Bug Blasters

2D Game Design Document

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1. Scope

1.1 Game Concept

"Bug Blasters" is an engaging mobile game designed for Android and iOS that combines thrilling gameplay with a cyber defense theme. Utilizing Unity and C#, players dive into protecting devices from digital bugs across five escalating levels: Phone, Tablet, Laptop, Desktop, and Supercomputer. Each device has health points, vulnerable to bug attacks. The game features two bug types: black bugs, representing common threats eliminated with a single tap, and green bugs, tougher challenges requiring two taps. To advance, players must clear a set number of bugs which increment with each level, with the challenge intensifying as bugs increase in speed and cunning with each level as well. "Bug Blasters" offers a fun, interactive way to simulate digital defense, making players tactically eliminate threats to keep their devices safe. It's an ideal blend of entertainment and education in cybersecurity, perfect for players seeking an action-packed game with a strategic twist.

1.2 Game Genre

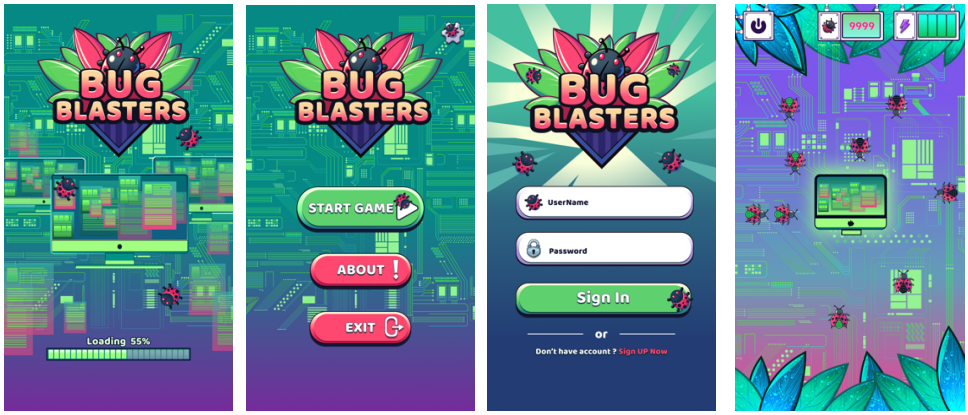
Casual, Action, Strategy

1.3 Intended Audience

The game is targeted towards casual gamers of all ages who enjoy quick, engaging gameplay that can be played in short bursts.

1.4 Look and Feel

Bug Blasters has a vivid and engaging UI design, brimming with bright colors and playful bug and computer themed graphics that unify the games various screens. The layouts are well organized and user-friendly, offering intuitive navigation with clearly labeled buttons and toggles for seamless interaction. The energetic circuitry motif in the background adds a dynamic digital ambiance that resonates with the game's vibrant aesthetic. The UI combines whimsy and clarity, ensuring that players are immersed in the experience from the moment the game loads. UI Samples:



2. Gameplay

2.1 Objective

The primary objective is to prevent bugs from reaching and "infecting" the device by tapping on them to defeat them and prevent from harming the device.

2.2 Gameplay Mechanics

Tapping: Players will tap on bugs to defeat them.

Health Points (HP): Both bugs and the devices have HP. There are two types of bugs: Black bugs and green bugs. Black bugs must be tapped once to be eliminated, green bugs must be tapped twice to be eliminated, and if a bug reaches the computer system, it will deduct from the device's HP. If the device's HP reaches zero, the game is over.

Levels: The game consists of increasingly difficult levels, currently 5 levels. Each level has a different device that needs to be protected while increasing difficulty of adversaries as player progresses.

3. Story and Setting

3.1 Narrative

The game will have a minimal narrative, focused on the player acting as the last line of defense of a device against an onslaught of bugs.

4. Game Components

4.1 Bugs

Bug design:

There are two type of bugs.

- **Black bugs:** 
- **Green bugs:** 

Bug health:

The bug's HP is the number of taps to make to defeat the bug.

Bug speed:

Each level the bug has a different speed.

Each level generates a different amount of bugs.

As the player defeats bugs in a current level, the generation and speed of bugs gradually increases during gameplay.

Balancing the speed is crucial for a good gameplay experience. It should be challenging enough to keep the game exciting but not so fast that it becomes frustrating. Speed and generation of bugs is adjusted based on playtesting feedback to find the right balance.

4.2 Devices

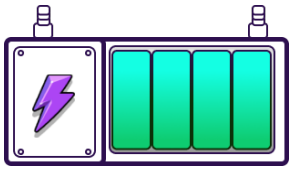
Computer design:

Each level will have a different device design.

- **Level 1 is a phone.**
- **Level 2 is a tablet.**
- **Level 3 is a laptop.**
- **Level 4 is a desktop.**
- **Level 5 is a supercomputer.**

Device health:

Device health will be displayed as a health bar.



HP are six. It takes six hits from bugs before it is shut down and player loses.

Each level the device's HP will restore.

When a bug reaches the device, the computer's HP will deduct.

The game is over when the device's HP reaches zero, and the user will have to restart the level.

4.4 Audio

Each action (tapping, bug elimination, game over, level introduction) will have a corresponding sound effect. The game will also feature a catchy background track.

4.5 Screens

- Splash Screen with game logo and loading bar
- Sign in/log in screen
- Menu screen (New(Start game), Progress(Continue game) About, Exit, Settings (Music on/off, sound fx on/off, log out)
- Game play screen (5 levels)
- Game over screen
- Level initiation screen with level instructions

5. Levels and Progression

5.1 Level Design

Initial levels (1 and 2) have only black bugs, and level 3 and above have both black bugs and green bugs. Each level increases in difficulty when it comes to bug speed and bug generation. The speed of the bug and generation of bugs progressively increases inside each level during gameplay as well. Each level has a different device that needs to be protected. Each level has a different amount of bugs to defeat in order to pass to the next level.

5.2 Progression System

Players advance by eliminating the amount of bugs required in each level and by preventing the device's HP (health bar) to reach 0, or be emptied.

UI will display, for example, on Level 1: 0/15

Level 1: 15 bugs

Level 2: 20 bugs

Level 3: 25 bugs

Level 4: 30 bugs

Level 5: 40 bugs

6. Technical

6.1 Development Tools

Unity Editor: For 2D game development.

Unity Asset Store: For audio.

Unity SQL Database: For local data storage.

Visual Studio: As the integrated development environment (IDE).

6.2 Platforms

The game will be released for mobile OS (Android and iOS).