Buggy Situation

DESIGN DOCUMENT

By Mark for the 2024 January Pirate Software Game Jam

Introduction

Game Summary Pitch

Buggy Situation is a game about collecting collectibles in the level while bugs are spreading and helping/holding you back.

Inspiration

The inspiration came at my programming day job while I was trying to find a solution to some problem and encountered several very frustrating bugs on the way, that led me to the thought of how the bugs are spreading throughout the project the larger it becomes.
I had a more ambitious design with more elaborate bugs and mechanics to match with progression but reverted it due to too big of a scope.

Player Experience

The player will try to manage the bugs on the mechanics he needs to reach the different platforms scattered throughout the level.

Development Software

- Unreal Engine 5
- Mixamo Converter (by terribilisstudio) - for retargeting animations from Mixamo to UE
- Rider - for C++ code
- Blender - for exporting .obj files to .fbx

Genre

Singleplayer, puzzle, top down, platformer

Concept

Gameplay overview

The player will try to collect the collectibles scattered throughout the level and require different abilities from the player, while in the meantime the bugs are spreading and ruining/enhancing the mechanics of the game preventing/helping the player to reach the places he needs.

To be able to progress, the player needs to switch to a top down view and stomp the bugs to fix the game mechanics, or take advantage of the bugs that enhance the mechanics to reach difficult places.

Theme Interpretation (It's Spreading)

In every software development project, you start with a clean slate and the more you expand the project, the more bugs are creeping into it (of course mostly by you). In this game I tried to represent this idea through bugging the mechanics over time, and making interesting combinations of bugs in different mechanics that prevent you from progressing or help you to progress.

Sometimes the bugs are annoying and game breaking and sometimes as they say, "it's not a bug, it's a feature", they become the main game mechanic because they found out to be fun.

Primary Mechanics

- Platforming - jumping and traversing on the level platforms.
- Switching played characters - switching between first person character which platforms and collects collectibles to top down character to stop and "fix" the bugs.
- Movement modifications - the movement of the first person character can be enhanced (higher jumps, faster movement) or disabled (disabled jumps or slower movement) by the bugs.
- Stomping - crushing the bugs to keep the first person player's controls.
- Collaboration - using first person view to help top down character to find its way (somewhat hidden in game)

Art

Theme Interpretation

Without a lot of experience on the artistic side, and the game representing the bugs spreading throughout the development of a game, the game follows a "blockout artstyle", the bare bones look of a game at the beginning of its development.

Audio

Music

Has very quiet tension music that is almost not noticeable.

Sound Effects

Some basic sound effects were added to convey feedback for the player on actions done like pickup collectibles or stomping bugs.

Game Experience

UI

Very simple and clean UI consists of only menus, no in-game UI except for some pop-up messages at the beginning as a tutorial. No more information needed to be conveyed to the player.

Controls

Keyboard

Top down section:
- Tab - switch characters
- Arrow keys / WASD - move
- Space - stomp bugs

First person section:
- Tab - switch characters
- Mouse - move camera
- WASD - move character
- Space - jump

Extra

Shoot mechanic	Coding ▾	Not sta… ▾	Adding weapons in the platforming stage for the first person character to find for top down view character to use. (flamethrower) More satisfying ways for the player to kill the bugs and handle the high rate of bug spawn which was omitted due to this.
Crouch mechanic	Coding ▾	Not sta… ▾	Another mechanic to enhance/deteriorate for the arsenal to allow more complex puzzles and platforming