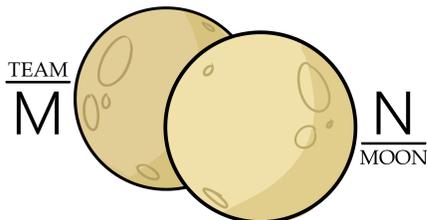


Coal Rush Concept Document



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Mikael Ferroukhi: Artist

Esbjörn Holmerin Nord: Artist

Sofie Lindberg: Artist

Konrad Skagerberg: Programmer

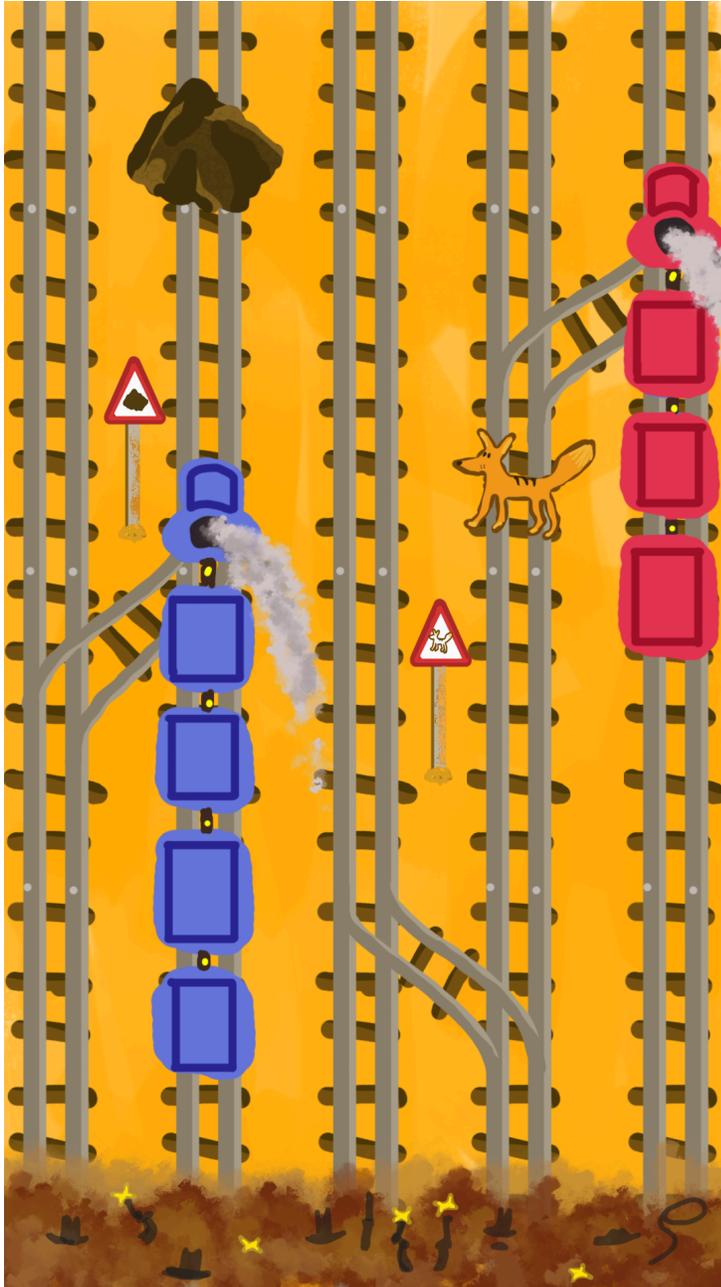
Jeppe Willatzen: Programmer

Simon Ågren: Game Designer, Product owner

-Elevator Pitch

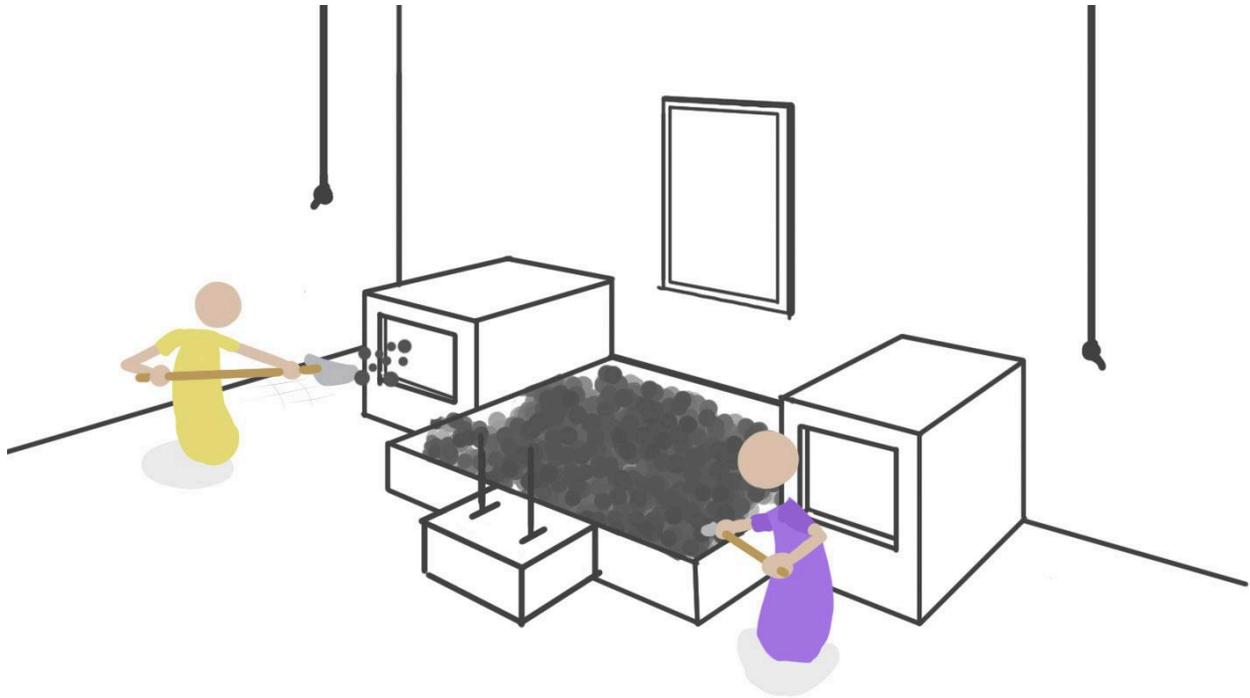
Speedrunners with trains: You are two train conductors that get attacked by bandits while trying to reach their destination. You have to deliver these goods and there can only be one survivor!

-Concept Sketch



-Interaction

You pick up coal in the "ballpit" using your shovel, you then throw that coal into the furnace in which they will go through a slide. On that slide will be a laser pointer and a light receiver that catches the laser signal, when a coal piece cuts through the laser, the signal is interrupted and it makes the train accelerate on screen.



The players use a lever to switch the position of the tracks in-game. Each lever will have one button which is pressed when the lever is pushed.

Finally the honk cord produces a train whistle-sound that can be used to scare off animals on track and also for fun.

-Key feature

The shoveling action: having to actually bury your shovel into the "coal" to pick it up and throw it into the oven

The track-switching mechanic: the players use a lever to switch EVERY track in the game, creating some intense moments for both players

The train whistle mechanic: what feels more like driving a train than sounding the train whistle?

-Aesthetic goals:

What you should feel

- Like you're working on a train, hard work,
- Racing, stressed, in a rush
- Competition

What you shouldn't feel

- Frustrated, annoyed, irritated
- Relaxed, bored, complacent

How we convey those feelings:

The players will get the feeling of working on a train by using our unique input. By replicating the actions one would perform when working on a wild west style coal powered steam train, mainly through shoveling "coal" into an oven, the player will feel like they're performing real work. Every control of the game is made so that it "feels" like doing the action in real life, strengthening the aesthetics of the game.

