

# UX Writing Portfolio

## @ Google Stadia (via Adecco)

Austin Fisher

# About Me

Austin Fisher

I'm a storyteller, and I strive to create experiences that make people **feel**. I use plain (& fun) language to explain tough concepts, and use design thinking to solve unconventional problems.

I want to make a positive impact on the world by making people's lives easier and more enjoyable, and I think UX is the best way to accomplish that.

All it takes is the right word.

# My UX Writing Principles

Austin Fisher

UX writing is all about helping people complete their tasks with confidence. Regardless of what I'm writing, there are a few principles I always try to follow.

## Be Helpful

Users always have a mission. Help them succeed faster.

This can be linking to FAQs, recommending a relevant product, or sorting results to be more valuable. Let's make their job easier.

## Be Brief

People don't read. Keep things short and scannable.

We process information way easier in bite-sized chunks.

## Be Consistent

Why re-invent the wheel? Use familiar industry terms, and re-use common words in similar buttons.

Consistency sets a pattern. This pattern helps users navigate the product much faster.

## Be Mindful

Always read the room. There's a time and place for all content.

Sympathize when something goes wrong, celebrate when things go right, and be direct when communicating errors.

## Be Human

Being human is more than using contractions and clever taglines.

Use human terms, talk with the user (not at them), and make them feel supported throughout the experience.

## Be Creative

Technical doesn't have to mean boring. Use metaphors to describe something complex, or use examples and images to explain difficult concepts.

A picture's worth 1000 words.

# Error Strategy

## Summary

I was hired as a UX Writer for Stadia because partners repeatedly told us:

“If you’re going to fix anything, make it your errors. I spend hours trying to figure out problems that take seconds to resolve.”

“Definitely improve your errors. I don’t know many times I’ve hit ‘internal error encountered’ and gave up.”

Needless to say, I’ve done **lots** of error writing.

In this section, you’ll see:

- Case study: File validation & 1000+ errors
- How to write an error
- Error writing samples

## Case study: File validation & 1000+ errors

End-to-end strategy and error writing

## Problem

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Uploading a storefront file produced thousands of errors, many of which were repetitive, unhelpful, inaccurate, or convoluted, making it nearly impossible to create a valid file.

This blocked partners from submitting their game to Stadia, and required manual intervention by our internal Operations team, costing both Stadia and our partners **100s** of hours of time.

## Solution

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Perform a full audit of all errors and canonical codes used, identify gaps, and use that data to create a design framework. Then, rewrite all of the errors to meet content standards.

## My Role

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I led this feature from start to finish. Here are the key tasks I accomplished during this project:

- Learned how to read the codebase to understand how certain errors are thrown.
- Became an expert in canonical codes and how to spot gaps in error messaging.
- Performed a full audit of all the possible errors for both the Excel and JSON versions.
- Outlined a 2-phase approach for tackling these errors, collaborating with PM and engineering.
- Organized the errors in a way that made it easy for engineering to implement.
- Rewrote all the errors, identifying patterns and templates to simplify the coding process.
- Created a design strategy for displaying the errors.

## Step 1: Identify the problem

Imagine you're putting together some images for your game's store and naming the achievements. You upload the first version of the storefront, and you see... 5003 errors.

### Validation results

**!** The file contains 5003 errors. All the errors should be fixed, otherwise the storefront may fail certification.

In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[0].image.variants['001\_de-DE'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[0].image.variants['001\_de-DE'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[0].image.variants['001\_de-DE'].image.locators\_2x[0]' can't be 'Size: 1920 x 1080 px' because it's not an accepted value. Update this field to one of the following: Size: 1856 x 1044 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[0].image.variants['001\_de-DE'].image.locators\_3x[0]' can't be 'Size: 2880 x 1620 px' because it's not an accepted value. Update this field to one of the following: Size: 2784 x 1566 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[1].image.variants['001\_de-DE'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[1].image.variants['001\_de-DE'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
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In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[2].image.variants['001\_de-DE'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[2].image.variants['001\_de-DE'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
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In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[3].image.variants['001\_de-DE'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[3].image.variants['001\_de-DE'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
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In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[4].image.variants['001\_de-DE'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[4].image.variants['001\_de-DE'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[4].image.variants['001\_de-DE'].image.locators\_2x[0]' can't be 'Size: 1920 x 1080 px' because it's not an accepted value. Update this field to one of the following: Size: 1856 x 1044 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[4].image.variants['001\_de-DE'].image.locators\_3x[0]' can't be 'Size: 2880 x 1620 px' because it's not an accepted value. Update this field to one of the following: Size: 2784 x 1566 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[5].image.variants['001\_en-US'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[5].image.variants['001\_en-US'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[5].image.variants['001\_en-US'].image.locators\_2x[0]' can't be 'Size: 1920 x 1080 px' because it's not an accepted value. Update this field to one of the following: Size: 1856 x 1044 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[5].image.variants['001\_en-US'].image.locators\_3x[0]' can't be 'Size: 2880 x 1620 px' because it's not an accepted value. Update this field to one of the following: Size: 2784 x 1566 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[6].image.variants['001\_en-US'].image.locators\_1x[0]' can't be 'Size: 960 x 540 px' because it's not an accepted value. Update this field to one of the following: Size: 928 x 522 px.  
In product 'ghost-skin', the field 'media\_assets.featured\_16x9s[6].image.variants['001\_en-US'].image.locators\_1.5x[0]' can't be 'Size: 1440 x 810 px' because it's not an accepted value. Update this field to one of the following: Size: 1392 x 783 px.

How does this wall of text make you feel? Is it obvious how to solve all these errors? How long would it take to solve everything?

Now look at this:

### Validation results

**!** The file contains 86 errors. All the errors should be fixed, otherwise the storefront may fail certification.

This storefront contains 2 visible gamer stats, but it's required to have at least 3 visible. Update the field 'visibility' to 'PROFILE' for at least 1 gamer stat.

The following sections are missing:  
- video\_config  
- audio\_config  
- stream\_connect\_config

There are 12 product IDs from the published storefront that are missing in this version. Products can't be removed from the game once they're published. Add the following products back to the storefront:  
- worm-day-subscription  
- worm-year-subscription  
- sparkly-color-skin  
- ghost-skin  
- angry-color-skin  
- deluxe  
- cow-skin  
- health-boost  
- rainbow-color-skin  
- polka-dot-skin  
- dragon-skin  
- cat-color-skin  
- featured\_16x9s.display\_order (the value '1s' must be an integer.)

In product 'game', the field 'media\_assets' is missing 15 fields. Add the following fields:  
- media  
- media\_small  
- featured\_16x9s  
- featured\_1x1s  
- featured\_thumb\_16x9s  
- branded\_keyart\_16x9  
- branded\_keyart\_1x1  
- branded\_keyart\_3x4  
- branded\_keyart\_4x3  
- branded\_keyart\_banner\_3x1  
- branded\_keyart\_small\_16x9  
- branded\_keyart\_thumb\_16x9  
- branded\_keyart\_thumb\_1x1  
- branded\_keyart\_thumb\_4x3  
- branded\_keyart\_thumb\_small\_1x1

In product 'game', the field 'key\_art\_color' has a very low contrast ratio of '1.65:1' with the Stadia gray text (#A8ADB3). The contrast ratio must be at least 4.5:1, but should be 7:1 to meet AAA accessibility standards. Provide a different color.

It's still a lot of errors, but doesn't it feel like you can breathe a bit easier? This was my approach to reducing thousands of errors into something manageable.

My priorities were:

- Rewrite to fix inaccuracies in the errors
- Bundle all similar errors together into one message
- Create stronger parsing logic to have more custom, human-readable errors.

## Step 2: Understand the problem

A storefront file contains a lot of pieces that can go wrong. It can be provided in a series of Excel files, or it can be uploaded as a big JSON file. Even though the data and images are the same, they're provided in very different ways depending on your upload preference.

**Problem:** The Excel and the JSON files don't map 1-to-1, and resources are stored very differently. This makes it difficult to pinpoint an error's source.

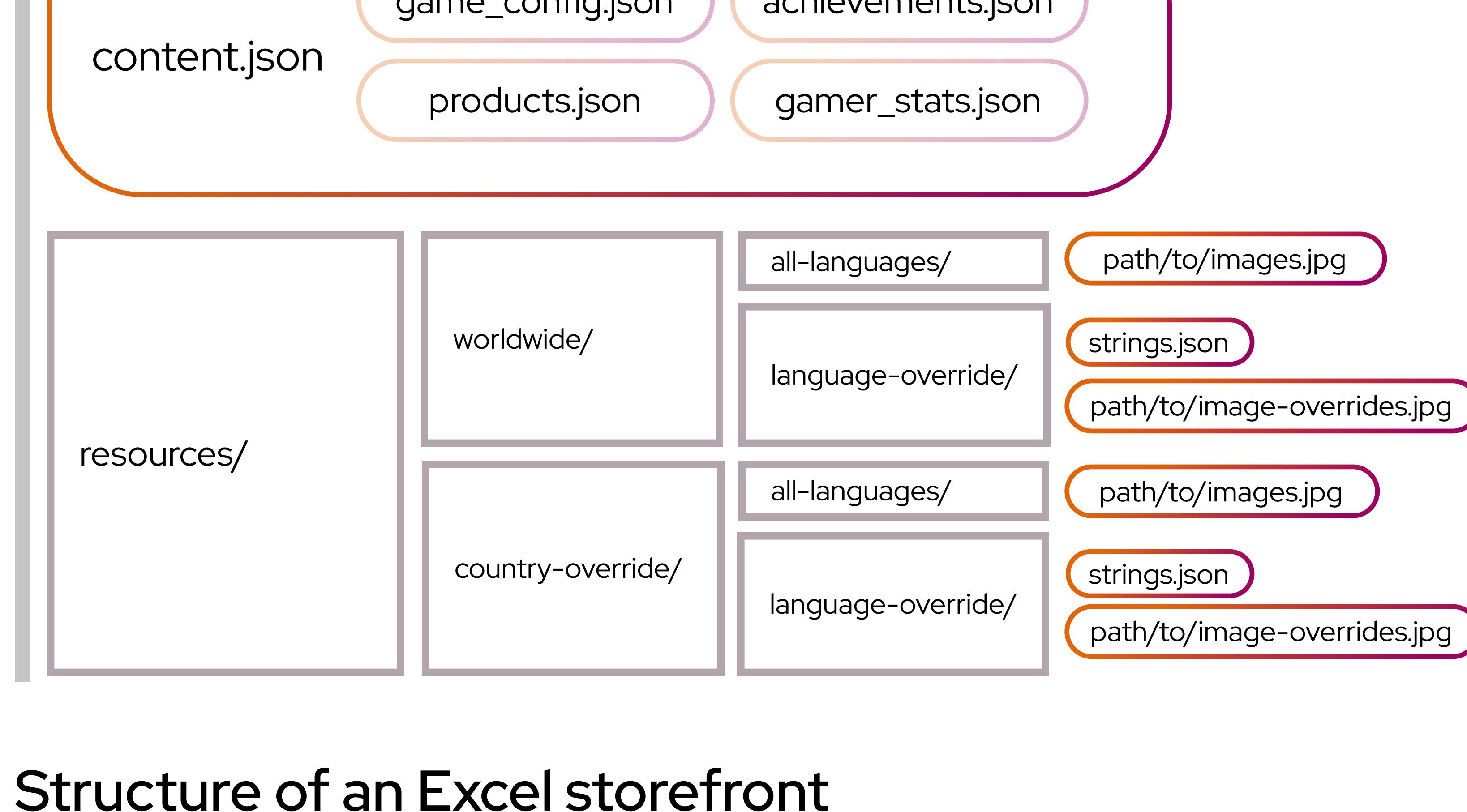
### Structure of a JSON storefront

A JSON storefront prioritized all data in one place. The main 'content.json' file contained all this data. It was a goliath of a file though, 10,000 lines easily -- and the publisher had to manually type most of it themselves.

