Dodgy Bullet

'You can run but you'll have to dodge' - Gary

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Game Development Team Members

PRODUCER
Gary

PRODUCTION MANAGER
Gary

PRODUCTION COORDINATOR
Gary

GAME DESIGNERS
Gary

SYSTEMS/IT COORDINATOR
Gary

PROGRAMMERS
Gary

TECHNICAL ARTISTS
Gary

AUDIO ENGINEERS
Gary

UX TESTERS
Gary

1 Game Overview

Title: Dodgy Bullet
Platform: PC Standalone + iOS & Android
Genre: Action
Rating: (10+) ESRB
Target: Casual gamer (aging from 12 - 30)
Release date: May, 2020
Publisher: Slimsy Studios

Description: Enter a futuristic world where robots are set out to seek and destroy you. With nothing but an automatic rifle packed with ammunition and your two feet, you must dodge as many bullets as you can while they travel at high speeds. But be careful, what goes around comes around, look out for the bullets that you've previously dodged but have bounced back towards you!

2 High Concept

Dodgy Bullet challenges the player to use their fast reflexes and dodge incoming bullets shot by other robot enemies. The player is able to see where the bullets are coming from as they are slowed down enough to give the player time to react. In addition to this, players must be aware of the bullets bouncing off the walls as a bullet that was previously dodged will bounce back and potentially kill the player from behind. Each level is completed by collecting all the money scattered through the terrain and by eliminating all robots using the weapon they're provided.

3 Unique Selling Points

Many other shooters in the market such as Call of Duty focus on a high-intense, constantly moving, and mindless shooting, Dodgy Bullet focuses on using logical thinking in combination with fast reflexes to create a plan which will prevent the player from coming into contact with any bullets. The player cannot expect to be succesful if they spend all of their time trying to shoot at the enemy. Instead, they must plan ahead and take the best route to avoid dying.

4 Platform Minimum Requirements

PC, MAC AND LINUX STANDALONE OS: Windows XP SP2+, Mac OS X 10.8+, Ubuntu 12.04+, SteamOS+ Graphics card: DX9 (shader model 2.0) capabilities; generally everything made since 2004 should work

5 Competitors / Similar Titles

Dodgy Bullet is heavily inspired by SUPERHOT and SUPERHOT VR created Piotr Iwanicki. The mechanics of slowed down bullet travel and dodging are both present in SUPERHOT and were incorperated in a similar fashion within Dodgy Bullet.

6 Synopsis

In a futuristic world, robots have taken over and saught conflict with humans in an attempt to extinct them from the world. In an attempt to escape Earth and seek help on another planet, you as the player must push through waves of robots and collect the money necessary to build your own rocket.

7 Game Objectives

The objective of the game is to complete each level by clearing out several robots and collecting any money scattered through the level

8 Game Rules

Each level is a closed environment featuring lifts and doors to present new areas to the player. The player is limited to moving, jumping and shooting and must conserve their ammunition in a way that they will not run out of ammunition before destroying all of the robots present in the level. To assist with this, ammo packs are scattered through the level for the player to find and use.

