Note: The game in question was a block destroying game, like tetris. Company name and other identifying information have been changed or removed to respect their privacy. The little creatures that are the main attraction of the game have been renamed to 'Mascots'.

1. Game Analysis and Improvement Proposal

The game's UI is very clean and clear, and the menus and gameplay feel quite intuitive. The gameplay itself is fun, and merging Mascots into a level 5 and then exploding it feels great. Not being able to rotate the blocks elicits slight feelings of frustration in some cases, and exploding the lower level Mascots is a little disappointing when comparing to the level 5 ones.

Unlocking new Mascots is rewarding and reading about their personalities is a fun addition. After unlocking all Mascots available, there seems to be a big gap before the next attainable goal. I feel a few smaller stepping stone purchases might be beneficial. This principle applies to daily goals and achievements as well, as they all felt quite far away after unlocking a Mascot in each level and trying to find a new goal to attain.

After playing a few games it was easy to start feeling like wanting some variety in the games, such as different kinds of blocks or some variation in the level itself. This also exacerbates the feeling of a big gap. As a side note, I encountered some possibly unintentional functionality, as all Mascots were available for 5 coins, and after buying them I was left in the negative.

I have decided to suggest an improvement for each of the categories, which were game mechanics, user interface, and the economy system, respectively.

Improvement 1:

A gameplay improvement I would suggest would be the ability to rotate the given block options before placing them. The reasoning for this is that I think it would be beneficial to allow the player to feel more agency over their gameplay as well as increase the strategic value of each play session which would increase player satisfaction.

During my testing of the game I noticed feeling disappointed upon seeing a perfectly-shaped hole for my blocks, just in a different rotation. This change would help alleviate that possible frustration as well.

Improvement 2:

A user interface improvement I had in mind was to show close-to-completion goals and achievements in the home screen. This would not only allow for introducing these screens to players who might not have visited them before, but also entice the player to play a bit more if they are close to obtaining a goal or achievement they want as well as give a suggestion for something to do when returning to the game.

These 'reminders' could either be similar to the items in the goals and achievements screens that are just displayed on the home screen, or a plain notification icon over the goals and achievement screen buttons on the home screen.

Improvement 3:

A game economy improvement I thought of was to add more ways to spend coins in the game. Currently the only things to spend coins on are to unlock Mascots and tile skins, so if a player either does not want to unlock any, or already has unlocked the ones they want, there are no ways of spending coins anymore.

My suggestion would be to make it possible to spend coins to unlock Mascots during gameplay, as an alternative to watching an ad, or add functionality for paying coins to refresh the available blocks in order to get another chance at clearing lines or squares on the screen.

I think this would serve players who are going for a higher score as well as players who are done unlocking things with their coins.

2. Feature Design for Player Retention

Below is the GDD template filled with details about my feature, called 'Mascot ranks'.

I. Summary

The new 'Mascot ranks' feature expands on the current Mascot screen and Mascot profiles by adding ranks to each individual Mascot. These ranks can be progressed through gameplay, paying coins, or watching ads. Each rank then alters gameplay in some way. The idea is to let players get to know the Mascots they unlock better, give some more character to each Mascot and allow players to be able to achieve higher scores by investing into the feature.

II. Goals

- Goal 1: To allow for a more varied gameplay experience
- Goal 2: To increase the impact of Mascots
- Goal 3: To increase avenues for using coins
- Goal 4: To increase overall retention
- Goal 5: To onboard a wider variety of players
- Goal 6: To increase player satisfaction
- Goal 7: To increase session length, interval and depth
- Goal 8: To increase player lifetime value

III. Effect and Measurement

- **This feature can increase Player Retention by up to X%**
  - Increasing the possibilities of player progression and complementing other progression systems within the game should be beneficial for all current players as well as welcome in a larger variety of new players. It also helps extend the longevity of the game by giving more variety both in terms of progression goals as well as rewards. While it is difficult to tell exactly how much player retention might increase without actual data, increasing the possible avenues of progression, and the rewards that come with it, should increase overall player retention.
  - Additionally, this feature also increases the value of each new Mascot added into the game.

- **Risk factor**
  - Ensuring the feature is engaged with may affect user experience.
    - Intrusiveness can be iterated on based on player data.
  - Players may not want to engage with the new feature.