file

folder/

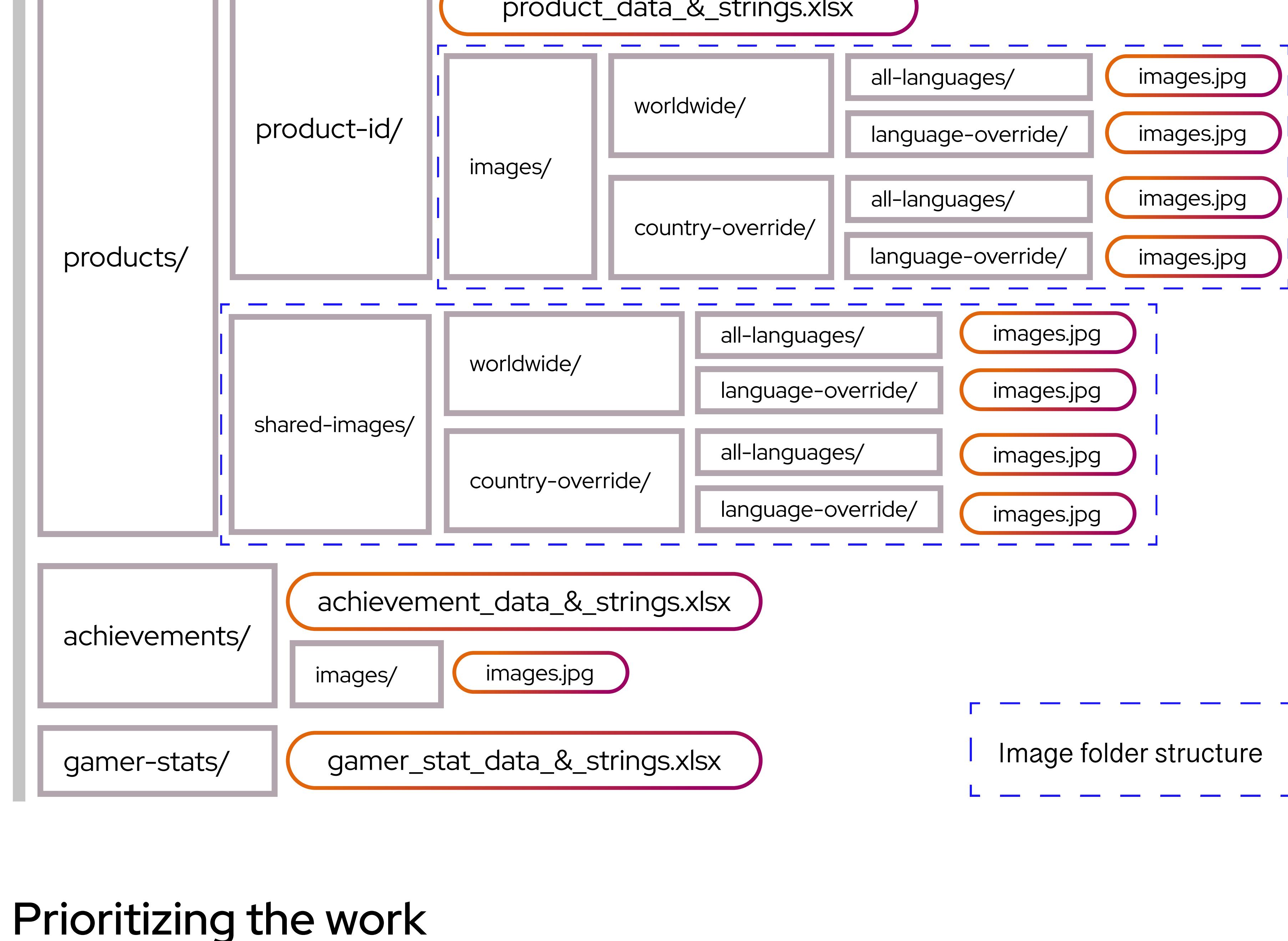
Publishers also had to manually construct the resource folders, which was very time-consuming and prone to error, especially since all the country/language combinations were mandatory.



### Structure of an Excel storefront

The Excel storefront was an effort to make the daunting task of creating a storefront much easier to complete. By working entirely in spreadsheets, all the fields were easy to see and fill in, many were drop-downs with validation, and we could pinpoint the exact cell that had an error.

The Excel version introduced "shared images" to remove all duplicate images from the storefront. In the JSON version, images were duplicated for every product, which was very impractical and took a lot of space.



### Prioritizing the work

We introduced the Excel sheet as a much simpler way to create a storefront, so our internal Operations team would no longer be required to assist every partner. We wanted to migrate all partners to the sheets.

But without proper error validation, the sheets weren't much more helpful than JSON, and our internal Operations team faced just as much stress.

So, I focused on writing all the Excel errors first. This would have the biggest impact, saving many hours for both our partners and our internal teams, and removing one of the biggest blockers to publishing a game.

## Step 3: Designing a solution

### Creating a design template

Before writing errors, I needed to think about how they'd be presented to partners. I explored some design options, working closely with our Visual Designer to find a component that fit with our existing assets.

We discovered the **file tree table**, a pattern that was very similar to our existing tables, but could also expand and collapse for viewing files.

Simple Tree Table (No custom controller)				
Demo tree table with file system data (lazy loads some rows)				
Name	Size	Permissions	Owner	Last Modified
Applications	--	drwxr-xr-x	rajendra	May 16, 2016 10:00 AM
Google	--	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Chrome Remote Desktop	104 KB	-rwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Desktop	--	drwxr-xr-x	rajendra	May 16, 2016 10:00 PM
Novitas.gslides	2 MB	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Public	--	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Pictures	53 MB	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Movies	--	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM
Music	33 MB	drwxr-xr-x	rajendra	May 09, 2017 02:20 PM

#### Pros:

- Adaptable for many situations across the product (e.g. replacing one file in a game's code)
- Good for locating invalid image files, with 1 or 2 errors each.

#### Cons:

- Not meant for large amounts of errors.
- Need to dig into a folder to find the error.
- Partners don't care about the valid files.

Name	Message
▶ achievements	
▶ gamer_stats	
▶ products	!
▶ product_name	
▶ resources_shared	4
▶ optional_country-code	This folder contains 4 errors.
ReadMe-Shared_Resources.docx	
▶ worldwide	!
▶ all-languages	!
image.png	!
This folder contains 1 error.	
de-German	
en-English	
es-Spanish	
fr-French	!
it-Italian	This folder contains 3 errors.
ReadMe-Stadia_Storefront_Template.docx	
game_data.xlsx	!
	- The following cells are required: D3, D4, D5, D6, F12, J21, J22. - You can only set the 'item_type' field when the 'product_type' field is set to 'ITEM'. Update the following cells: B12. - There are 12 images marked 'YES (SHARED)' in the 'All languages' column that are missing from the folder 'products/shared_images/worldwide/all-languages'. Add the images that correspond to the following cells: A99, A100, A101, A103, A108, A109.

## Designing with one string

At this point, engineering told us about a technical limitation: Our backend could only send one error string to the front end.

**Problem:** The error had to be delivered as one big string. We couldn't apply any front-end formatting.

**Goal:** Easily identify **what** the error is, and **where** to fix it.

**Solution:** Remember the big wall of errors from the start? I went back to that template to see what I could work with. We couldn't apply fancy formatting, however we **could** still add line breaks and apply basic text formatting in the string itself. So I got creative and drafted a way to organize the errors within our limitations.

Validation results	
1	The file contains 86 errors. All the errors should be fixed, otherwise the storefront may fail certification.
>	title.definition.xlsx (14 errors)
(Title definition sheet)	
-	The following cells are required: B13, B14.
-	When there's a drop-down menu, choose a value from one of those options. Update the following cells: C4, C6, C9, C10.
(Products sheet)	
-	The following cells are required: C11, C12, C13, C14.
-	When 'product type' is set to 'ITEM', the 'item type' and 'item display order' fields are required. Fill in the following cells: D15, D16, E15, E16.
>	products/base-game/product_data.xlsx (19 errors)
(Product data sheet)	
-	The following cells are required: C11, C12, C13, C14.
-	When 'product type' is set to 'ITEM', the 'item type' and 'item display order' fields are required. Fill in the following cells: D15, D16, E15, E16.
(Localized for CA sheet)	
-	There are 11 images marked 'YES' under 'All languages' that are missing from the folder 'products/base-game/resources/CA/all-languages'. Add the images that correspond to the following cells: C44, C45, C46, C47, C48, C49, C50, C52, C55, C56, C59.

I didn't want these errors to be repetitive. The best way to showcase similar errors was to bundle them together whenever possible. I grouped them by file path, then by specific sheet within the file, then by error type (required field, localization error).

I added white space to help distinguish all the different sheets and files.

Now that I had the design mapped out, I could focus on writing all the strings.

## Step 4: Writing the Excel errors

### Auditing all the errors

I did an audit of the spreadsheets to find all possible types of errors for every field. Most fields followed the same few error types, so many strings were reusable, like invalid values and required fields.

### Strategy

1) I filled in the first 2 columns with the type of error, and the specific scenario.

Whenever I discovered a new conditional issue ("when A is set to 1, B must be set to 2"), I logged it as a separate error scenario.

