O' DAM

EGD-220, Section 06, Team 2, Sprint 3
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1. **Intent** – In *O' Dam*, we intend to make a turn-based strategy game that blends competitive and cooperative elements to create a unique play experience. In the game, both players take on the role of prospectors trying to claim the most chunks of gold floating down a river. They do this by strategically placing differently shaped dams to control the path of the gold so that it floats towards their side. However, if the players fully dam the whole river, then the water will pour out from the sides and cause a flood, causing both of them to lose the game. This means that while each player is always competing against their opponent, they must also be thinking about when to cooperate (or not cooperate) with them for their mutual benefit.

2. **Concept** – *O' Dam* is a turn-based two player strategy game about greedy prospectors fighting over gold as it floats down a river. Players take turns placing dams along the water to redirect gold to their side of the river, or using their limited supply of dynamite to blow up their opponent's dams. If a player obtains five pieces of gold before their opponent, that player wins. However, if a section of the river is entirely dammed off, then it will flood, causing both players to lose. This means that both players must plan ahead and sometimes work cooperatively in order to avoid a flood.

   O' Dam's target audience is children and young adolescents aged 7-14. The game has enough strategic depth to appeal to those who enjoy the strategy genre, but its relative simplicity and low skill floor also makes it appealing to audiences who are younger, or are unfamiliar with strategy games. The game also rewards a variety of playstyles, so more cautious, passive players can have just as much fun as more cutthroat competitive ones.

O' Dam's art direction is aggressive and gritty, with muted colors, heavy shadows, and darling inking, reinforcing the game's themes, mechanics, and audience.

3. **Target Audience** – The general audience is children and young adolescents from ages 7 - 14 who enjoy competitive strategy games, as well as the parents who wish to play with them. The age demographic informs the design in several ways. For one, it means that the basic strategic elements must be simplified for young children to easily understand. However, the plans and schemes that can be utilized must still be deep enough that older players can use their intelligence and experience to succeed. The game rewards cautious, long-term planning as well as fast and aggressive sabotage, so it appeals to players of various personality types and playstyles. Certain mechanics, like the dynamite which can be used to destroy enemy dams, also encourage constant competitive interaction, reinforcing its appeal to those with a competitive mindset. The verbal negotiations that might go on to avoid floods would also appeal to competitive players who enjoy manipulating their opponent, or those who enjoy competitive games for their human element and mind games.

   The younger age demographic also informs the art and sound design of the game, making it a bit more light hearted in theming. However, the art doesn't stray away from the slightly gritty sense of the Old West, making it interesting to look at for the younger generation as it is more stimulating and distinct, but the older demographic are likely to enjoy the western style that they can identify. The art direction is also integral to appealing to competitive players, as its grit and references to the Old West and the Gold Rush invoke the feeling of cutthroat, winner-takes-all competition.

The type of player that this game is marketed towards is one who would enjoy light strategy games, or those that are seeking to break into the genre with a more simple entry. The audience should also be competitive, and always seeking to win against their opponent.

4. **Monetization** - Most of the monetization will first be gotten from game sales. We will be selling the game for 8.99 US dollars. This relatively low price should be reasonable for our target demographic to buy or convince their parents to buy for them. However, as we continue development for the game we can monetize future content, in the form of map layouts, challenges, and further mechanics. These new features will be sold for a small fee.

5. **Marketing Approach**-
   a. Facebook- Given the focus on parents buying the game for their children. We would post ads on facebook to target the older market. This is because a large portion of facebook are generally in the age range we want to target, but this does limit our exposure to our younger demographic.
   b. Instagram- Instagram would help us focus on the younger demographic, and younger parents, as they are more common members of instagram.
   c. Youtube Ads & Sponsorships- This marketing strategy will focus the most on the younger demographic in its entirety. Primarily it will be flashy ads that draw attention easily. After some time and if we gain traction, we can try for sponsors of those channels that focus on younger audiences.

6. **Content** – Players take on the role of greedy prospectors during the Gold Rush. After hearing of a river with a large gold deposit floating down it, they both arrive on opposite sides of the river at the same time. However, both prospectors want all the gold to themselves, so they each start damming the river to change the flow of the water and redirect the gold to their side, while also using dynamite to blow up their opponent's dams. But they must also keep their greed in check, for if either of them completely dams the river, their camps will be flooded and neither of them will get the wealth that they want.

7. **Player Motivation** - The core reason why players would be attracted to *O' Dam* is how it allows them to express themselves and outsmart their opponent. The main objective of the game is to gain five pieces of gold before your opponent without causing a flood, and each turn has players placing dams to either redirect the gold towards them or to sabotage their opponent's dam setup. The ways in which dams can either be used to help yourself or hurt your opponent allows players to express their personality through their playstyle, while providing constant interaction and strategic depth. The possibility of causing a flood also adds more tension to the later stages of the game, and encourages players to negotiate with one another to avoid a mutual loss. This negotiation process is a far more human interaction than is found in most other competitive games, and further allows players to express themselves through how they negotiate with their opponent and whether or not they keep their promises.

8. **Game States** -

    a. Start State: At the start menu the players have the choice of playing, learning how to play, exiting, or observing the credits. When they press play the players first choose the color that they wish to play, then the game begins and they enter the playing state. At the very start of the game, both players are given a chance to place down a single dam before the gold starts flowing.

    b. Playing - In this state both players place their dams to try and move the gold to the other side of the river to score a point. They must keep on the lookout for dam the whole river to enter the Loss Both state

    c. Loss Both- In this state the players have damd the whole river, meaning the gold can not move down, and their camps have flooded. Both players lose and they must reset the game to the start of the playing state.

    d. Loss Alone - In this state one of the players has lost the game by not collecting five points. They are the only player that loses.

    e. Victory - In this state one of the players has successfully collected five points, meaning they win the game.

