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# Main.js

## Actions manager

### keyPush(evt) and keyLetGo(evt)

The method window.onload sets up event listeners on keydown and keyup, linking them respectively to keyPush() et keyLetGo().

These two methods set up Booleans on the variable “dirs” to be evaluated later.

### actionsManager()

This method is called in the main loop.

It evaluates some Booleans to trigger specific methods (firing, speed, …).

## Animations

### animateMissile(m) and animateEnemy(en)

These two methods simply increase the entities’ “x” and “y” by their respective “sx” and “sy” properties (named after speedX and speexY). Ad of now, the “x” parameter is not considered in the gameplay.

### animateItem(b,indx)

This method does the same as animateMissile and animateEnemy to an Item entity. The difference is that items change “x” direction when they reach an edge on either side. To do so, a “dirMod” variable is introduced, with a value of [-1;1]

### doEntityExplosion(entity, sprite, shouldLoop)

This method choses which portion of the @sprite should be drawn based on the spriteHeight, spriteWidth and nbFramesCount variables present on the @sprite parameter. The @shouldLoop parameter allows the animation to restart when it is done (ie for missiles) or to end (ie for enemy explosions).

As of today, this method displays the next sprite on every frame. A delay feature should be implemented to be able to slow animations down if needed.

### animatePlayer()

### adjustAnimationDrawing(caseName, sprite, entity, offsets)

## Creations

### createMissile()

### createMissile(direction)

### createCustomMissile(data)

### createBonus(name)

### createItem(name)

### createEnemy()

### createEnemytest(oStats)

### createHomeMenuChoices()

## Detections

### checkMissileOutOfBounds(m, indx)

### checkEntityCollisionWithMissiles\_getMissileIndex(entity)

### checkEntityCollisionWithPlayer(entity)

### checkEnemyOutOfBounds(en, indx)

### checkItemOutOfBounds(b, indx)

## Drawings

### drawScene()

### drawAimSight()

### drawBonuses()

### drawItems()

### drawMissiles()

### drawEnemies()

### drawPlayer()

### drawPlayerHitbox()

### drawAimSight()

## Firing

### startFiring()

### stopFiring()

### carpetBombing()

## Movements

### speedUpPlayer()

### speedDownPlayer()

## Spawn loops

### spawnEnemies()

### spawnItems()

## Stats

### addRage(amount)

### resetRage()

### addHealth(amount) // total : 200

## Utils

### getRandomInt(min, max)

### writeScore()

### writeStatistics()

### writeDebug()

### getPlayerPosY\_inPercents()

### adjustPlayerPositionsForBoundaries(item)

## Main loop

### update()

## Init

### window.onload = function() { ... }

### createHomeMenuChoices()

### initGameEntitiesOnGameStart()

### initLateVariables()