2) I wrote the error so it could list any number of cells. I made sure to use consistent wording so we could re-use the same template.

When writing, I spelled out all the variables we'd need to grab from the backend, so engineering could plan work accordingly.

3) I asked engineering if the new variables were feasible to grab, and rewrote when necessary.

4) I wrote an example of the error in action, plugging in all the variables to show how it would read in context.

5) I marked in the appendix which fields threw which errors. This way, engineering could see an exhaustive list of all errors for each spreadsheet.

6) I noted any custom errors that needed special attention, so engineering knew to create new error codes.

Error type	Error case	Structure	Example
REQUIRED_FIELD	Empty field.	"The following cells are required: [cells]."	"The following cells are required: B13, B14."
	Conditional. 1 field affected. On specific entry.	"When '[field1]' is set to '[value]', the '[field2]' field is required. Fill in the following cells: [cells]."	"When 'product type' is set to 'BUNDLE', the 'Bundle contents' field is required. Fill in the following cells: F13, F14, F15."
	Conditional. 1 field affected. On general entry.	"When '[field1]' is provided, the '[field2]' field is required. Fill in the following cells: [cells]."	"When 'Country' is provided, the 'Release date' field is required. Fill in the following cells: D42."
	Conditional. 2+ fields affected. On specific entry.	"When '[field1]' is set to '[value]', the '[field2]', '[field3]', [...] and '[field#]' fields are required. Fill in the following cells: [cells]"	(no known situation exists yet)
REQUIRED_FIELD *WARNING*	Empty field. Warning.	"The following cells are empty and should be provided: [cells]."	"The following cells are empty and should be provided: B33, B35."
	Conditional. 1 field affected. On specific entry. Warning.	"When '[field1]' is set to '[value]', the '[field2]' field should also be provided. Fill in the following cells: [cells]."	"When 'product type' is set to 'GAME', the 'Game genre' field should also be provided. Fill in the following cells: B17."
	Conditional. 1 field affected. On any general entry. Warning.	"When '[field1]' is provided, the '[field2]' field should also be provided. Fill in the following cells: [cells]."	"When 'Description (locked)' is provided, the 'Achievement name (locked)' field should also be provided. Fill in the following cells: J12, J13, J14, Q12, Q13, Q14, X12, X13, X14."
	Conditional. 2+ fields affected. On specific entry. Warning.	"When '[field1]' is set to '[value]', the '[field2]', '[field3]', and '[field4]' fields should be provided. Fill in the following cells: [cells]"	"When 'product type' is set to 'GAME', the 'Privacy policy URL', 'Terms of service URL', 'Product website URL', and 'Publisher support URL' fields should be provided. Fill in the following cells: A12, A13, A14, A15."
INVALID	Already exists. An ID	"Can't define the same ID multiple times. Update or remove the duplicate rows of the following IDs: [IDs]."	"Can't define the same ID multiple times. Update or remove the duplicate rows of the following IDs: 'base-game', 'red-armor'."
VALUE (ALREADY EXISTS)	appears more than once.		
INVALID VALUE	Must be from drop-down.	"There are # invalid values. You must choose a value from one of the dropdown options. Update the following cells: [cells]."	"There are 4 invalid values. You must choose a value from one of the dropdown options. Update the following cells: C4, C6, C9, C10."
	Conditional. 1 field affected. Empty.	"When '[field1]' is set to '[value]', the '[field2]' field should be empty. Update the following cells: [cells]."	"When 'Data type' is 'STRING', the 'Display format' field should be empty. Update the following cells: E16, E22."

### Appendix A: All possible Excel errors by file

Resources for finding all errors: [Products](#), [Achievements + Gamer stats](#), [Multiplayer](#)  
Green-coded strings have general templates, blue-coded strings are customized templates, and orange-coded strings can't be executed by the storefront checker and must remain in the GamerX backend.

File	Sheet	Error case	String type / Custom string
Title_definition.xlsx	(title def sheet)	Required field. (Game engine, Dynamic range, Maximum stable framerate at 1080p, RESOLUTION_4K, CHANNEL_MODE_SURROUND51, Stream Connect, Queue to play, Crowd boost)	Empty field
		Not required, but should be provided. (Stadia Package ID)	Empty field. Warning.
		Invalid value.	Must be from drop-down.
		Stadia package ID incorrect	Custom. Stadia package ID incorrect
	(product sheet)	Required field. (Product ID, Product type)	Empty field
		Required field - conditional on type being ITEM:(Item type) or BUNDLE: (Bundle contents)	Conditional. 1 field affected. On specific entry.
		Not required field but should be provided - conditional on others. (Item display order)	Conditional. 1 field affected. On specific entry. Warning.
		Product ID doesn't match a folder.	Missing product folder.
		Already exists - product ID	Already exists. An ID/field appears more than once.
		Invalid value.	Must be from drop-down
		Invalid field - not a positive integer (item display order)	Number. Must be a positive integer.
		Bundle. Product ID in bundle doesn't exist	Custom. Product ID in bundle
			incorrect
		Bundle. Bundle can't reference itself.	BUNDLE_INVALID_CONTENT_TYPE
		Bundle. Bundle must include game product ID.	BUNDLE_INVALID_GAME_COUNT
Product_data.xlsx	(product definition)	Required field. (Product ID, product type, Disclosures, Input supports, Accessibility features, Platform features, Gameplay modes, Accessible regions, Languages supported in-game, ESRB/PEGI/USK age ratings)	Empty field
		Not required, but should be provided. (Key art color, Min#/Max# of players, NON-GAME: Original release date)	Empty field. Warning.

### Conclusion: Passing it off

After putting together every error possible, I knew it was ready to hand off. I got great feedback from engineering about the handoff process.

"The errors were very clear and well-documented. We could easily identify the required logic. You made our jobs way easier by doing this."

The next steps: create alternate errors for the JSON validation.

## Step 5: Writing the JSON errors

### Organizing the errors

The JSON validation errors were similar... but not the same. Since we couldn't identify them by cell number, I had to change the writing approach to identify them by field names.

I used Google Sheets to organize all the errors this time. It was much easier to create templates and tie them together with formulas. I broke each message down into 5 parts:

**Location:** This is the entity or field that triggered the error. This affects the rest of the message.

**Issue:** The actual error.

**Rules:** The conditions that failed, or any other context like formatting.

**Solution:** How to fix the error. This usually lists the fields to update.

**Help:** Links to our documentation or to our partner support contact page.

Introduction (locating the error)		
	Single	Bundle
Entity-level	The [entity] 'id'	There are # [entities]
Field-level	In [entity] 'id', the field 'name'	In [entity] 'id', # fields

Issue	Context (rules)	Solution (action)	Help
is missing.	It's required when 'field2' is set.		
is missing.	It's required when 'field2' is set to 'VALUE'.		
are missing.	They're required when 'field2' is set.	Add the following fields: - field1 - field2 - field3	
are missing.	They're required when 'field2' is set to 'VALUE'.	Add the following fields: - field1 - field2 - field3	
has an invalid value of 'VALUE0'.		Update this field to one of the following values: 'VALUE1', 'VALUE2', 'VALUE3'.	
has an invalid value of 'VALUE0'.		Update this field to one of the valid values listed at: <a href="https://developers.google.com/stadia/docs/list-of-values">developers.google.com/stadia/docs/list-of-values</a>	
has an invalid date of 'VALUE0'.	All dates must follow ISO 8601 format: 'YYYY-MM-DDThh:mm:ssZ'.		Learn more
has an invalid value of #.	This field must be a positive integer.		
has an invalid value of #.	The maximum allowed value is #.		

I recorded the canonical code, the type of error (which determined the location), and grouped similar errors together. This way it was obvious which errors shared the same messaging.

I tied all the fragments into the 'Final string', so I could read it over in context. Sometimes I'd combine fragments together that didn't make sense, so this helped me edit them to be more human.

Error code	Single / Bundle	Level of error	Scenario	Issue	Context (rules)	Solution (action)	Help	Final string
(NEW) INVALID_VALUE_CODE_NTRAST	Single	Field		has a very low contrast ratio of # with the Stadia gray text (#A8ADB3). ERROR	The contrast ratio must be at least 4.5:1, but should be 7:1 to meet AAA accessibility standards.	Provide a different color.		In [entity] 'id', the field 'name' has a very low contrast ratio of # with the Stadia gray text (#A8ADB3). The contrast ratio must be at least 4.5:1, but should be 7:1 to meet AAA accessibility standards. Provide a different color.
PRODUCT_DELETED + ACHIEVEMENT_DELETED + GAMER_STAT_DELETED	Custom	Field	WARNING	has a low contrast ratio of # with the Stadia gray text (#A8ADB3).	The contrast ratio should be 7:1 to meet AAA accessibility standards.	Provide a different color.		In [entity] 'id', the field 'name' has a low contrast ratio of # with the Stadia gray text (#A8ADB3). The contrast ratio should be 7:1 to meet AAA accessibility standards.
PRODUCT_TYPE_MISMATCH + PRODUCT_ITEM_TYPE_MISMATCH	Single	Field		The [entity]'id' is in the published storefront, but is missing in this version.	[Entities] can't be removed from the game once they're published.	Add the [entity]'id' back to the storefront.		The [entity]'id' is in the published storefront, but is missing in this version. [Entities] can't be removed from the game once they're published. Add the [entity]'id' back to the storefront.
				There are # [entity] IDs from the published storefront that are missing in this version.	[Entities] can't be removed from the game once they're published.	Add the following [entities] back to the storefront: - entity1 - entity2 - entity3		There are # [entity] IDs from the published storefront that are missing in this version. [Entities] can't be removed from the game once they're published. Add the following [entities] back to the storefront: - entity1 - entity2 - entity3
				is 'VALUE1', which is different from the published storefront, where it's 'VALUE2'.	The field 'name' can't be modified after the [entity] is published.	Revert this field back to 'VALUE2'.		In [entity] 'id', the field 'name' is 'VALUE1', which is different from the published storefront, where it's 'VALUE2'. The field 'name' can't be modified after the [entity] is published. Revert this field back to 'VALUE2'.

### Designing for one string... again

**Problem:** The design template for Excel cells didn't adapt well to long field names. It was much harder to tell where field names began and ended.