9 Game Structure

```
          ┌──────────────┐
          │  Start Game  │
          └──────┬───────┘
                 │
                 ▼
          ┌──────────────┐
          │  Begin Level │◄──────────────┐
          └──────┬───────┘                │
                 │                         │
                 ▼                         │
             ╱Player╲      Yes    ┌─────────────────┐
            ╱ Died?  ╲──────────► │ Show Game Over  │
            ╲        ╱            └─────────────────┘
             ╲──────╱
                │
               No
                ▼
           ╱Enemies╲
          ╱ Dead?   ╲─── No ──┐
          ╲         ╱         │
           ╲───────╱          │
                │             │
               Yes            │
                ▼             │
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          ╱collected? ╲─ No ──┘
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           ╲─────────╱
                │
               Yes
                ▼
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          │  Next Level  │
          └──────────────┘
```
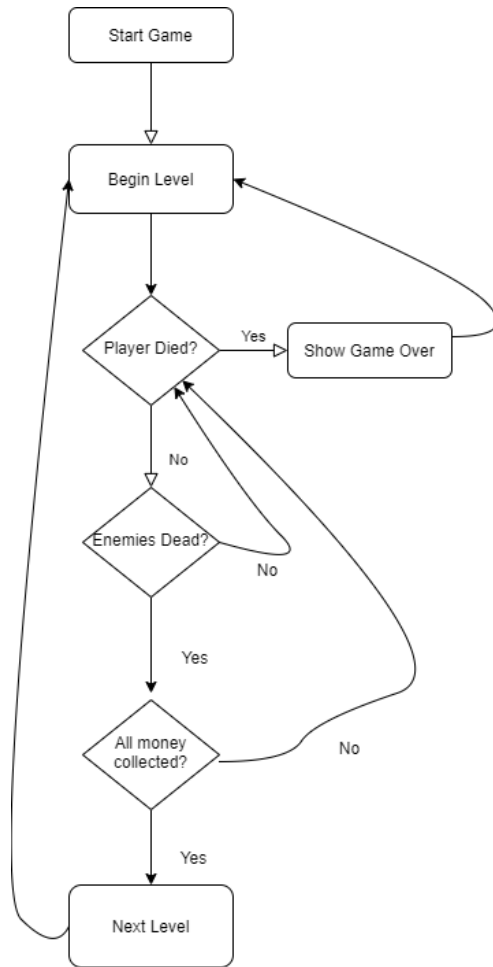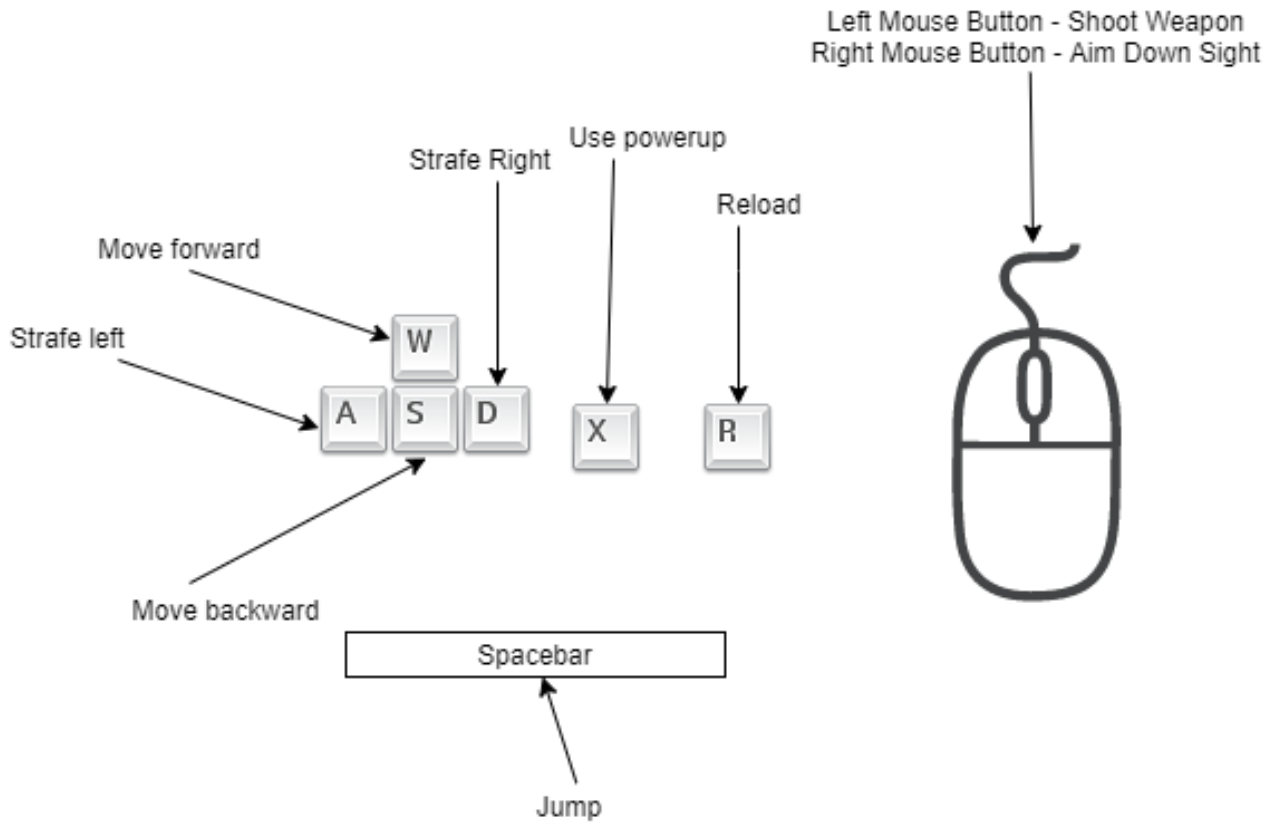
10 Game Play