- Feasibility of this feature can be determined by looking at analytics data on how much and how often players engage with the current Mascot screen
- Ensuring appropriate rewards should entice players to use the feature.
  - The feature is too costly or complicated to implement.
    - The feature is quite scalable and solutions can easily be found to implement it in a smaller or a larger scale and it can be expanded upon later on.

IV. Overview

'Mascot ranks' is intended to give permanent progression for the player in the form of ranks that are individual for each Mascot, and they will affect the player's performance in gameplay by naturally increasing the scores they get if they continue engaging with the feature and gaining ranks for their Mascots. It also helps to increase the impact individual Mascots have, so when adding new ones to the game the players will get more out of them overall.

The feature complements and extends the current Mascot screen. As the player unlocks Mascots, they become available in the Mascot screen, and the new feature is added to extend this system.

Some changes are required to the current game, depending on the scale of the implementation of the feature. For example, to allow for a reward structure that affects gameplay, changes to how gameplay score is calculated will be necessary. Changes to the Mascots screen will be required to accommodate for the new information and functionality. Adding new achievements to support the new feature will be necessary as well.

The intended way to engage with this feature is to first unlock a Mascot, then when visiting that Mascot's profile, it will display its rank and options for how to improve them as well as information about them. The player can then pay coins, watch an ad, or complete a task specified for this Mascot, eventually have them gain a rank by repeating this enough times, which then affects gameplay in a positive manner.

In the Mascot's profile, each rank gives an extra text entry of information about the Mascot, continuing in the style of how the Mascots profiles are currently. These text entries can be used to expand the world of Mascots, delve deeper into the personalities of each individual Mascot, or have the Mascots tell stories to entertain and engage the players.

Each Mascot would have a separate 'rank' that the player can progress through, so they can either pick their favorite and rank them up to gain rewards while using them during gameplay, or try to max out all of their unlocked Mascots if they are more completionist-minded.

The effect on gameplay can vary depending on how extensive the implementation can be allowed to be, such as simply giving a higher score when destroying blocks with a higher-rank Mascot, or more extensive such as affecting the destruction pattern and size when a Mascot is activated.

Additional incentives can also be added to support this system, such as incorporating rank-ups in the daily/weekly tasks, or adding some locked customization options or Mascots that are unlocked when the player elevates a Mascot to a certain rank. Overall this feature can be scaled and expanded upon well in order to complement further additions to the game.

V. Key Elements

1. **Element 1**

   Additional 'rank' UI element in the Mascots screen for each unlocked Mascot, and it updates whenever a Mascot ranks up.

2. **Element 2**

   Expanding upon the current Mascot profile screen to list their rank, rank progress bar, 'increase rank with coins' –button, 'increase rank by viewing an ad' –button, and a carousel element that shows text entries about their character and backstory. The carousel buttons are disabled if the Mascot in question is rank 1 as there will only be a single entry, but at higher ranks carousel buttons will appear that can be used to cycle through all the entries available at the current rank. This screen is where the Mascots are ranked up. If a Mascot meets the criteria for ranking up, it will be done once this screen is visited and the animations have completed.