**Solution:** List the fields vertically to easily compare them all. Engineering said this isn't much of an issue.

Validation results	
<p>1 The file contains 86 errors. All the errors should be fixed, otherwise the storefront may fail certification.</p> <p>This storefront contains 2 visible gamer stats, but it's required to have at least 3 visible. Update the field 'visibility' to 'PROFILE' for at least 1 gamer stat.</p> <p>The following sections are missing:</p> <ul style="list-style-type: none"> <li>- video_config</li> <li>- audio_config</li> <li>- stream_connect_config</li> </ul> <p>There are 12 product IDs from the published storefront that are missing in this version. Products can't be removed from the game once they're published. Add the following products back to the storefront:</p> <ul style="list-style-type: none"> <li>- worm-day-subscription</li> <li>- worm-year-subscription</li> <li>- sparkly-color-skin</li> <li>- ghost-skin</li> <li>- angry-color-skin</li> <li>- deluxe</li> <li>- cow-skin</li> <li>- health-boost</li> <li>- rainbow-color-skin</li> <li>- polka-dot-skin</li> <li>- dragon-skin</li> <li>- cat-color-skin</li> <li>- featured_16x9s.display_order (the value '1s' must be an integer)</li> </ul> <p>In product 'game', the field 'media_assets' is missing 15 fields. Add the following fields:</p> <ul style="list-style-type: none"> <li>- media</li> <li>- media_small</li> <li>- featured_16x9s</li> <li>- featured_1x1s</li> <li>- featured_thumb_16x9s</li> <li>- branded_keyart_16x9</li> <li>- branded_keyart_1x1</li> <li>- branded_keyart_3x4</li> <li>- branded_keyart_4x3</li> <li>- branded_keyart_banner_3x1</li> <li>- branded_keyart_small_16x9</li> <li>- branded_keyart_thumb_16x9</li> <li>- branded_keyart_thumb_1x1</li> <li>- branded_keyart_thumb_4x3</li> <li>- branded_keyart_thumb_small_1x1</li> </ul> <p>In product 'game', the field 'key_art_color' has a very low contrast ratio of '1.65:1' with the Stadia gray text (#A8ADB3). The contrast ratio must be at least 4.5:1, but should be 7:1 to meet AAA accessibility standards. Provide a different color.</p>	^

### Proposing features & passing it off (in progress)

I'm in the process of passing off this phase of the project. It's actually much tougher to edit existing error logic than it is to create it all from scratch, like we did with the Excel errors, so I broke it down into pieces when presenting to engineering and the PM.

#### How could we prioritize the work?

##### 1) No logic change. Rewrites only.

These errors follow logic that's already in place, but we'd need to update the wording for accuracy.

There aren't many of these errors. Most of these errors are for very specific, narrow cases.

Eng effort: **Low**  
Impact: **Medium**

##### 2) Expand existing error logic, new error codes.

These errors build on top of existing logic to check more scenarios. Some of these errors are brand new.

This is the **vast majority** of errors. They cover a lot of cases and can adapt to new fields.

Eng effort: **Medium**  
Impact: **High**

##### 3) Construct the file path for image size errors.

This grabs the image's name, and pieces it with the resource key, region, and language folders to create a file path.

This makes it much easier to locate the image and know the correct size.

Eng effort: **Medium**  
Impact: **Low**

##### 4) Create bundling logic.

Adds steps to error parsing, grabs variables from many errors and organizes them.

Reduces visual strain, enabling the "list".

Valuable logic that can be used in other areas of the code.

Eng effort: **High**  
Impact: **High**

The meeting went well, and now we're prioritizing the work. This is currently in progress! I'm working with engineering to get more accurate estimates about effort.

### Next steps

The Excel errors from Step 4 were just implemented to our internal Operations team, so in the coming weeks, I should start getting feedback about what's working and what isn't. I may need to edit some errors or add in new cases.

Then, it'll finally be implemented for partners to use. At that point, the impact of this work will finally pay off!

That's all for this case... for now.

## How to write an error Structure and examples

## How to write an error

Errors are key to fixing problems and continue workflows. A bad error disrupts workflows for hours, even days. A good error clearly outlines the problem and solution so it only disrupts workflows for a few minutes. A great error is when the error isn't thrown at all, and the experience prevents it from happening altogether.

### Structure of an error

#### Problem

Every error starts because of a problem. This must identify the **action** that went wrong, and the **item** that's affected. At Stadia, we tend to start internal errors with "Unable to...", and user-caused errors with "Can't...".

Example: "Can't upload game to the project [name]."

#### Rules / context

There's a reason why this problem happened. Explain the rules: "when item A is true, item B is required." This way, users know the cause and hopefully never make the error again.

Example: "The game is 40GB, but the project only has 25GB of cloud storage left."

#### Solution

The solution must identify an **action** to do, and the **item** to act on. Sometimes the solution is clear from the rules, or vice-versa. Be explicit with the solution, but make sure it's adaptable to all endpoints. Instead of "Click an option", say "Specify an option".

Example: "Archive old game uploads to free up space, or ask an admin to assign more storage to this project."

#### Help

Sometimes an error is highly complex and can't be explained in 1 or 2 sentences. In that case, we may direct the user to our documentation, or ask them to contact us for support.

Example: "[View the full list of country codes](#)" or "[Contact us at stadia.dev/partnersupport](#)"

## Examples

#### Scenario

A user uploaded a game package, but it can't distribute to our cloud data centres because of some storage errors at the centres.

Ideally, these would never happen. But if they do, we want the partner to know the cause so they can act on it temporarily as they contact us.

Code	Original	UX
RESOURCE_EXHAUSTED	At least one of the requested locations does not <u>has</u> sufficient storage.	Can't distribute package. At least one zone doesn't have enough storage. This shouldn't happen. If you need to
		distribute your package right away, try archiving other packages to free up storage. Contact us at <a href="#">stadia.dev/partnersupport</a>
NOT_FOUND	At least one of the locations has no capability to serve packages of this class.	Can't distribute package. At least one zone isn't configured to store your package. This shouldn't happen. Contact us at <a href="#">stadia.dev/partnersupport</a>
(any other code)	Can't upload package due to an unknown error, but we're retrying in the background. If this error persists, try archiving the package and re-uploading. If it still persists, Contact Us for support.	Can't distribute package because of an unknown error. We'll keep trying to distribute the package. If this error persists, try archiving and unarchiving the package to restart the process. If this still persists, contact us at <a href="#">stadia.dev/partnersupport</a>

#### Scenario

Various API messages are stored in a centralized location in the codebase. Some use out-of-date language.

I updated the messages to use our latest terminology, and cleaned them up while I was at it.

Original	UX
Invalid time range '%s'-'%s'. Start time must be less than end time.	Invalid time range. The start time must be before the end time.
Gamelet shape '%s' is invalid. Please choose a different gamelet shape and try again.	The instance shape '%s' is invalid.
Gamelet shape '%s' is incompatible with the pool's configuration. Please choose a different gamelet shape and try again.	The instance shape '%s' is incompatible with the pool's type or generation.
GCS URI in field '%s' is invalid.	The field '%s' has an invalid Google Cloud Storage URI. Make sure the URI begins with 'gs://'.
Enter a different release date as it cannot be in the past.	The release date can't be in the past.
Enter a different release date since the storefront cannot released on a US holiday.	The release date can't be on a US holiday.
Enter a different release date since the storefront cannot be released on a weekend.	The release date can't be on a weekend.
The release date you've selected is too close to today. Enter a release date at least 5 business days in the future.	The release date is too soon. It must be at least 5 business days in the future.

# UI Content Strategy

Designing with words

A big part of the UI work that I do is microcopy. You know, those buttons, table headings, instructions, and pesky errors.

But I also get deeply involved in the user flows, the design thinking, and the research. Often times, I'll tag-team with the UX Designer to map out the user journeys, discover gaps for opportunities, and even get my hands dirty in design tools. (Figma is my favorite of them all)

In this section you'll see:

- Case Study: Creating a promotion (End-to-end flow)
- UI Writing Samples
- Content Strategy + Style Guide excerpts

## Case Study: Creating a promotion

UI copy & Information architecture

## Problem

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Our partners needed to create and submit promotions to Stadia for their published games.

## Solution

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Create a web form within our Partner Portal to create, build, and submit a promotion on any number of products in a game.

## My Role

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I created new content strategy around web forms (this was our first one!) and worked close with UX Design and PMs on delivering a strong V1 experience to partners.

Things I did:

- Information architecture (content hierarchy)
- Content strategy
- UI text, micropcopy, and regular length copy.
- Error messages

## Step 1: The Promotion Dashboard

### IA: Placing a new entity

**Problem:** Where do we put promotions?

**My impact (Design thinking):** A promotion is based off of published prices. You can't create a promotion until you've published prices. We already have a dedicated category for a game's prices.

**Solution:** We nested promotions within the "Pricing" section.

### Microcopy: The right button

**Problem:** How do we start the promotion flow?

**My impact:** I had defined a content strategy guide to button naming, so drew from our existing content patterns to write this button.

**Solution:** Since this would launch the form and create a new entity in our backend systems, I chose "Create".

"Create" also established a good mental model. It alluded to an underlying process – "creating" isn't viewed as one step, but the result of many steps.

STOREFRONTS	PACKAGES	PRICING	ANALYTICS	USERS
Pricing				<a href="#">UPLOAD PRICING</a>
Name	Last updated on	Status	Number of proposals	⋮
jump-pricing-launch	July 27, 2018 at 7:42 PM	Published	12	⋮
jump-pricing-new	July 24, 2018 at 11:55 AM	Published	5	⋮
jump-pricing-4	July 24, 2018 at 1:43 PM	Published	5	⋮
jump-pricing-3	July 1, 2018 at 4:23 PM	Published	9	⋮
jump-pricing-3	July 1, 2018 at 4:23 PM	Published	9	⋮

PROMOTIONS	CREATE PROMOTION				
Add a filter					
Name	Funded by	Start date	Status	Discount	⋮
jump-promotion-oct	Publisher	July 27, 2018 at 7:42 PM	Published	10%	⋮
jump-promotion-sept	Stadia	July 24, 2018 at 11:55 AM	Published	25%	⋮
jump-promotion-july4	Publisher	July 24, 2018 at 1:43 PM	Published	10%	⋮
jump-promotion-sum...	Publisher	July 1, 2018 at 4:23 PM	Published	10%	⋮
jump-promotion-sum...	Publisher	July 1, 2018 at 4:23 PM	Published	10%	⋮

### Strategy guide: Common buttons

Add	...an existing item to another item
Assign	...an existing item to a team
Create	...an original item
Upload	...a new file
New	...original item with 2+ above actions

## Step 2: Filling in the form

### Content strategy: 2-step promotion form design

**Problem:** What information do we need? How do we ask for it?

#### My impact:

- Talked to PM to learn what questions we needed to ask, and what information Stadia required.
- Reviewed user research about common industry terms.
- Researched form design standards and principles.

