class name: doomship_npc**Class Attributes:**

- self.screensize #Gets the screen size
- self.surf #Sets cover image for sprite
- self.rect #Sets the sprite's hitbox

Class Collaborations (other classes):

- PyGame sprite
- Random
- bullet

Class Methods:

- __init__ #Creates a sprite and sets the default values
- get_action #Gets the current action to be performed by the enemy
- movement #Moves the enemy around the screen
- attack #Has the enemy use an attack on the player

Class Collaborations (other classes):

- PyGame sprite
- Random
- bullet

Class name: bullet**Class Attributes:**

- self.screensize #Gets the screen size
- self.surf #Sets the cover image
- self.rect #Sets hitbox size

Class Collaborations (other classes):

- PyGame sprite

Class Methods:	Class Collaborations (other classes):
<ul style="list-style-type: none">• <code>__init__</code> #Creates the sprite with default variables to be changes with the bullets unique actions• <code>get_bulletType</code> #Chooses an action for the bullet• <code>bulletAction</code> #controls the bullets movement	<ul style="list-style-type: none">• PyGame sprite