3. **Element 3**

   Customization screen with some options unlocked until a Mascot is elevated to a certain rank. This functionality can be extended to apply to some Mascots as well.
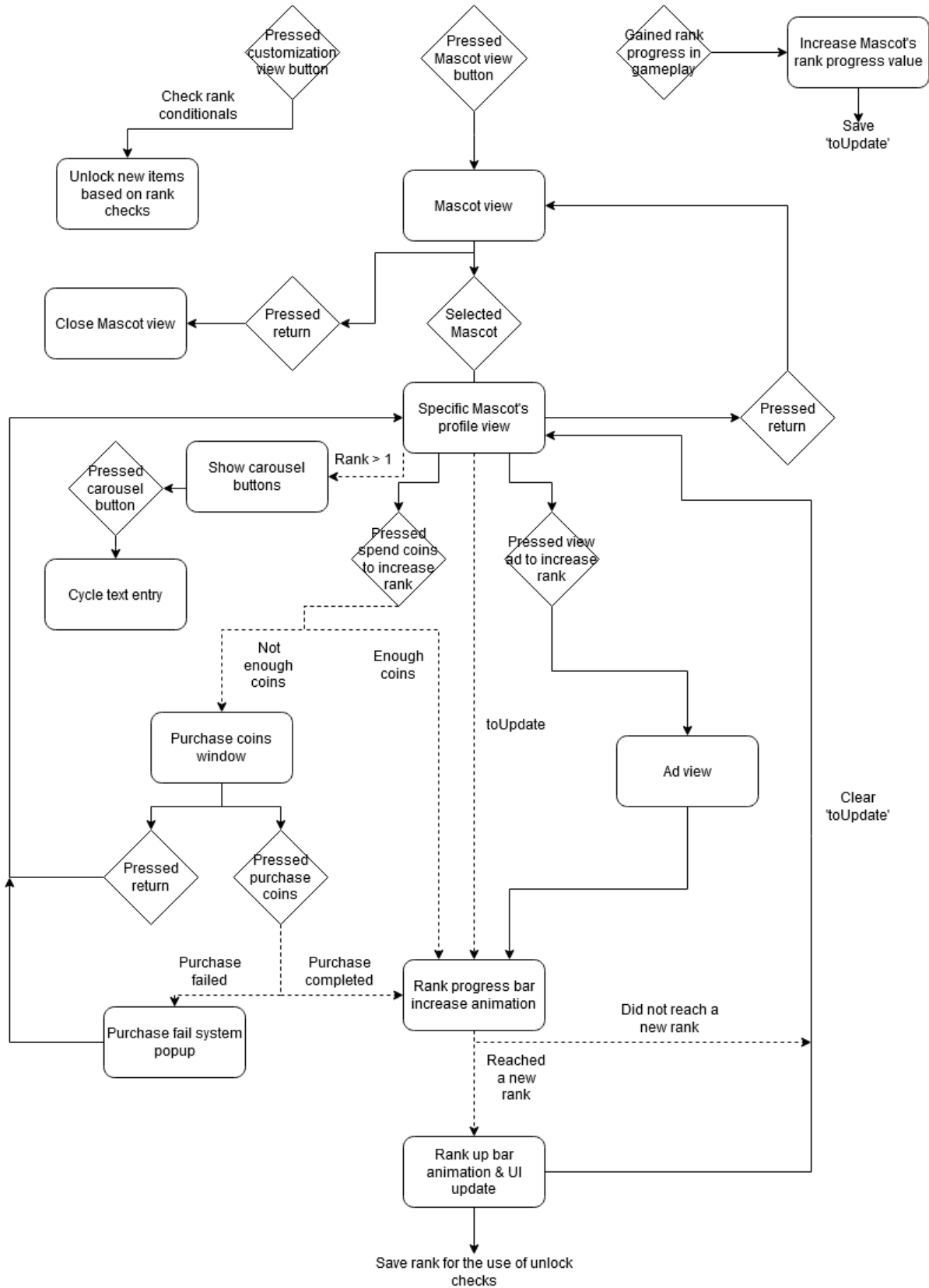
4. **Element 4**

   During gameplay, when the player destroys blocks using a Mascot, it will grant a bonus modifier to the score based on the specific Mascot's rank.

5. **Element 5**

   When getting score by using specific Mascots, that Mascot's rank progress is increased based on a percentage of the total score gained by the action.

VI. Description

Flowchart

```
Pressed                Pressed              Gained rank          Increase Mascot's
customization          Mascot view          progress in          rank progress value
view button            button               gameplay

Check rank                                                            Save
conditionals                                                          'toUpdate'

Unlock new items                            Mascot view
based on rank
checks

                        Pressed             Selected
Close Mascot view       return              Mascot                              Pressed
                                                                                return

                                            Specific Mascot's
                        Show carousel       profile view
Pressed                 buttons          Rank > 1
carousel
button                              Pressed              Pressed view
                                    spend coins          ad to increase
                                    to increase          rank
Cycle text entry                    rank

                        Not
                        enough              Enough
                        coins               coins

                        Purchase coins                                           Clear
                        window                                                   'toUpdate'

                                                              Ad view

Pressed                 Pressed             toUpdate
return                  purchase
                        coins

            Purchase        Purchase
            failed          completed       Rank progress bar        Did not reach a
                                            increase animation       new rank
Purchase fail system
popup                                       Reached
                                            a new
                                            rank

                                            Rank up bar
                                            animation & UI
                                            update

                                            Save rank for the use of unlock
                                            checks
```