**Solution:** I ensured we followed best practices for form design, and created form content principles:

- Only ask what we need to know, and don't make the user think too much.
- Make sure all restrictions and requirements are clearly labelled on each field, like formatting
- Split the form into sections that reflect how the user thinks.
- Let the fields speak for themselves. Only include more context when necessary.

Jump Game > Create a promotion

Provide the promotion details

Name

Promotion names are for internal use only

Funding type ?

Co-funded  Stadia-funded

Starts on YYYY/MM/DD (GMT-07:00) PST

Ends on YYYY/MM/DD (GMT-07:00) PST

Promotions can run up to 14 days at a time

Discount ?

%

Minimum 10%

Select & preview products

You can only select products that are active during the selected promotion time.

Products SELECT PRODUCTS

Countries SELECT COUNTRIES

Pricing preview

Product name	Country	Discounted wholesale price	Discounted retail price <small>?</small>
			Not seeing anything? Make sure all the fields are provided. Prices will appear automatically.

CANCEL CREATE PROMOTION

**Step 1:** Set up the metadata, discount rate, and time restrictions of a promotion.  
i.e. "The Basics"

**Step 2:** Choose the combination of products and countries to discount.

Note: At launch, only 1 discount per promotion was allowed.

### Microcopy: 'Simple' vs 'Human' time zone picker

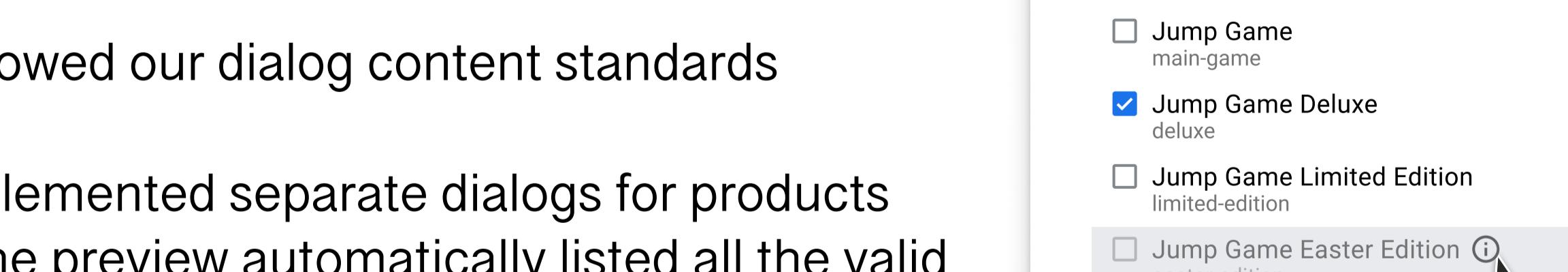
**Problem:** What's the best practice for choosing time zones? Simplicity, or human-readable labels?

#### My impact:

- Created the content pattern for time zones
- I talked with the PM about our requirements: Do we need time zones? Are we accounting for daylight saving time? What do we anticipate our partners choosing?
- I asked UX Design what the best strategies are for choosing from very long lists. Specifically, if we had to use dropdowns, or if we could use an input dropdown that searches.
- I asked engineering how complicated time zones needed to be, what logic we could build, and how big of a list we could store.
- I researched best practices for time zones across Google, and digital best practices. (UTC vs GMT)

**Solution:** Based on engineering's feedback and clean design principles, I created V1: a simple list of each possible time zone difference.

However, further research and partner feedback proved that people aren't usually confident with their time zone, so I made V2, a list of every local time zone. This was received more positively.



### IA: Splitting products and countries

**Problem:** How do we increase efficiency and decrease human error when selecting products & countries?

#### My impact:

- Worked with UXD to simplify the interaction into 2 tasks
- Discussed backend restrictions with engineering
- Reduced content to only show essential pieces of information
- Ensured we followed our dialog content standards

**Solution:** We implemented separate dialogs for products and countries. The preview automatically listed all the valid product/country combinations from the selections.

**Pros:** Broke down a big task into 2 simple tasks. Prioritized efficiency and automation. Reflected our backend system.

**Cons:** Restricted customizability and didn't allow exceptions.

### Strategy guide: Writing dialogs

Use consistent verbs	- Add [item] & "ADD" button - "Select" items & selection boxes
Provide instructions & context	Instructions: "Selecting..." Context: "the <b>Christmas Savings</b> promotion"
Explain exceptions	Any invalid products or countries have a tooltip explaining the issue.

Add products

Select the available products to add to the **Christmas Savings** promotion.

All products

Jump Game main-game

Jump Game Deluxe deluxe

Jump Game Limited Edition limited-edition

Jump Game Easter Edition easter-edition

Sparkly armor item-sparkly-armor

Terrifying mask item-terrifying-mask

Turtle shell item-turtle-shell

Walk speed boost boost-walk-speed

CANCEL ADD

Add countries

Select the countries to include in the **Christmas Savings** promotion.

All countries

Canada

France

Germany

Mexico

United States Your game isn't available in this country during the promotion period.

CANCEL ADD

## Step 3: Previewing and validation

### Microcopy: Empty states and table design

**Problem:** How should previewing work? What do partners want to preview?

#### My impact:

- Wrote a helpful empty state to explain how previewing worked
- Advocated to PM for plain language with legal phrases. “Indicative retail price” -> “Discounted retail price”
- Took out unneeded columns to make the important information easily scannable
- Implemented currency content strategy

**Solution:** The preview appeared automatically, once products and countries were chosen, presenting the most essential content (product/country pair & new prices) in a clear, easily scannable way.

The screenshot shows a user interface for creating a promotion. At the top, there's a table with columns: Product name, Country, Discounted wholesale price, and Discounted retail price (with a help icon). Below the table is a message: "Not seeing anything? Make sure all the fields are provided. Prices will appear automatically." with an icon of a document with a red exclamation mark. Below this is a "Products" section with a "SELECT PRODUCTS" button and two selected items: "Jump Game" and "Jump Game Deluxe". Under "Countries", there's a "SELECT COUNTRIES" button and three selected items: "Canada", "Germany", and "United States". In the "Pricing preview" section, there's a search icon and a table showing discounted prices for various products across different countries. The table has columns: Product name, Country, Discounted wholesale price, and Discounted retail price (with a help icon). The preview table shows the following data:

Product name	Country	Discounted wholesale price	Discounted retail price
Base game	Canada	20.00 CAD	27.50 CAD
Base game	Germany	12.50 EUR	15.00 EUR
Base game	United States	15.00 USD	17.50 USD
DLC A	Canada	5.00 CAD	7.50 CAD

At the bottom right are "CANCEL" and "CREATE PROMOTION" buttons.

### Error strategy

**Problem:** How do we communicate different types of errors so it still feels like a unified experience?

#### My impact:

- Implemented our error strategy to keep in-line errors short, and backend errors descriptive.
- Worked with PM to identify common errors and UXD to prevent users from making those errors with intelligent input fields
- Wrote errors closely with our internal Operations team to ensure the errors accurately represented our rules and restrictions
- Separated rare edge cases to improve the emotional response and avoid: “Obviously a discount can’t be more than 100.”

**Solution:** We separated backend errors into message bars so they had space to be descriptive, and styled in-line errors around input boxes only. I ensured the errors used similar language to feel consistent.

The screenshot shows a user interface for creating a promotion with two sections: "Common out-of-range error" and "Rare out-of-range error".

**Common out-of-range error:** Shows a date range from "Starts on Feb 21, 2020" to "Ends on April 1, 2020" with a note: "Promotion can't be 41 days long. They can only run up to 14 days." The "Discount" field is set to 5% with a note: "Discounts must be at least 10%".

**Rare out-of-range error:** Shows a date range from "Starts on Feb 21, 2020" to "Ends on April 1, 2020" with a note: "Promotion can't be 41 days long. They can only run up to 14 days." The "Discount" field is set to 120% with a note: "Discounts must be from 10% to 100%".

A red callout box for the common error states: "The promotion contains 3 errors. You must fix these before you can submit for certification." It lists:

- Promotions that begin on the game's release date can't exceed 7 days. If the promotion starts later, it can run up to 14 days.
- Products can't be discounted for more than 45 days in a 90-day period. The following products will exceed 45 days:
  - Worm Game (Canada, Germany, United States)
  - Worm Game Deluxe (Canada)
- Promotions that share products and occur within 21 days of each other must have the same discount. Update the discount to 25% to match [previous promotion].

Another red callout box for the rare error states: "The promotion contains 2 warnings. You can still submit for certification, but the promotion may take longer to review." It lists:

- Discounts that exceed 80% require special permission. Contact us before submitting this promotion.
- Can't have 3 promotions within a 30-day window unless one is curated by Stadia, or one doesn't share any products with the others. Review the promotions [promotion name] and [promotion name] before submitting.

## Aftermath

I was very satisfied with how the promotion form turned out. The majority of partners were satisfied with the promotion form.

Since our UX exploration happened after product planning, some important functionality that we discovered got pushed back to V2 or even V3, because there just wasn't enough time.

### Things we plan to include in V2:

- Multiple discount rates in one promotion
- The ability to include and exclude any product/country pairs.
- The ability to edit a single product/country pair.
- Stronger backend logic so we can shift most backend errors to in-line errors.

## What I Would Change

### "All promotions" table

I didn't get a chance to provide input to the "All promotions" table (under the Pricing tab) during production. The form design was a higher priority at the time.

**Problem:** What's the most important thing to know about all my promotions as a publisher?

**Solution:** Group the columns into similar ideas that flow logically, add the end date, and modify our "date and time" content strategy in tables.

Promotions					CREATE PROMOTION
<input type="text"/> Add a filter					
Name	Funded by	Start date	Status	Discount	⋮
jump-promotion-oct	Publisher	July 27, 2018 at 7:42 PM	Published	10%	⋮
jump-promotion-sept	Stadia	July 24, 2018 at 11:55 AM	Published	25%	⋮
jump-promotion-july4	Publisher	July 24, 2018 at 1:43 PM	Published	10%	⋮
jump-promotion-sum...	Publisher	July 1, 2018 at 4:23 PM	Published	10%	⋮
jump-promotion-sum...	Publisher	July 1, 2018 at 4:23 PM	Published	10%	⋮

### Rewrite: Group by priority

<input type="text"/> Add a filter					
Name	Status	Discount	Funded by	Start date	End date
jump-promotion-oct	Active	10%	You	Jan 29, 2020	Jan 31, 2020
jump-promotion-sept	Ended	25%	Stadia	Jul 24, 2018	Jul 24, 2018
jump-promotion-july4	Ended	50%	You & Stadia	Jul 4, 2018	Jul 4, 2018
jump-promotion-sum...	Ended	10%	You	Jul 1, 2018	Jul 1, 2018
jump-promotion-sum...	Cancelled	10%	You	Jul 1, 2018	Jul 1, 2018

The name identifies the promotion, and the status tells partners how to interact with the promotion.

