

Objective

This lab will introduce you to loading images into the GBA ROM and displaying them.

Tasks

An alien spacecraft has invaded your GBA with the intent of stealing Earth's gaming technology. Your mission is to destroy the alien invader using your ship's weapon(s).

1. (8 points) Write a **draw_image** routine which draws an image to the screen. The parameters should be:
 - o **position** – position to draw the image
 - o **address** – memory location of the image data
2. (2 points) Implement the ability to control the ship using the GBA's directional buttons (up, down, left and right).
3. (5 points) Have the ship fire its weapon when a button is pressed. The projectile fired can be a pixel, rectangle or image.
4. (5 points) Have an enemy ship flying across the screen. If the projectile fired from the player's ship hits the enemy ship, have the enemy ship disappear.

Bonus

1. (3 points) Implement an animation for the player's ship. (Example: blinking lights)
2. (3 points) Implement a death animation for the enemy's ship. (Example: explosion)
3. (1 point) Display a game over screen when the enemy's ship is destroyed.

