Block Breaker

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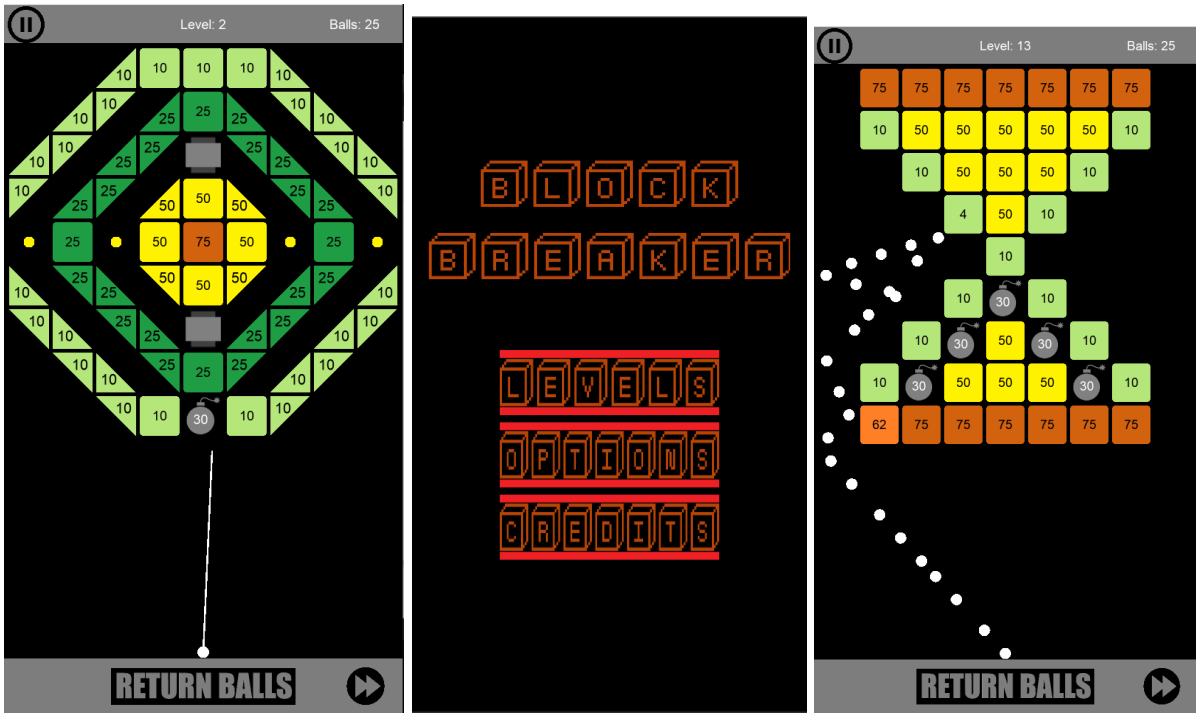
Concept:

Block Breaker is a puzzle game involving bouncing balls to break blocks before they reach the end of the screen. Puzzle games are perfect for mobile platforms because they can contain many levels and are easily monetized, which is the main benefit of publishing on mobile. They also generally have easy control schemes, which work well on a smaller screen. Each level is self-contained and unlocked by beating previous levels so the player can play it for short amounts of time and still feel as though they are accomplishing something. There are many similar games, as the concept goes back many years, even to Pong, one of the first games to ever release. Our target audience is anyone who enjoys puzzle games, and is suitable for all ages.

Game Mechanics:

Block Breaker is played by launching a number of balls, default is 25, towards an organized group of blocks with numbers on them. Whenever a ball collides with a block, that number goes down, and the color will change depending on what the number is. When it hits 0, the block is destroyed. That is the core concept, but there will also be a number of power ups that can be hit to introduce new ways of destroying blocks. These powerups could include row or column lasers, that when a ball is being passed through them does damage to blocks in that row or column. Bomb blocks could explode and damage nearby blocks when destroyed, and we could have triangles as well as rectangular blocks. The main obstacle will be level design, as we can place blocks in ways that could make it easy to destroy them all in one pass, or make it impossible to do it in one pass with densely packed clusters of blocks. We considered the touch screen as a tool, as this type of game is much easier to play when you can use touch to adjust trajectory.

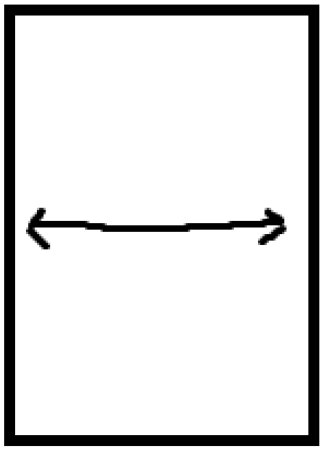
Screenshots:



Gameplay Example:

- A typical level will start you off with 25 balls. Most levels are built primarily around square blocks, so your goal will be to destroy all of them before one of them reaches the bottom of your screen. More advanced levels will include a number of special blocks that will affect other blocks. You will use your finger to guide a line that points to where your balls will shoot towards, and upon releasing the screen the balls will launch and bounce around, taking health off any blocks they hit. Once a ball hits the bottom of the play area it will be stopped. Once every ball hits the bottom of the player area they will be moved towards the first ball, and the blocks will move down towards the bottom. Winning occurs when all blocks are destroyed, losing occurs when a block touches near the bottom of the screen.

