Gem Shooter

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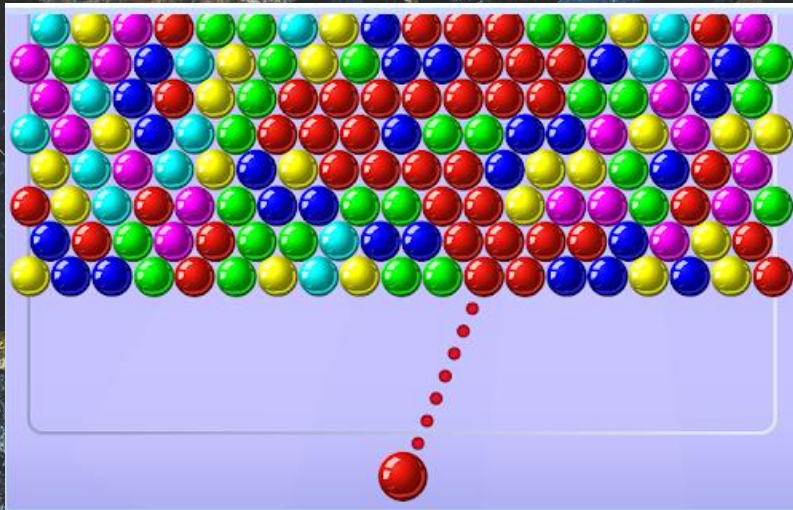
Gameplay

Players will have to use their quick thinking and logic skills to find the best way to clear the level as quick and in as little shots as possible. Gems will replace the bubbles in the image below but the basics will be just like any bubble / marble shooter game.

Depending on the difficulty / level the roof will move towards the player, and the player has to clear the gems by matching the colours or causing them to fall. If the gems get to close to the player they lose the game.

However the player can add some my spice to the game by dropping many gems at once to get a dynamite special used to clear gems in a cone, or keep a 5 matching gem spree to get a pickaxe which clears all gems in a line.

Interactions

The player will move the dotted aiming line via mouse or controller, allowing them to aim in an almost 180 degree area. The game will show the current gem and the next gem they will shoot so they can plan their strategy, however they can also swap between the two.

Interactions include the basic matching of gems, but also routes such as dropping gems connecting to other gems, once they are no longer connected to the roof, gravity will drop them down for the player. The various specials, angles and obstructions will result in the player interacting differently every time, keeping the game fresh for longer

Environments

The player is a miner within a cave / mine system which is slowly collapsing but the greedy miner wants those gems. The Environment will be simple, a rocky background, gems and obstructions such as clay and rock pieces.

Goals

The goal of the player is to clear all the gems before the roof falls on the player, extra points are rewarded using less gems and quicker times

Consequences

The first level is forgiving, but each level after the roof moves faster, so the user can learn to play on the first taking their time. Taking to much time on later levels will result in a quick loss as the roof moves closer the player could get flustered and surrounded by gems.

Game Flow

Game flow is the following, Play is selected, the user plays ending in a win or lose if lost they are told their score and sent back to the menu, if they win the score is shown followed by another game which is harder in difficulty. This loop continues for a few levels.

Splash Screens

Splash screens will be placed as the game loads when the .exe is clicked, another after clicking play from the menu and one for losing and winning.

Menus:

The menu will be very simple containing only 4 options of Play, Settings, Scores and Quit. Play will start the game well settings will have basic sound and music volumes and a back button. Scores will contain local scores and hold the top 10, starting with none and building as the user plays.

Quit will exit the game.

