Extermination

It is a game for the android system using app inventor. The game’s objective is to last as long as possible while destroying objects before they reach the ground or bottom edge. The highscore is saved and can be checked on the main menu screen and game status screen. The score is kept and displayed at the top of the game screen with lives as images and are lost every time the enemy sprites reach the bottom edge. Instructions for how to play are available for viewing before and after the game is played.

Screens

MainMenu

TitleImage – Shows an image of the name of the game. Image is graphically designed in Adobe Photoshop.

OptionsArrangement – Vertically center screen arrangement holding three buttons which are the options of when game is first opened.

* StartButton – When clicked opens the Game screen where the game begins.
* InstructButton – When clicked opens the Instruction screen where instructions for how to play the game.
* HighScoreButton – When clicked displays the scores of previous games played below in the HighScores label.

HighScores – label that displays saved scores from within the TinyDataBase.

TinyDB1 – Saved scores are saved here and is use to communicate between screens.

Instructions

InstructImage – An Image created in photoshop of instructions of how to play the game. Having an image is easier than having a large label with multiple lines of code.

Game

StatusArrangement – A horizontal screen arrangement that shows players score and lives within.

* Score – label that displays score as game is played. Label is updated as user gains points. Starts at 0.
* Life1, Life2 and Life3 – Images representing the number of lives or chances the player has. When the player has zero images visible, the game is lost. User starts off with all 3 which are visible. The visibility becomes fall one by one

PlayCanvas – Play area for the game. The user can drag his piece (executioner) on this canvas and the enemy objects fall down on.

* Enemy objects (Ball1, Ball2, Ball3) – Are what the player (executioner) has to destroy and stop from reaching the end (bottom edge). Are of various radiuses and reset upon colliding with player sprite. They spawn randomly across the top of the canvas and fall until they reach the edge or collide with player object. When they reach the edge a life or chance is lost by the player and one Life image disappears. They fall also at random speeds with in a range of 5.0 and 2.0.
* Player – What the user controls by touching and dragging the Image Sprite anywhere across the canvas. When it collides with the enemy sprites the user gains points and the enemy sprite disappears.

TinyDB1 – Records Players final score after game is lost so it can be used in Screen1.

Screen1

Status – A label that displays a message on how well the game went after the game is ‘lost’.

FinalScore – The label displays the final score of the game just played by the user.

Save – Button, when clicked it saves the final score. The score is saved to the TinyDB. The user is given the option of saving their score or not.

Restart – Button, when clicked it is returns to the Game screen where the game beings from the start.

HighScoreButton – When clicked it displays scores from the TinyDB in the label, HighScore, below.

InstructButton – When clicked opens the Instruction screen where instructions for how to play the game.

Procedures

RndInt – for determine a random speed for the enemy sprites to fall or y-value for the sprite to spawn at.

* Max – a parameter for where the maximum random integer to be determined.
* Min – a parameter for where the minimum random integer to be determined.

Multiplyer – for enemy sprites going at speeds higher than 5 bonus points of 25 is awarded to the users score.

Variables

* Speed – Speed of the enemy sprite going towards the bottom edge.
* CScore – Current score as game is running.
* HScore – high score value saved from TinyDB.
* Chance – How many lives or chances the user should have.
* Counter – Keeps track of how many enemy sprites eliminated.