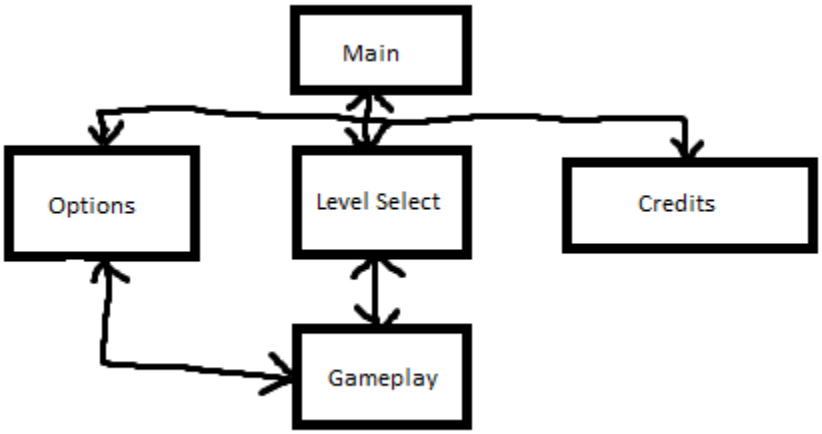
Control Scheme:

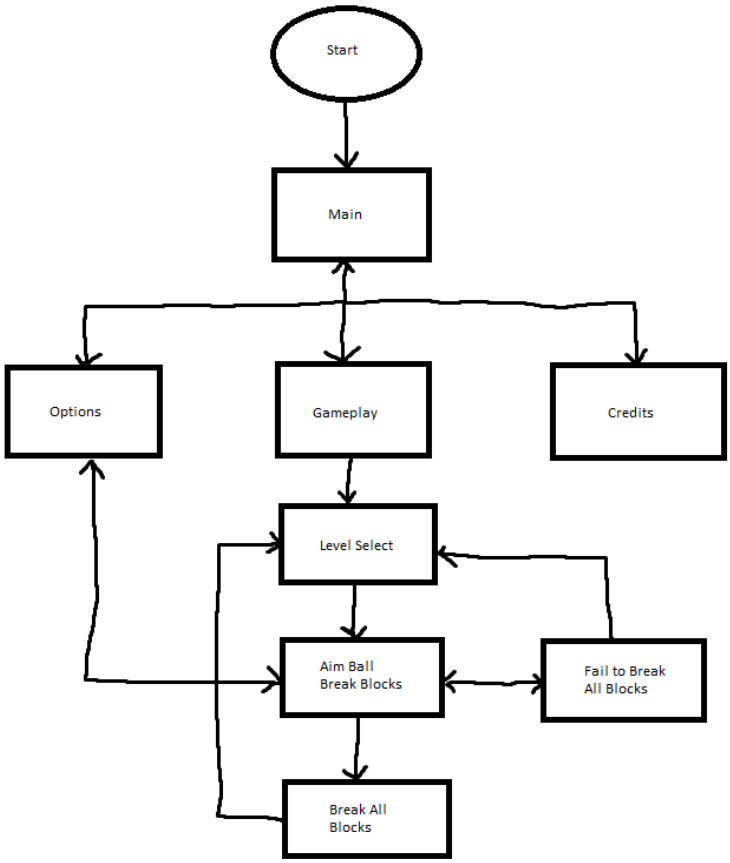


Scoring System

- Each level is scored with stars, beating the level with a small amount of turns will give you 3 stars, while beating the level with the maximum number of turns before the blocks fall below the loss line will give you 1 star. The most common score will be 2 stars.

Screen/Game Flow:





Tech:

Target Platform: Android/iOS

Targeted Screen Resolution: 1080x1920/Borderless Android 1080x1920

Visual Assets:

- Blackstar.png
- Bomb-sprite-sheet.png
- Creditsimg.png
- Fast-forward.png
- Goldstar.png
- Home.png
- Laser-sprite-sheet.png
- Laser-sprite-sheet-vertical.pmg
- Levelimg.png
- Lock.png
- Montemuroimg.png
- Next-turn.png
- Optionsimg.png
- Owenimg.png
- Pause.png
- Settings.png

- Spearkon.png
- Speakeroff.png
- speakerSpriteSheet.png
- Tiedemannimg.png
- Titleimg1.png
- Titleimg2.jpg
- Tonyimg.png
- Xbutton.png

Audio Assets:

- Ball.mp3
- Block.mp3
- Bomb.mp3
- Bomb-tick.mp3
- Laser.mp3
- Level-complete.mp3
- Level-fail.mp3
- menu.mp3

Resources:

- Sublime/VSCode
- Solar2D
- Discord

Discussion:

Implemented Features: We implemented everything we described in our original proposal.

Final Work Distribution: We both worked on every aspect of the game. Tony focused primarily on the game, adding new blocks and ball mechanics. Owen focused primarily on menus and saving, making sure that everything worked together when merged. We had no difficulties working together, meeting regularly through Discord and sharing files over it.

Future Work: We could add new blocks in the future, and more levels. We could also possibly add it to the google play store.