Pointless Knowledge(wannabeasteroids)-1\_0\_0-linux Feature Design Document

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# Executive Summary/Elevator Pitch

Sound effects for shooting bullets, asteroids being hit & ship moving if possible. It will add extra atmosphere to gameplay and provide additional information in complex/hectic scenarios when the eye may not be able to follow every event.

# Gameplay

When the player accelerates the ship forward or backward using the “w” or “s” keys respectively, the ship will produce an “engine” noise. Turning/changing the ships angle/aspect should not make noise (or later feature additions could possibly produce a different “turning” sound effect).

When the player fires a bullet using the “space” key a “shooting” sound effect will be produced. Can become staccato when rapidly firing bullets.

If the player fires a bullet which successfully hits an asteroid (the objective of the game) a rock “smashing” sound effect will be produced. Louder/different pitch sounds could be used for Big Asteroids, gradually reducing volume or increasing pitch for Medium Asteroids then again to the last Small Asteroids.

Optionally the disintegration of Small Asteroids could produce a different sound effect to alert the player of success, thus requiring no further attention to that position.

# Mechanics

The event sheet has a “Player” event group applicable to the Player (ship) object. Under this the sub-event “Player movement” has a “w” key press condition which is always applicable to the Player object. This condition produces the action of a forward force (of a given amount and angle) on the Player object. We will add another action when this condition is true that plays the sound effect asset “Lose 3.aac” of volume [50] 0-100 & boolean [no] to loop playing.

The same sub-event “Player movement” has the “s” key press condition, always applicable to the Player (ship) object, producing the action of backward force (of a given amount and angle) on the Player object. We will add the action when this condition is true that also plays the sound effect asset “Lose 3.aac” of a slightly lower volume [30] 0-100, a pitch (speed) of 1.5 & boolean [no] to loop playing.

Another sub-event “Player firing” in the “Player” event group has a “space” key release condition, triggered once only. This condition produces the action to create a “Bullet” object (of a given speed and direction). We will add another action when this condition is true that plays the sound effect asset “Boss Shoot.aac” of volume [100] 0-100 & boolean [no] to loop playing.

The event sheet has an event group “Splitting asteroids”. The sub-event “Split big asteroid” repeats for each instance of the “AsteroidBig” object. The condition AsteroidBig object in collision with a “Bullet” object has an action that splits the big asteroid into two medium asteroid objects. We will add another action to play the sound effect “Explosion 1.aac” of default volume [100] 0-100, the default pitch (speed) of 1 & boolean [no] to loop playing.

The sub-event “Split medium asteroid” repeating for all instances of the “AsteroidMedium” object has a similar Bullet object collision condition as the big asteroid. It produces the action to split the medium asteroid into two small asteroids. We will add another action to play the sound effect “Explosion 1.aac” of different volume [90] 0-100, a pitch (speed) of 2 & boolean [no] to loop playing.

The sub-event “Destroy small asteroids” repeating for each instance of the “AsteroidSmall” has a Bullet object collision condition like the other asteroids. It produces the action to destroy the small asteroids. We will add another action to play the sound effect “Explosion 1.aac” of different volume [80] 0-100, a pitch (speed) of 3 & boolean [no] to loop playing.

# Assets

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| --- | --- | --- |
| **Asset Name** | **Short Description** | **Source** |
| Boss Shoot.aac | Laser-like bullet sound  **Source**: Gdevelop Asset Store  **Category**: “space shooter by pixel boy”  **Asset**: Boss Shoot.aac CCO (public domain) | https://asset-resources.gdevelop.io/public-resources/Space Shooter by Pixel boy/Sound/208c11a06c6413ff7b02b490bf9dad801113167370013cdf516d1c4044ed7c22\_Boss Shoot.aac |
| Lose 3.aac | Sound effect to indicate spaceship movement. Backward motion (“s” key) uses the same sound effect at slightly lower volume and 1.5 pitch  **Source**: Gdevelop Asset Store  **Category**: “All assets”  **Asset**: Lose 3.aac CCO (public domain) | https://asset-resources.gdevelop.io/public-resources/Arcade/Sound effects/Lose/6ba89a9f2e7dc36e95d33b19fb5933cd516bce00d5ac6e72ba1bdfe9c98dfe46\_Lose 3.aac |
| **1)** Explosion 1.aac | All sizes Asteroid hit/damage sound effect (volume/pitch altered for size)  **Source**: Gdevelop Asset Store  **Category**: “All assets”  **Assets**: Explosion 1.aac CCO (public domain | [https://asset-resources.gdevelop.io/public-resources/Western FPS2D/Sound/68d16e38f82501c538c69cacf2f2491b4ff15cb34fa3ad08ce8e9445b4f1812a\_Explosion 1.aac](https://asset-resources.gdevelop.io/public-resources/Western%20FPS2D/Sound/68d16e38f82501c538c69cacf2f2491b4ff15cb34fa3ad08ce8e9445b4f1812a_Explosion%201.aac) |