10.1 Game Controls

Left Mouse Button - Shoot Weapon
Right Mouse Button - Aim Down Sight

Use powerup

Strafe Right
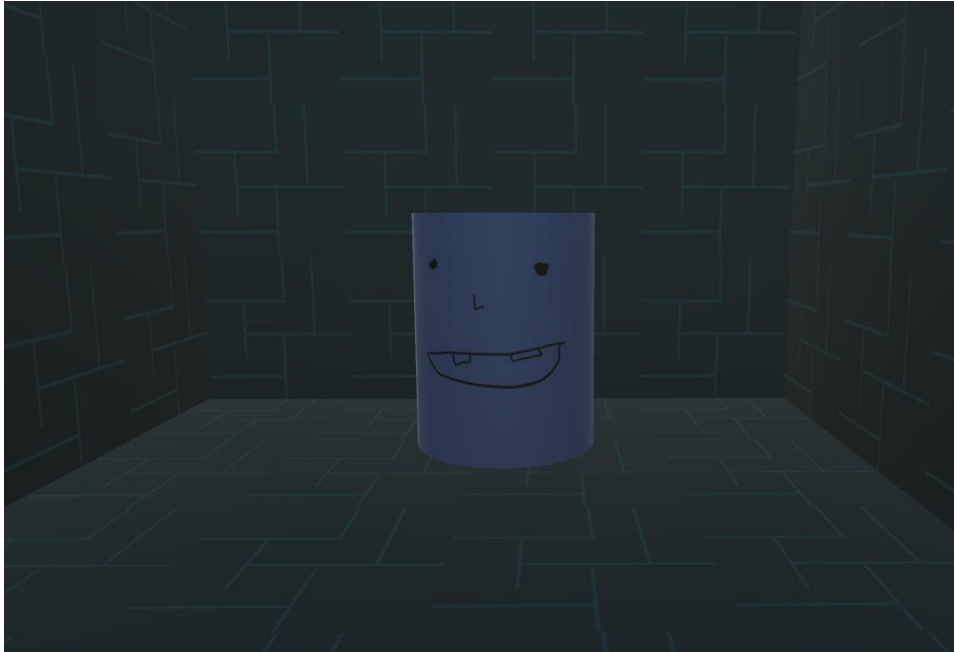
Reload

Move forward

Strafe left

W

A S D

X

R

Move backward

Spacebar

Jump

10.2 Game Camera

11 Player

11.1 Characters

In terms of character selection, Dodgy Bullet does not have many to choose from. Dodgy Bullet chooses to stay simplistic in terms of character design and instead focus on challenging the player to use their reflexes in an action packed first person shooter. For this reason, our character design has stayed simplistic with a simple cylindrical object with a drawn face.

11.2 Metrics

Speed:
Max Health: Can only take one bullet before dying
Attack Damage: 2 damage points per machine gun bullet
Time to attack: Instant (Fully-Automatic weapon). Must reload when clip empties (50 bullets)

11.3 States

Idle: Player is not moving.
Moving: Player is moving.
Jumping: Player is jumping. Can also be moving while in air

In all three states, the player is able to reload, shoot, or aim down their weapon sight

11.4 Weapons

Currently the only weapon to choose from is the UMP-45 fully automatic sub machine gun. Thi weapon has clip sizes of 50 bullets.

Weapon	Description	Effect On Enemy	Cooldown	Reticle
UMP-45	Fires bullets at enemy robots through a fully automatic firearm	Damages a robot enemy upon impact for 2 damage points per bullet	No cooldown	Yes, reticle(red dot sight) is placed at center of screen

12 Player Line-up

Player only has one character to choose from.

13 NPC

13.1 Enemies

The game features a glowing red robot enemy that fires bullets at the player. A future update would be to add additonal enemies to challenge the player to adapt to different types of attacks

13.1.1 Enemy States

Idle – The enemy robot is not moving and is not aware of a nearby player
Tracking Player – Upon visual contact with the player, the robot will begin rotating to match the players position in relation to the robot

Moving to Player – If the player is far enough from the robot but still visible, the robot will begin moving to a certain distance from the player to maintain a shooting distance

Shooting – The robot fires a single bullet towards the player. The robot could either be in a Tracking/Moving state when firing their bullets.

13.1.2 Enemy Spawn Points

Enemy	SpawnPoint	Spawn Rate	Max Enemies
RobotEnemy	RobotEnemySpawnPoint	One per spawn point	Dependent on level

13.2 Allies / Companions

The following powerups are used as an ally to the player in an attempt to increase survival time

| Name	Description	Effect on Player
Orb of Time Freeze	A bright yellow orb that allows the player to freeze time and stop bullets from moving. (Robots will still move towards player)	Freeze bullets in place. Note that bullets will still damage player if they accidentally touch one!
Ammunition Pack	Gives the player an additional amount of ammunition. Allows the player to continue shooting at enemies	Gives the player an additional 200 bullets
Money pack	An objective/collectable for the player. In addition to destroying all of the enemies, the player must collect all money packs placed on the level before they are able to advance to the next	Updates players tasking

14 Art

14.1 Setting

The game is set to be in a futuristic environment with robots and futurustic looking bullets fired at the player