By pitting two players against each other both in game and in the physical space, they will get a feeling of competition. When using the input, players will compete for coal pieces. They will also compete when using the lever, since changing tracks also effects the opponent.

The gameplay is also inherently competitive, since in the style of Speedrunners, the player in the lead will set the pace of the game.

The racing aspect combined with performing a physical action will also make players feel rushed to perform as quickly as possible. In some cases players may even feel stressed, which still fits our aesthetic goals.

The player shouldn't feel frustrated with the controls, which we will accomplish by making the controls as clear and easy to use as possible.

The player also should at no point feel safe or complacent, which could happen if one player doing a lot better than the other. This will be avoided by having catch up mechanics and by having a player that repeatedly falls behind lose quickly.

-Target Audience

The target audience is determined based on these aesthetics, along with the fact that the game is a custom built arcade that you will only be able to play at certain times when the arcade is on

display. The extended audience would be anyone that comes to an event like the Gotland Game Conference or any other Video Game event with at least one friend who they would enjoy having a competitive experience with.

The feeling we want the players to experience while playing the game can be compared as the one you get in Mario Kart: a love-hate relationship where you do everything in your power to sabotage the other without sabotaging yourself.

The more specific target audience is people ages 15 to 25 that are at one of these events with at least one friend. They like Arcade Games and probably have some sort of appreciation of the wild west theme and some prior interest in fast paced competitive games such as Speedrunners.

-Gameplay

The game is a race between two players, each controlling a train. The players make their train go faster by shoveling coal into the furnace, making them move up on the screen. As one player moves further up the screen, the other player moves down and closer to the bandits. When a player's cart touches the bottom of the screen, that cart is lost. Once a player loses all their carts, they lose the game.

In addition to moving faster by shoveling, the player can also use a lever to switch the direction of tracks. When the lever is pushed forward, the direction of all tracks change.

The tracks have intersections connecting them, they allow the players to move to the next track on the left or on the right, using the lever allow the players to control in which direction they will turn.

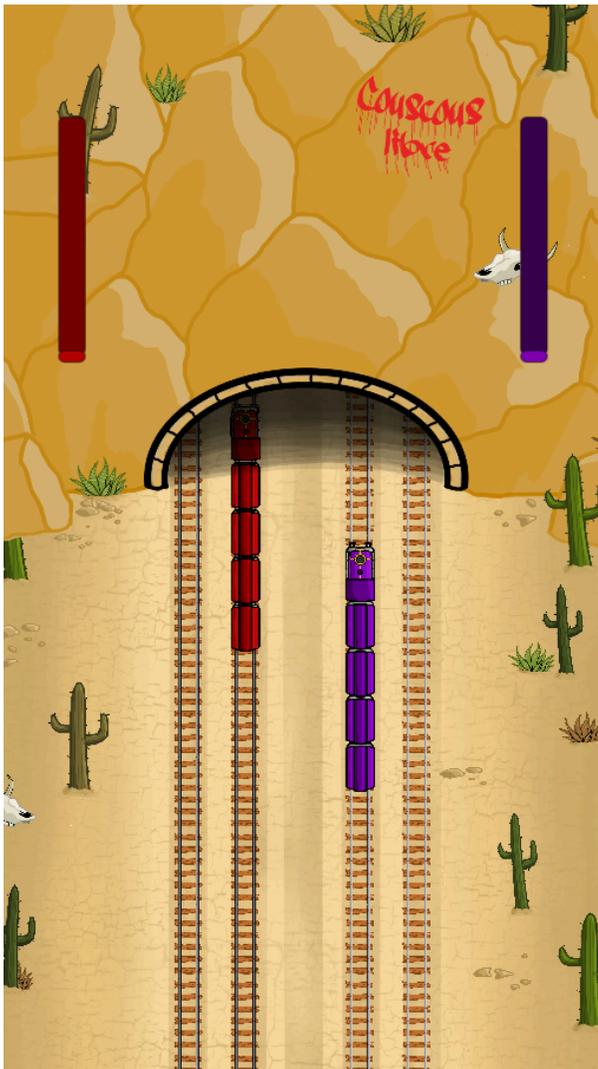
There are a few different obstacles on the tracks that the players must avoid by switching tracks, the opposite player can also switch the tracks for the other player to force that player into an obstacle. If a player hits an obstacle, they slow down, and risks losing a cart in the process. Different obstacles will have to be approached in different ways. Standard obstacles like rocks and trees other blockades will just have to be avoided. Animals can be scared off the tracks by sounding the whistle.