Since these are actionable items, they're up at the front where they can be scanned quickly.

"Discount" and "Funded by" are closely related ideas, creating a full 'thought' together.

"This discount is funded by..."

I also simplified "Publisher" to "You", to make it feel more human and collaborative.

"Start date" is helpful, but is only half of the story. I added in "End date" to show the full lifecycle of a promotion.

I omitted the exact timestamp to keep the table scannable. They can still see the time if they click into the promotion.

## Writing samples

Dialogs and my UI Style Guide

## A developer setting up local hardware - final step

**Problem:** The hardware can't display information after it's rebooted due to technical limitations, but there are important instructions.

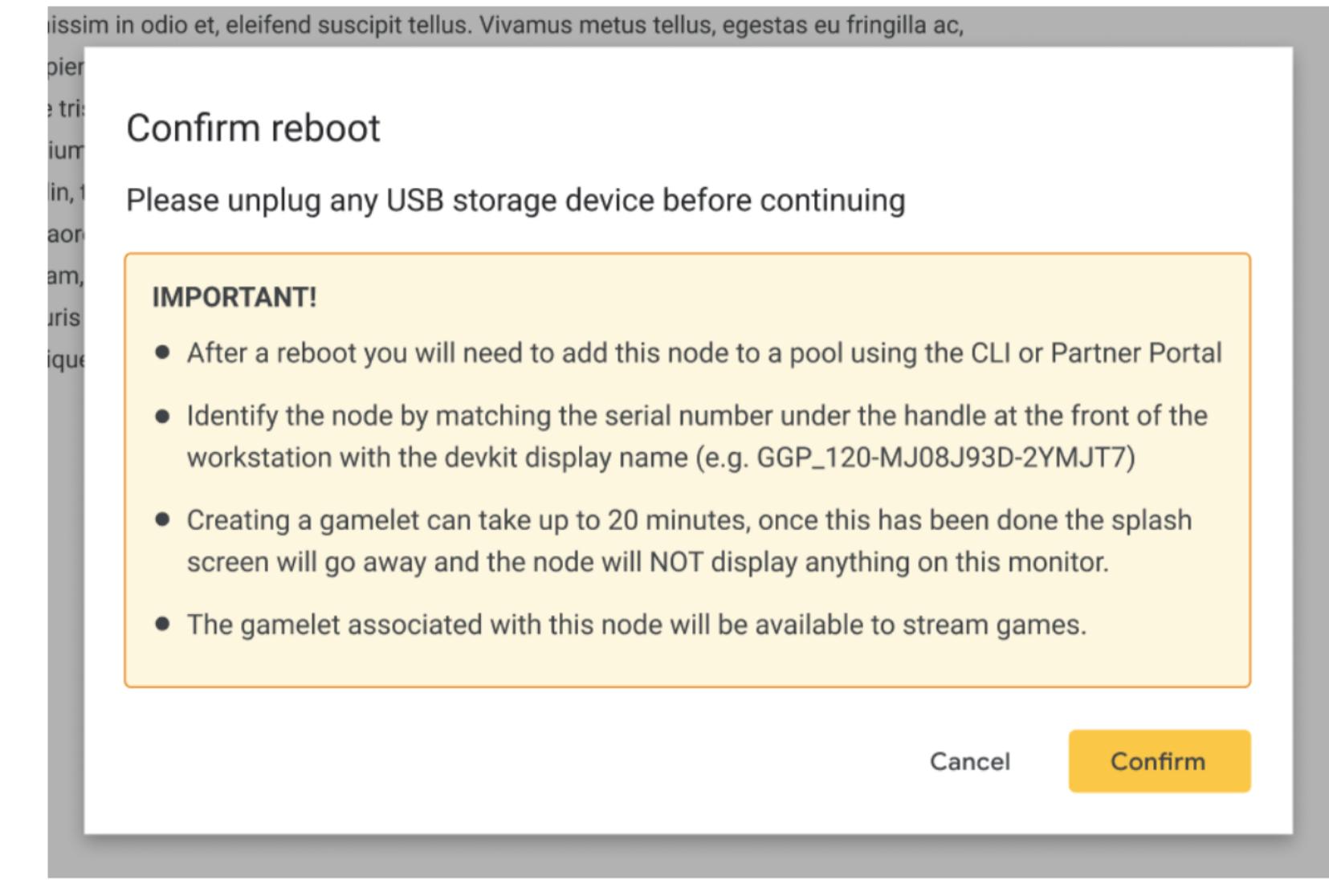
**My impact:** I took initiative to reorganize the information into more digestible steps, and added some friction to the process. External to this flow, I also made sure our online documentation included these instructions.

**Solution:** Clearly explain what to do before and after rebooting, and have the partner acknowledge that they've read the information.

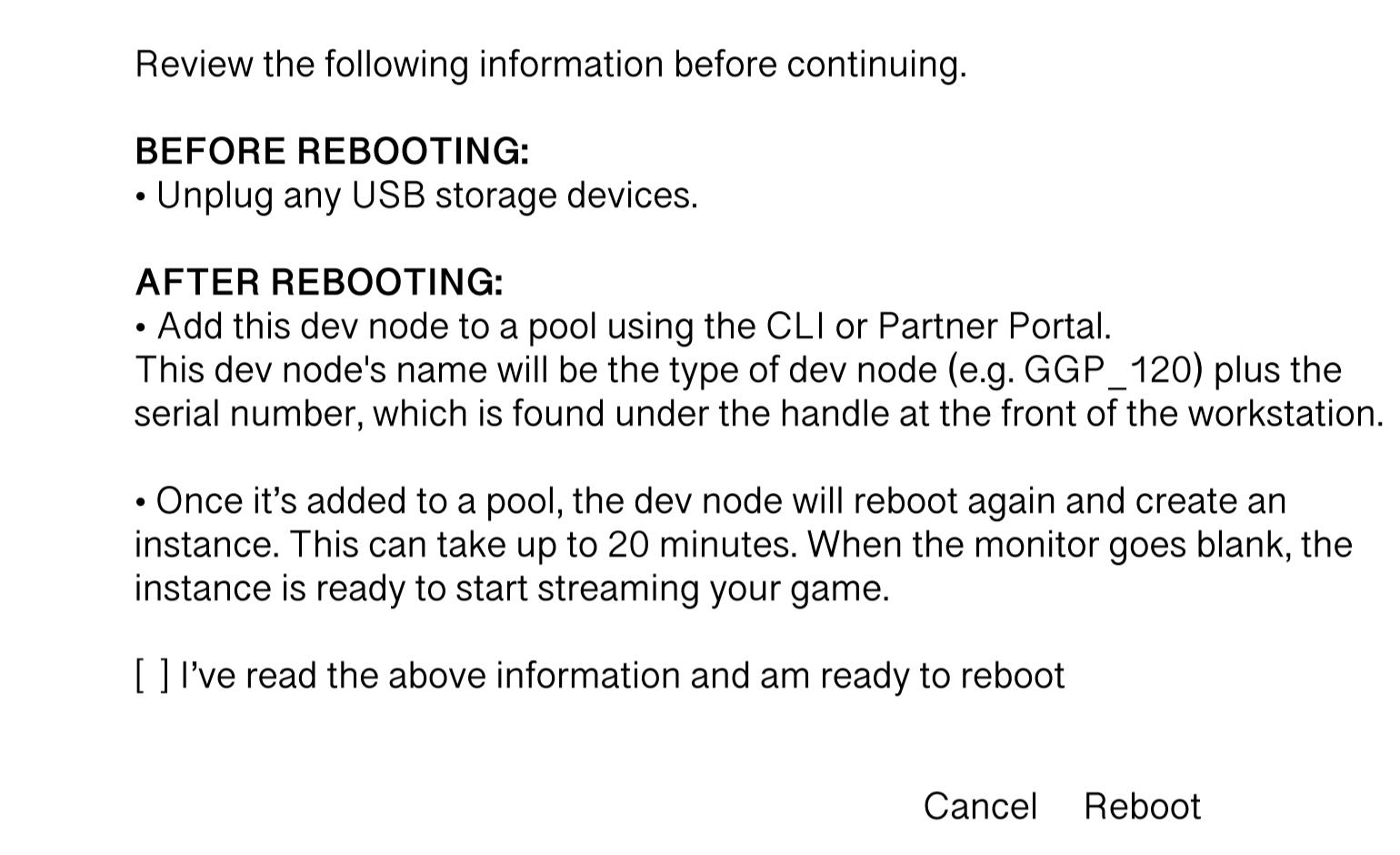
### Notes:

"Gamelet" was renamed to "instance" prior to this project.

#### OLD:



#### NEW:



## Adding users to any team (developing project, publishing title, organization)

### Problems:

- 1) Partners don't realize they can have more than 1 access role at a time.
- 2) It's unclear what the relationship is between "Users" and "Members" in the web portal.