14.2 Level Design

The level design within the game is set in a futuristic time period indicated by the blue wires that can be seen everywhere throughout the level. There are also moving platforms and automatic doors throughout the level to allow the player to transition to different spots of the level. In terms of lighting, the level is slightly dark to give the bullets a glowing effect
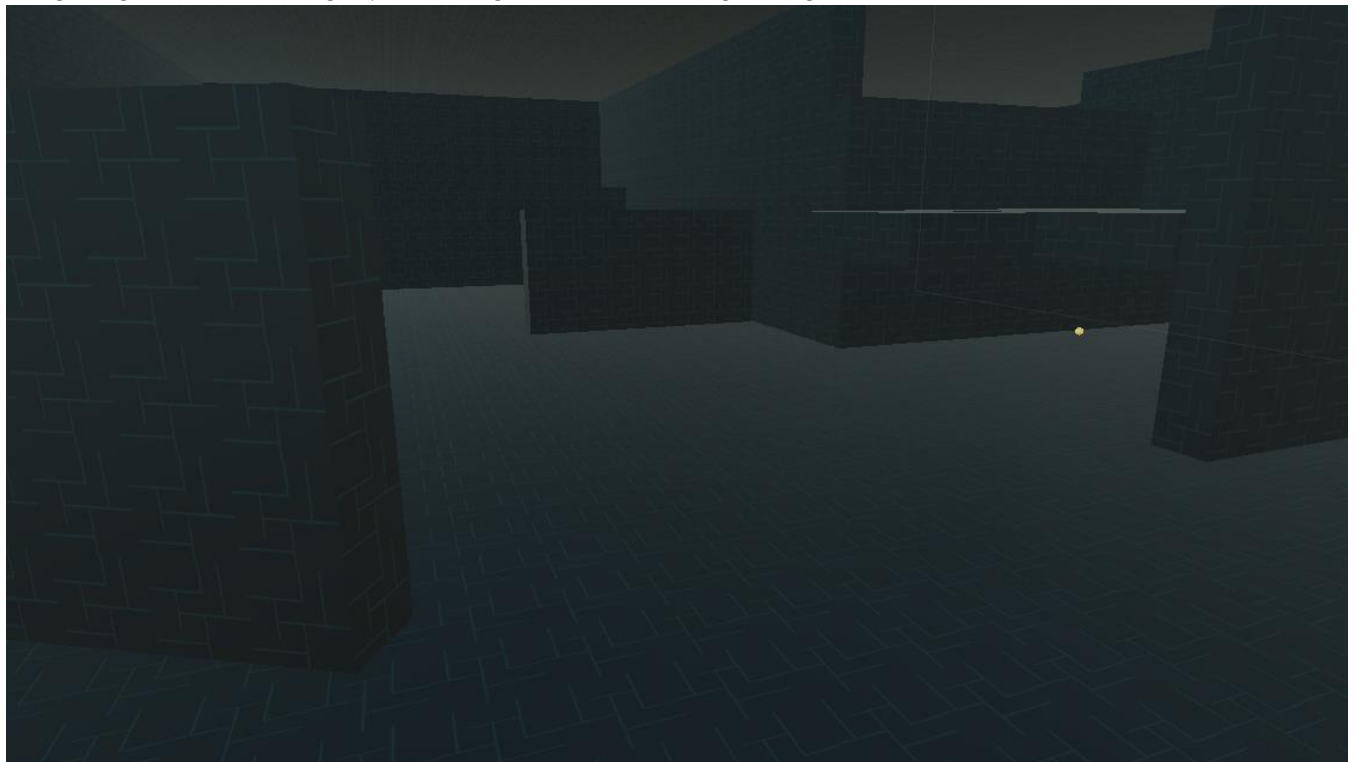
14.3 Audio

Name	Category	Description
BackgroundMusic	Background Music	A futuristic electoron audio clip that loops while the game is being played
EnemyDeath	Sound FX	An explosion sound played when an enemy is destroyed
ReloadGun	Sound FX	A reloading sound when the player inserts a new ammo clip into his gun
ShootingGun	Sound FX	A shooting sound that is played when the player fires his gun

15 Procedurally Generated Content

15.1 Environment

None of the environment is procedurally generated, each piece has been pre-designed

15.2 Levels

None of the levels are procedurally generated, each level was constructed using ProBuilder

15.3 Artificial Intelligence NPC

The enemies use NavMeshAgent's to navigate each level and approach the player

15.4 Visual Arts

None of the artwork has been procedurally generated. Aside from the 3D modeling and texturing for weapons and the robots, all designs were created from scratch.

15.5 Audio

None of the audio has been procedurally generated. All audio aside from the background music have been recorded from scratch.

15.6 Minimum Viable Product (MPV)

- A single player game built for the PC platform
- One character for the player to choose from

16 Wish List

- Port the game to a VR platform
  - The game would be very fun with virtual reality mechanics. Players could use their body to physically dodge incoming bullets

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