Occasionally, signs will appear to inform the players that a new environment or a new set of obstacles lies ahead.

The player will be able to pick up a power-up on track allowing them to destroy the next obstacle that they will face without getting slowed down, while also creating debris on the adjacent tracks. This will create obstacles for the other player.

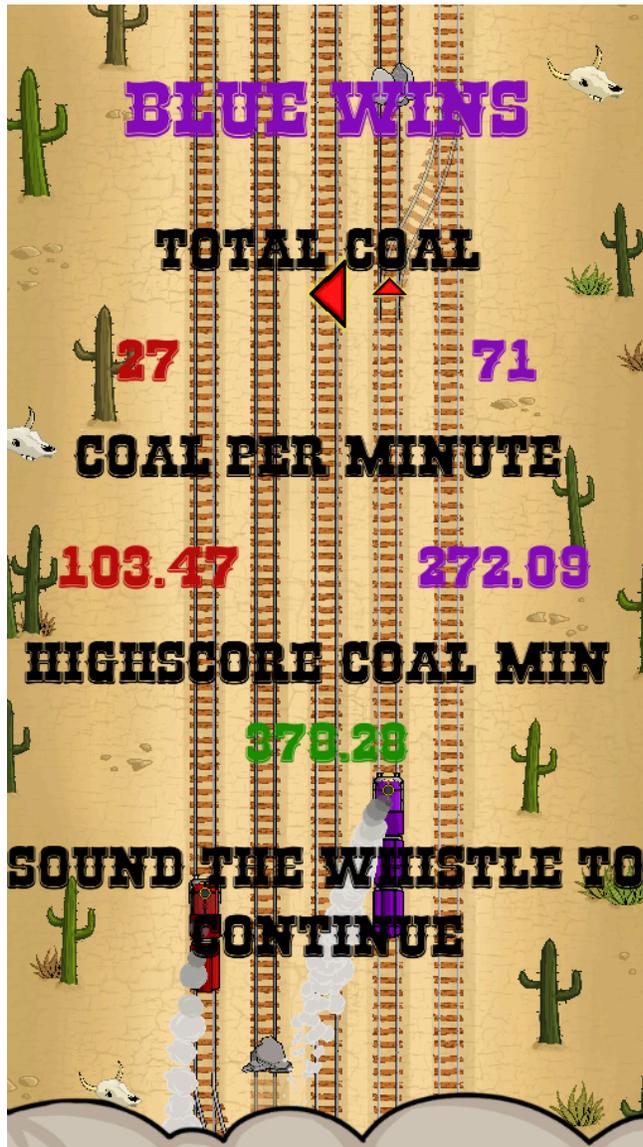
-Short description of a game session

Since the game is played in an arcade setting, the game will always be on, having the trains roll along in a sort of tutorial level. Once two players are ready to play, they both sound the whistle at the same time, making a tunnel appear which transitions into the main gameplay mode.