Detailed Screens

Mascots screen	img_01
### 1. Rules The Mascots screen's base functionality remains unchanged. The only change here is that below each Mascot's level is a rank indicator. This indicator is updated after a Mascot's profile is viewed and it has ranked up. For example, if during gameplay a Mascot has gained enough progress points to rank up, it will not be shown in this screen until its profile, and subsequent rank up animation has been seen. ### 2. Actions Actions for this screen remain the same; pressing 'tell me more' opens the Mascot's profile, and non-encountered Mascots remain grayed out and uninteractable until they have been encountered.	\<image removed\>

Mascot profile screen

1. Rules

This screen is the same as the current Mascot profile screen, but with additional information and functionality. This screen is seen for each Mascot when pressing the 'tell me more' button in the Mascot screen. Above the Mascot's name are a rank progress bar and two buttons, labeled 'ad' and 'coins' (A). The rank progress bar updates to reflect the current progression amount when this screen is opened. A bar-filling animation is played, and if a new rank is attained, a rank-up animation is displayed. If the Mascot was previously at rank 1 and has now ranked up, or if the Mascot is rank 2 or above when opening this screen, the carousel buttons (B) will become visible.

2. Actions

The player can press the carousel buttons (if visible) to cycle through text entries for this specific Mascot. Entries based on the Mascot's rank are shown, and yet unlocked ones are not shown. The player can press the 'ad' button to view an ad to add a certain amount of progress to the progress bar. This button then goes on cooldown and cannot be used again for some time. The 'coins' button can be pressed to do the same thing as the ad button, except here the player will pay coins for the effect. If not enough coins are possessed, a screen to purchase more coins is shown instead. In this case, after a successful transaction the bar-filling animation is played.

img_02

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Customize screen

1. Rules

This screen is the customization screen with slight changes to functionality. In addition to unlockables by coin, there are unlockables by attaining a certain rank Mascot. When opening this screen, a check is made for each Mascot's rank. If a Mascot at or above the indicated unlock rank is found, the item becomes available for unlocking.

2. Actions

Previous customization screen actions apply. The player can now unlock a rank-limited item if they have a Mascot at or above the required rank by pressing on them.

VII. Appendix

New analytics events

- Times the Mascots screen has been opened
- Times a Mascot's profile screen has been opened
- Times the Mascots screen has been opened before starting a new game on launch
- Times a rank has been gained for a Mascot
- Times progress towards a rank has been gained by paying coins
    - Times coins, and their amounts, have been purchased through the new feature
- Times progress towards a rank has been gained by watching an ad

New Achievements

Name: Mascot strong!

Description: Elevate a Mascot to maximum rank.

Points: 50

Trigger: On Mascot rank-up to maximum rank, if this is the first one at maximum rank.

Name: Together stronger!

Description: Elevate all Mascots to maximum rank.

Points: 250

Trigger: On Mascot rank-up to maximum rank, if all Mascots are now at maximum rank.

3. KPIs and Success Measurement

Besides player retention, the main KPIs that I think would be crucial when measuring the success of 'Mascot ranks' would be: session length, interval & depth, and lifetime value. Other KPIs, such as churn rate, DAU & MAU, and conversion rate, would then help either corroborate and help break down conclusions drawn from my chosen KPIs, or help explain discrepancies or unexpected results.

1. Session length, interval, and depth

I believe session length will help identify whether or not the new feature has added more variety and more to do in the game in general. Upwards-trending session length would indicate that the feature has been successful and players are engaging with the game for longer periods of time due to the added progression and tie-ins with unlocks and gameplay. Session depth will help corroborate these findings, and session interval will either do the same or help explain possible unexpected results for the former two. For example, if there is more for the player to do overall, their sessions might become shorter in length but they might have them more often.

2. Lifetime value

Lifetime value will also be a helpful indicator of whether the feature has been successful or not in my opinion. While the main goal will be to increase player retention, it will be helpful to additionally measure if there are any compounding benefits in terms of monetization revenue. And if, by increasing the avenues and possibilities for watching ads and spending coins, the average LTV of a player trends up, it can be said that the feature has been a great success. This would mean that more players are engaging with the game's monetization, the amount of players is staying the same but that they are more incentivized to interact with the monetization more due to there being an overall increase of things to spend on, or simply that players are spending a longer time with the game in total due to the new feature increasing the game's longevity.