9. **Mechanics/ Systems** –

    I. Game Set Up Systems:

a. Choosing Color and Side: At the beginning of the game the players choose what color, either red or green they want to play as this determines the order of turns and what side of the river they want the gold to land on.

b. Generating the gold: The gold is then placed at the top of the river in a random location.

II. Water and Gold Physics:

c. Gold Movement: The gold moves programmatically based on the dam it hits. For example if it hits a horizontal dam it moves to the nearest side and then after it reaches the edge it continues going down, mimicking the flow of a river. If the gold hits a diagonal it bounces off an amount of spaces based on the distance it was above the diagonal dam. Often diagonals are the main method that the players will bring it to their side as it lets the gold move the most sideways.

d. Spawning Gold: Every turn or so the gold is spawned in a random location at the top of the screen. This can happen in several areas, meaning there is more gold on the screen at once.

III. Turns and Playing systems:

e. Placing dams: The red player may then place their first dam. They may place a horizontal dam which lets the gold slide off it, or a diagonal dam which the gold bounces off of if the gold hits it. Then the green player places their damn either horizontal or diagonal. They have a small pool of dams that they may choses from, so they must choose carefully.

f. Dynamite: Each player is given three dynamite pieces, the players may use this to destroy dam pieces, either their own if they believe their placement was poor, or the other player's to sabotage them. Once a dynamite is used it is expended and they can not gain more.

g. Gold Reset: if the gold reaches the bottom of the screen it returns to the top.

h. Dam Durability: When a dam is hit three times by gold it then breaks. This is done to make perfect strategies and placements more difficult as the dams will break, and change the playing field. It also makes the first placement more considered as the dam is already a limited recourse, and it breaking limits it's foolish and unconsidered use.

i. Beavers: Occasionally there will be beavers progressing from the bottom of the river to the top. When a beaver hits a dam in a handful of turns the dam is destroyed and the beaver continues moving upward, until it leaves the screen from the top. This adds an element of confusion, and thinking on the fly, which can add interest and engagement to whatever match is occuring. In addition it also hinders perfect strategies.

IV. Victory and Loss Systems:

j. Gaining Points: If the gold moves onto the side of the river that player gains one point. To win one player must collect five points

      k. Damming the Whole River: If the gold can not progress down and the river is fully blocked, the camps on both sides of the river flood, and both players lose.

      l. Winning: When a player gains five points that player wins the game and the game is reset for another game.

10. **Game Engine** – We have chosen to use Unity version 2019.2.8f1. This was chosen due to the programmers, design, and production having experience in using this engine. We also believe it to be the most useful for our purposes given its robust physics system, which can help us mimic the movement of water, or at least inform us, should we truly go with moving programmatically. Unity builds can also be easily accessed and fixed, and the usage of public variables can make assembling the game rather easy, should anything small needs to be changed. Unity also is extremely useful for creating builds for many different systems, including mobile and PC which are our target systems.

11. **Art Direction** - The art style will be visually more gritty and grungy. Using deep shadows, and deep solid ink. Any colors that are present are dulled to add to this aesthetic. The influence for this direction is the wester aesthetic that uses lighting and muted colors to establish the time and place and the grittiness of the era. In addition the art should accentuate the competitive nature by it being more rough and unpleasant.

12. **Sound Design** -

      a. Menu Theme: The menu should have a simple, quiet song reminiscent of older country songs such as "O' Death". It should include instruments that

invoke images of the time period, such as guitars, banjos, spoons, harmonicas, flyers, etc.

b. Main Game Theme: The main game theme is a country instrumental with a fun and upbeat tempo, but not so fast or energetic that it suggests an action game.

c. Sound Effects in Game:

   i. Water: Due to the water being a constant presence, it should be gentle and be on the quieter side of the sound effects so as not to be annoying. It should make a simple rushing sound to mimic the movement of a river.

   ii. Placing Dams: When a dam is placed, it should have a satisfying thump and splash, and then small sounds of hammering or sawing, to show that it is being built.

   iii. Gold Hitting Dam: When the gold hits a dam, it should make a loud and clear "thump", so to absolutely ensure that the player understands that the gold is affected by the dams.

   iv. Gold Hitting the Sides: When the gold reaches a side of the river it should make a sound similar to parting sand, and the clink of rocks on rocks. This is to help complete the image in the player's mind of the prospector retrieving the gold for themselves.

   v. Successfully Gained a Point Sound: When a player gains a point they should have an appropriately satisfying sound. This sound is likely a "yee-haw!" or other similar yells of joy, and/or a small riff on a guitar.

   vi. Flooding River: If the river floods, the sounds of water should grow in volume and speed, while adding sounds of waves crashing and wood splintering. This should communicate that the camps have both been flooded, and to make this mutual loss state feel genuinely climactic.

vii. Victory: When a player scores their final point to win the game, then
    a sound similar to the "point gained" sound will play, except the
    yells will involve more people, and the music played will continue
    on, with more instruments involved.

viii. Dynamite: When dynamite is used it should make a sound
    comparable to an explosion. However, with our limited resources, it
    may have to be a stock sound effect.

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