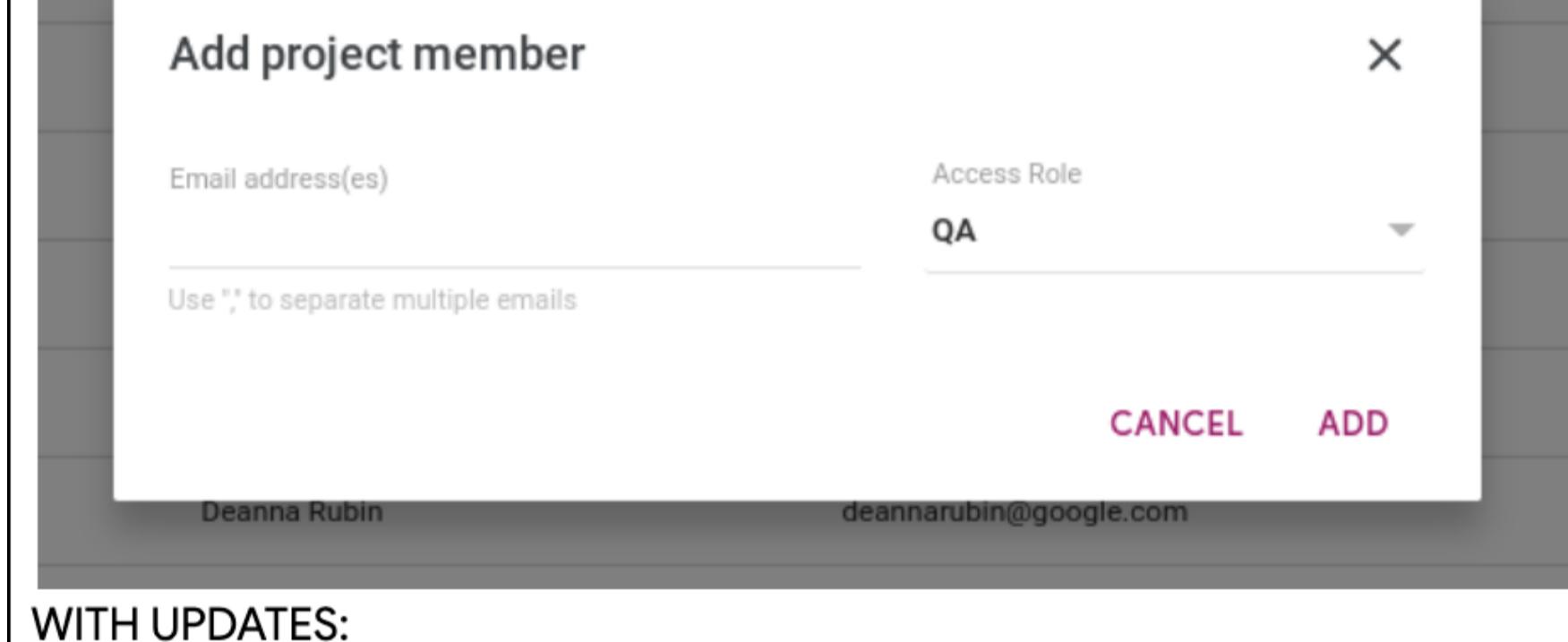
**My impact:** I created a template for all team dialogs, so they all read the same way, simplifying our codebase and message.

We used to say "project members, title members, & organization users" but in our system, they're all treated the same, so I eliminated the redundancy in favor of "users".

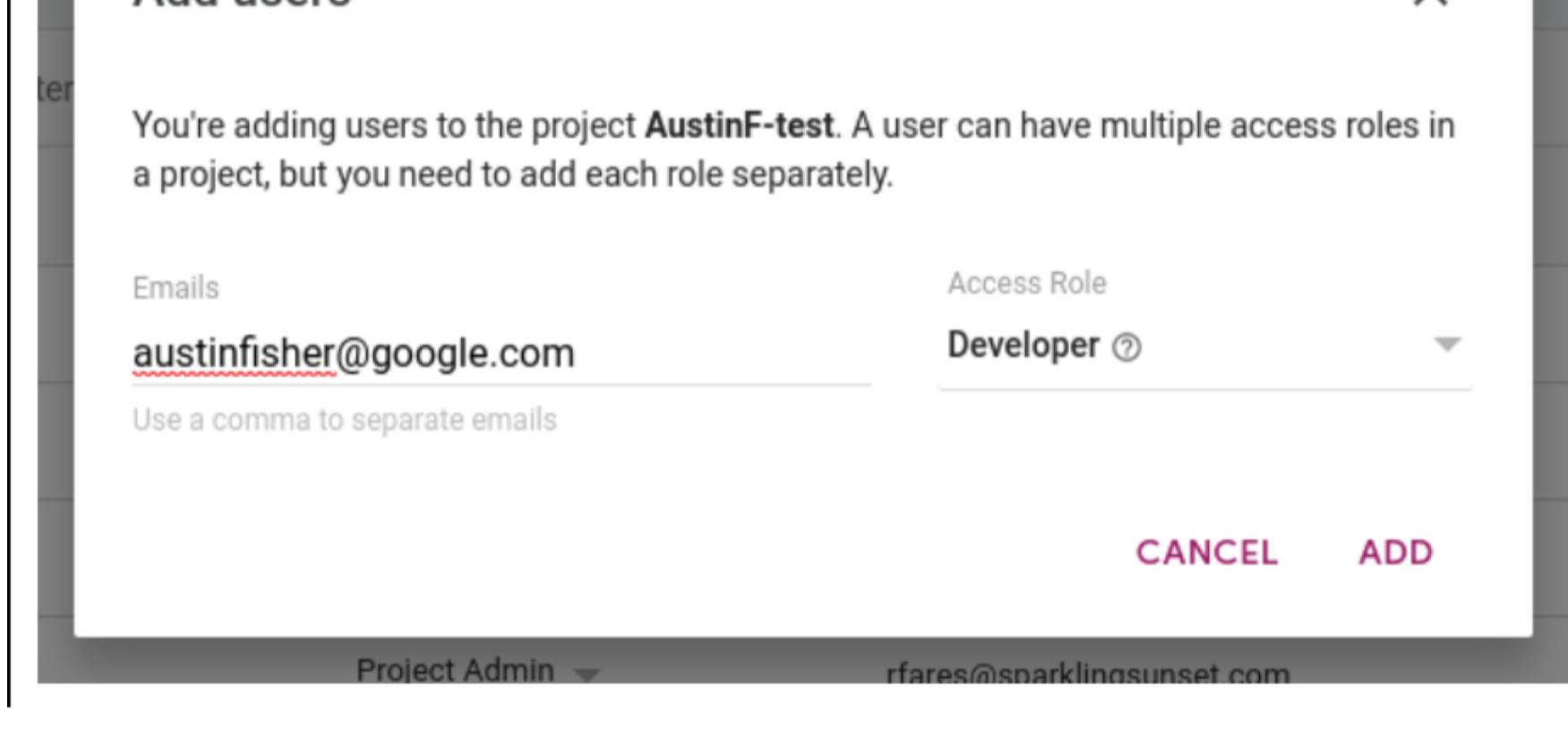
### Solution:

Explain how access roles behave, and standardize the name "users" across all teams.

#### OLD:



#### WITH UPDATES:



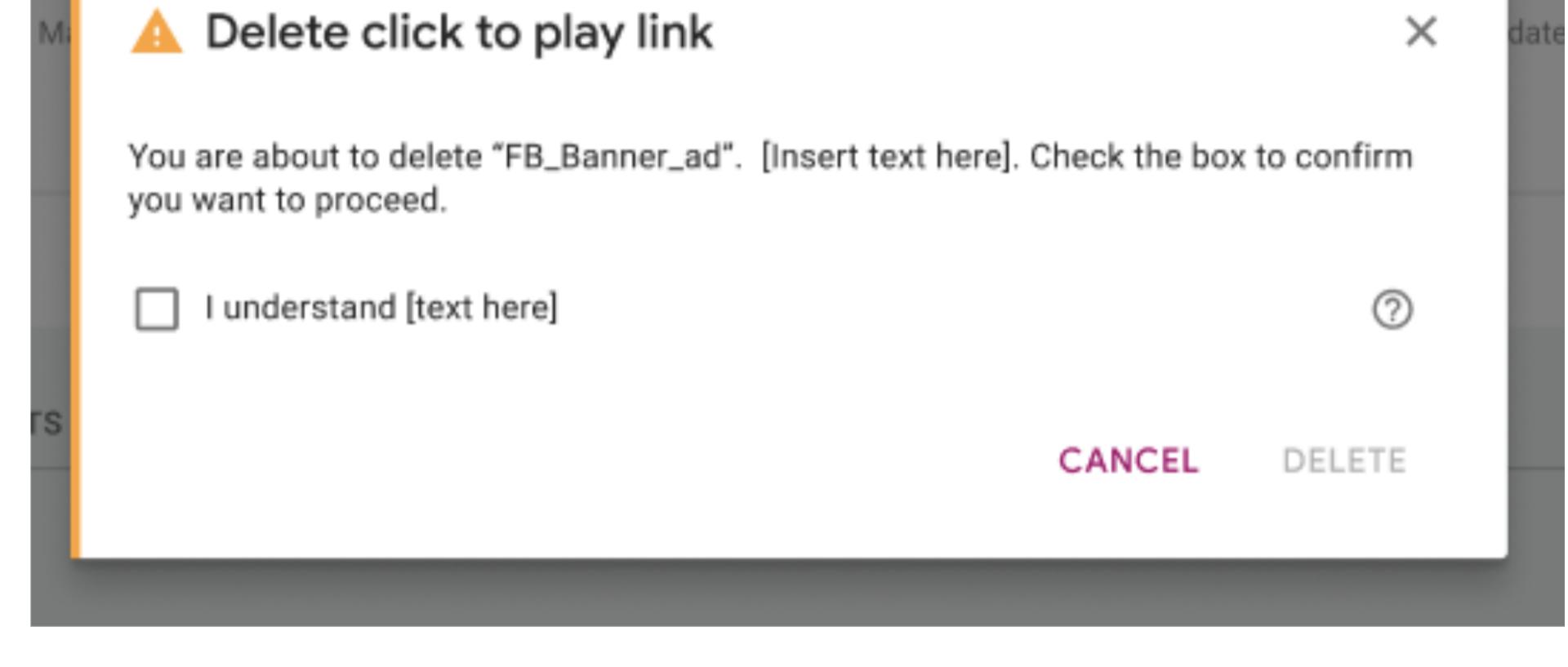
## Deleting an active Click to Play link

**Problem:** Deleting a C2P link can negatively affect an ad campaign.

**My impact:** I contacted the ads team to learn exactly what happens with a link, so I could provide helpful context to partners.

I applied our dialog content patterns to ensure a consistent experience.

**Solution:** Warn partners of the consequences, and enforce an acknowledgement to stress the importance.



#### Delete a Click to Play link

You're deleting the **[name]** link. It will still appear in reports, but if you use the link in ad campaigns, it will direct players to the Stadia home page instead of your product **[product name]**. You can't undo this action.

[ ] I understand that this link will no longer direct players to **[product name]**

CANCEL DELETE

# Dialogs

# SUMMARY

A dialog is an on-screen prompt used to communicate additional information with a user. It can be used to confirm actions, or to gather information to complete actions.

There are **3** types of dialogs.