The race starts out with the two trains travel parallel to each other. Obstacles, intersections, animals and power-ups are then put in the path of the players with increasing complexity. The two players hectically shovel as much coal as they can, while using the lever and whistle to avoid obstacles, and to mess up for their opponent.

Eventually one player will lose all their carts, and the other player then wins, ending the game. When the game ends, information about how much coal they managed to shovel is shown and they can compare it against the (or set a new) highscore.



-Ingame Screen



There are almost no GUI, all the information needed for the game is visually translated through the train carts. The only GUI is the arrows that are positioned on the intersections.

-Visual style

Cartoony, Wild west vibes, trains



-Sound

Sounds will attempt, in a funny way, to convey important information about the game to the players while they are performing actions that prevents them from looking at the screen. This is done by using a mix of classic wild-west themed sounds with cartoon sounds.

For instance, when animals are within the field of view of a player a howl (coyote) or squeek (hedgehog) will be played to alert the players. Additionally, colliding with different gameobject will also produce a sound.

Sounds produced from playing the game, i.e. shoveling coal, will also help drive the arcade-feel of the game, further promoting the fundamental aesthetics.

<https://www.youtube.com/watch?v=PYI09PMNazw>

<https://www.youtube.com/watch?v=wRSHzenjiNA>

<https://www.youtube.com/watch?v=WjEzExukNMs>

<https://www.youtube.com/watch?v=mLXQItR7vUQ>

-Risk assessment

We are aware the game is demanding and will require a lot of physical work, as such we want to make sure we start work as quickly as possible on the actual arcade booth. Furthermore we need decide on an MVP for the physical stuff to make sure the baseline for the physical inputs is met.

The design is also a risk factor since it requires a lot of playtesting to get the competitiveness and content right so that we can ensure our Aesthetic goals are met. Evidently, the way to prevent any problems with the design is playtesting, therefore we should definitely schedule one day a week for a full-group playtesting session.

If we were to be in the position that the deadlines aren't met in time and the full project wouldn't meet our MVP expectation, we will first scale down the booth size and focus more on the input and the gameplay. If it is still not enough time we will simplify our inputs. For the art and programming part, we would make the game simpler and produce less diversity in the assets.

-Rough management plan

We are planning on meeting daily for work sessions. That way we all together agree on what we work with and we can easily keep track of the progress made, and make changes if necessary. These will of course be accompanied by daily stand-ups in the morning as well as sprint planning and retrospect on Monday and Friday. Since we have three artists It would be preferable to split up their work after the concept stage to have someone assist in terms of physical art, this way three artists aren't working on digital art for the game. This way we can get both an attractive booth and game and there will hopefully be less disagreements in the art department. We have decided that the Scrum Master and Product owner, Alec and Simon, will be working on the physical booth whereas the others will focus primarily on the digital game. Potential assistance from one of the artists is possible as mentioned previously. By having at least two or three people working on the booth continuously will help our group stay on track and limit confusion for any group members having to switch between digital and physical.

- List of hardware

We don't need a standard arcade.

- 2 speakers

One on each side of the booth so that each player hear its respective sounds

- 1 screen,(big) at least 40 inches, at least 1080

Since players will be moving around a bit while playing, the screen needs to be quite large.

- 1 I-PAC card
- 4b buttons (mechanism)

In order to use for track changing mechanism and the "coal ball" detection as well as honking the horn.

- 2 kid shovels

preferably something like this

<https://www.k-rauta.se/byggvaruhus/sn%C3%B6spade-bil-fiskars-solid>

For each player to pick up coal balls

- 2 wooden lever (stick)

So that we can use the track changing system even without the shovel

- Two handles

So that we can attach them to a cord and use the honking system

- Plywood, 5 piece of 3*3 meter
- Wooden boards

To build the booth

- Brown, blue, red, and white buckets of paint

To paint the inside and outside of the booth

- Black spray paint

To paint the goal balls into coal balls

- 2 Light receivers

To count the exact amount of coal balls that is inserted by both players.