Gem Shooter

Play

Settings

Scores

Quit

Mock-up

This is a sample of the game well being played with labels for understanding. The **Deadline** is a visible line which purpose is to let the player know if a gem or rock hits this line they will lose the game. This would happen if the player takes to long to knock the gems down (doesn't affect the **Deadline**), the roof moves towards the player which pushes the gems closer to the **Deadline**.
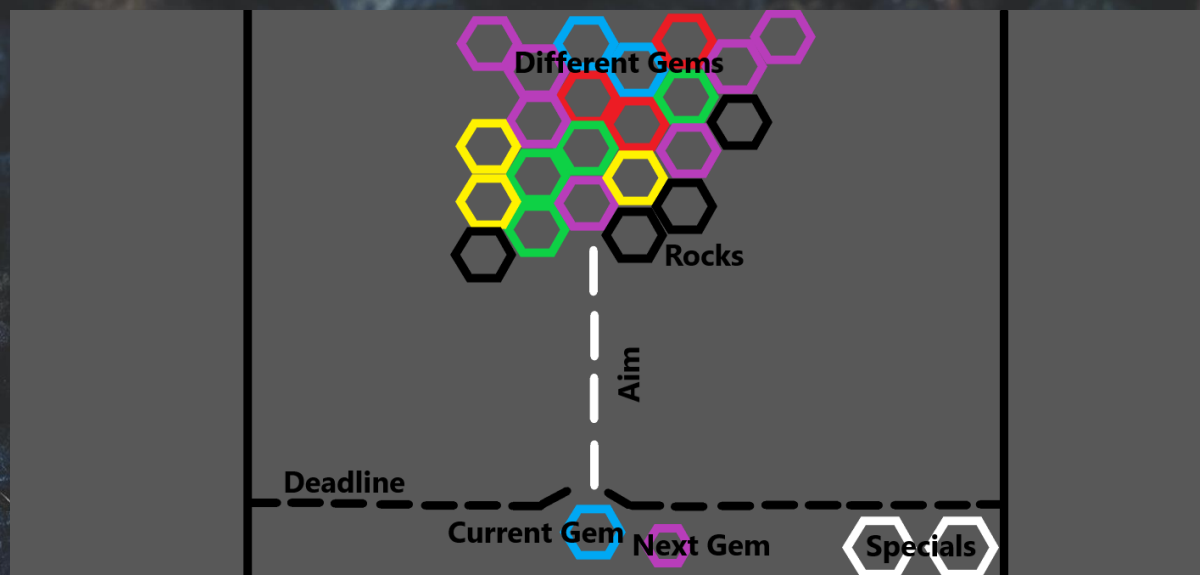
The player can swap between the **current gem** and **next gem** which lets them juggle gems they need at a specific time and create more options to hit gems. The **aim** moves in a straight line but can be moved to almost a full 180 degree angle so the user can bounce gems off walls to get around to gems behind the front.

Specials are locked until they are available via dropping 10 or more gems for the **Dynamite** or dropping gems 5 times in a row for the **Pickaxe**. Once unlocked the player can use this the **special** once and then its locked again. This is done by clicking the unlocked **special** which replaced your current gem for one shot.
Dynamite: when it hits a gem it blows gems down in a cone where collusion occurs 3 hexagons deep, note that **Dynamite** cannot blow though **Rock** but can though **Clay**.

Pickaxe: Based on the angle of the aim line the pickaxe will drop a line of gems till its off screen

Asset List

Sprites:
Gem sprites 5 colours (purple, light blue, yellow, red, green)
Rock and Clay Sprites
Icons for Pickaxe and Dynamite
Sprites for Pickaxe and Dynamite
Aiming lines
Background Sprite

Animation
Animation for gems falling, gem collusion.
Animation for Dynamite and Pickaxe effects

Game Sounds
Gem impact
Gem drop
Dynamite explosion
Pickaxe sound
Roof Collapsing
Roof Moving Closer
Win Sound
Lose Sound

Music
At least one track

Bibliography

https://en.wikipedia.org/wiki/Game_design_document#:~:text=A%20game%20design%20document%20(often,efforts%20within%20a%20development%20team.

Title Wallpaper
https://unsplash.com/photos/zwjSCTItiZU