# CA2: Phaser Project – Multimedia Programming

## Introduction

The purpose of this CA was to create a casual game using the Phaser JavaScript Game Framework. Phaser simplifies the implementation of a physics engine through JavaScript and provides a number of game specific functions including state & asset management.

I chose to create an Asteroids remake. The game was originally meant to include enemy ships and weapon systems progression however I have not had time to implement these features. I have successfully implemented:

* Keyboard & Touch Controls
* An animated ship sprite through a sprite sheet
* Collision Detection
* Sound
* Level Progression
* A start screen

These features were implemented through research on phasers own documentation and an online tutorial.

## Code Description

My game has two states. The ‘main’ state is started when the game is ran. This state simply contains an image that when touched launches the next state. The main state.

The main state contains all of the code for the actual game. This code is broken into functions which I will describe below.

### Preload function

This function loads all of my assets into memory. This is the first function ran and ensures that all of the asssets are in memory before they are called on. The assets I am using include images for the asteroids, bullet, buttons and background, a sprite sheet for the ship and audio files. These are all imported in a similar way.

*game.load.image('asteroidS', './asset/asteroidS.png');*

## Create Function

The create function contains all of the code functionality for the game that is ran to instantiate the game. Functions which place all of the assets on the screen and start the physics engine.

**InitAssets()**

This function takes the assets it needs from the preload function and places them on the canvas. This is also where I have scaled some assets, prepared the sound files to be played and created the lives and ponts text fields.

**initPhysics()**

This function is where I have started Phasers Arcade Physics System. After enabling the physics engine on my sprites I pro

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