## Confirmation dialog

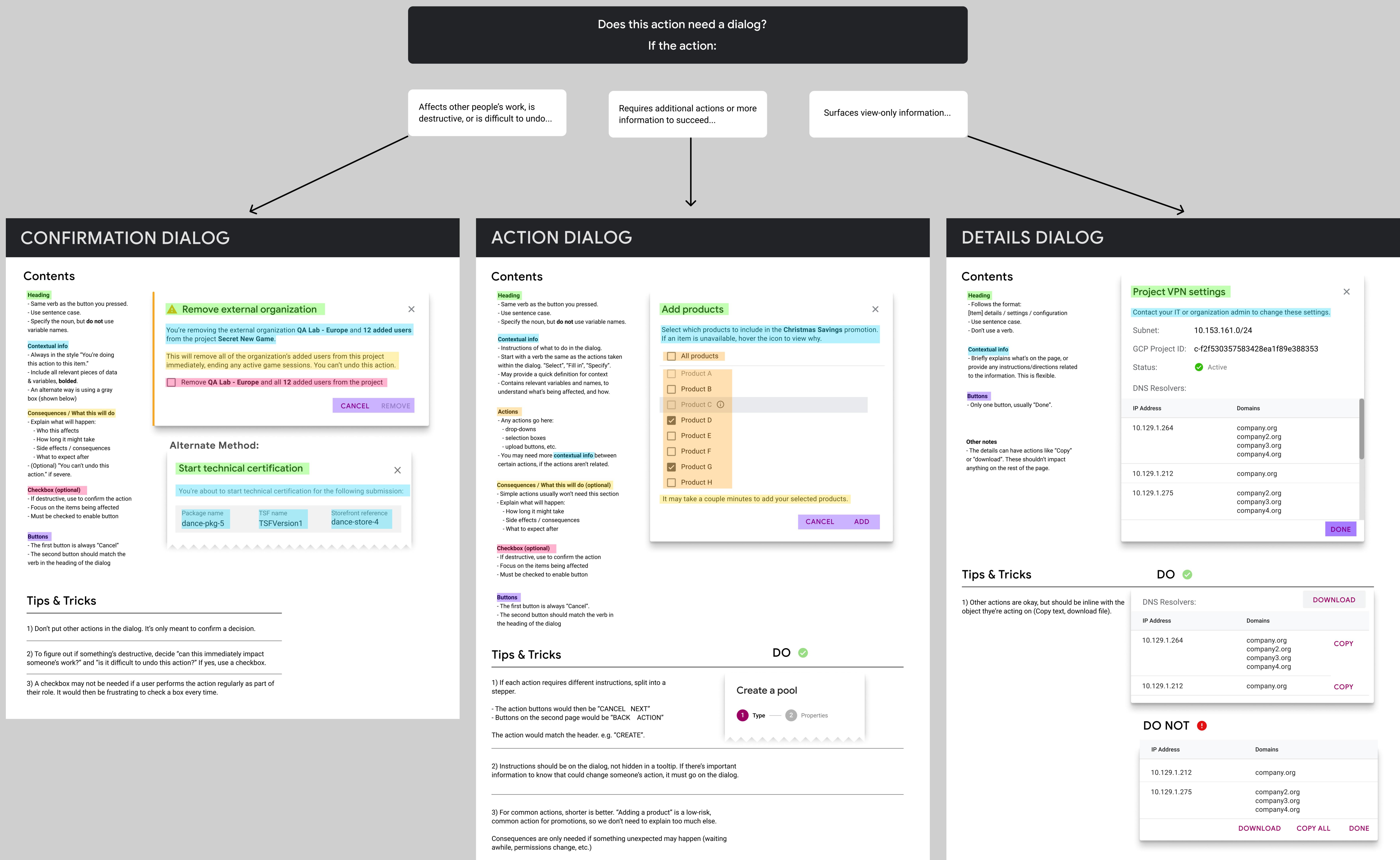
This is used to slow the user down and see their action in context. It's used for destructive or significant actions, and provides a summary of what will happen next. It sometimes has a checkbox for confirmation.

## Action dialog

This is used to gather more information to complete the action. Usually it contains instructions, and requires selecting from a list, or inputting fields. There are many variations of these, but they all follow the same structure.

## Details dialog

This is used to display information for the user. There are no interactions other than copying or downloading information.



## Buttons

### Contents

1 impactful verb  
1 noun (optional)

CREATE STOREFRONT

### Common buttons

The same word should be used for the same action across the portal. Here are words for common buttons.

CREATE [NOUN]	Create a new, original entity in our system with metadata. Used mostly for forms. e.g. "Create TSF"
ADD [NOUN]	Add an existing entity to another entity, or for adding people. e.g. "Add dev nodes"
ASSIGN [NOUN]	Assign an existing entity to a team (project/title). Not for people. e.g. "Assign application"
UPLOAD [NOUN]	Upload a new, original entity into our system. e.g. "Upload pricing"
NEW [NOUN]	Use when creating a new entity has multiple potential ways. e.g. "Upload" or "Transfer" a package.
SUBMIT [NOUN]	Submit an entity for certification.
DOWNLOAD [FORMAT]	Download a file in a certain format, if the format isn't already clear. e.g. "Download CSV"
SAVE	Save progress on an entity. Not for downloading. Used mostly on forms.
EDIT	Edit the metadata of an existing entity. Paired with "Update" as a dialog action.

### Tips & tricks

DO ✓

DO NOT ✘

1) Keep it short and sweet. Don't use **determiners** like "a" or "the".

CREATE STOREFRONT

CREATE A STOREFRONT

2) Words should be impactful and straightforward.

DOWNLOAD

GET

EDIT

CHANGE

3) Re-use the same language from descriptions or headings.

Select the item you want to download.

Select...

Select the item you want to download.

Choose a file...

DOWNLOAD

SAVE

# CLI Content Strategy

## Style guide and writing samples

The Command Line Interface (CLI) is a text-based interface where partners can use the Stadia SDK to its full potential. This is an excerpt from my style guide, plus some samples below.

## CLI style guide excerpt

### How to write commands: Short and sweet

CLI commands are meant to be as brief as possible to minimize typing and maximize doing. A command has 4 pieces: the group, the action, the item, and the flags.

```
ggp user add austinfisher@google.com --project="Test-Project1"
```

**Group:** A noun. A group is what we're acting on. You can have nested groups, but these only make sense if the top group has too many commands or flag combinations.

**Action:** A verb. It should match what we use in the Partner Portal (Add, Assign, Create, Upload), whenever possible.

**Item (optional):** The ID or name of an entity in the group. You can have multiple items.

**Flags (optional):** Any other variables required for the command to work. Boolean flags start with a verb like 'enable' and always have a 'true' state. Item flags just use the name of the item.

### How to write help text: Long and descriptive

This is very similar to technical writing. Help text explains what a command can do in complete detail, covering every use case.

**Group help:** Provides a definition of the group. It almost always begins with "Manage", and explains the user benefit of the item.

**Action help:** The action help has 4 pieces.

- 1) The core functionality.
- 2) How to use all the required flags or arguments, providing context that may affect user input.
- 3) How to use the optional flags, how they work together, and their user benefit.
- 4) Any other helpful information, other commands to use first, documentation to read, etc.

**Flag help:** This describes how to format the flag. It lists the arguments and formats it accepts. These don't require full sentences.

## CLI writing samples

### Connecting a metrics tracker before a session starts

**Problem:** Users can't connect the metrics tracker until after the game begins.

#### CLI - Original

Original command	Original short	Original long	Original flags
ggp chrome-extension connect	Connect to the game on your reserved instance	Connect to the game on your reserved instance	

**Solution:** Create a command to connect and disconnect the metrics tracker.

**My impact:** Looking at the user journeys, I added a "disconnect" command since it's possible to connect to the wrong instance.

#### CLI - UXW wording

UX command	UX short	UX long	UX flags
ggp chrome-extension	Manage the remote chrome extension	Manage the remote chrome extension.  Connecting this extension to a reserved instance provides metrics and run-time stats about the instance and the stream. It provides this data regardless of which screen you're playing on, and displays the data on your workstation's screen.	
... connect	Connect the remote chrome extension to a reserved instance	Connect the remote chrome extension to a reserved instance.  This defaults to your current instance. You can specify a different one with the --instance flag.	--instance: Instance ID
... disconnect	Disconnect the remote chrome extension from a reserved instance	Disconnect the remote chrome extension from a reserved instance.  This defaults to your current instance. You can specify a different one with the --instance flag.	--instance: Instance ID

### Setting up a crash report bucket & downloading reports

**Problem:** Users needed to download crash reports.

**Solution:** Create commands to create a crash report bucket and to download the reports.

**My impact:** I renamed a proposed command from 'set-gcs-destination' to 'gcs-bucket update' to follow content standards.

This nested group also made it easy to separate the bucket management from the actual reports, especially since more commands would be coming to GCS buckets soon.

I also talked with the engineer to merge 'count' into the 'list' command to simplify how to view information.

UX command	UX short	UX long	UX flags
ggp crash-report	Manage crash reports	Manage crash reports.  You can set a Google Cloud Storage (GCS) bucket to store crash reports, and then download the stored reports.	
ggp crash-report gcs-bucket	Manage the GCS bucket destination for storing crash reports	Manage the Google Cloud Storage (GCS) bucket destination for storing crash reports	
... update	Update the GCS bucket for storing crash reports	Update the Google Cloud Storage (GCS) bucket for storing crash reports.  Specify the GCS bucket URI with the --bucket flag, and specify which title's crash reports to store in this bucket with the --title flag.	--title: Title ID --bucket: GCS bucket URI. Example: gs://bucketname/optional/path/to/folder
ggp crash-report report	Manage and view crash reports	Manage and view crash reports.  You can list and download crash reports, and can filter results by different times or specific report IDs.	--title: (same as above)
... list	List crash reports and details	List crash reports and details.  Specify which title's crash reports to list with the --title flag. It defaults to listing all reports created over the past 24 hours, but you can change this with the --start-time and --end-time flags. You can also list specific reports with the --report-id flag.	--title: (same as above) --start-time: Default is 24 hours ago. Use RFC 3339 format: YYYY-MM-DDThh:mm:ss(+/-)(UTC offset) --end-time: Default is now. Use RFC 3339 format: YYYY-MM-DDThh:mm:ss(+/-)(UTC offset) --report-id: Crash report ID
... download <report-id>	Download crash reports	Download crash reports.  Specify which title's crash reports to download with the --title flag, or specify a report ID. Set the save destination with the --path flag. It defaults to downloading all reports created over the past 24 hours, but you can change this with the --start-time and --end-time flags, or by specifying a report.	--title: (same as above) --start-time: (same as above) --end-time: (same as above) --path: Local path to save the report
... describe <report-id>	Describe a crash report		

# Naming & Ideation

Solving a “word problem” in 24 hours

## Creating a name: “Betas” to “Custom Audiences”

What's in a name? Well, as it turns out, a lot. A name carries a lot of meaning, emotions, and reactions. Where “Project Stream” was a codename that invoked curiosity and mystery around streaming innovation, “Stadia” was a metaphor for all things play, inspiring community, action, and excitement.

### Summary: “What do we call betas?”

#### Problem

I was approached to help name “betas”. However this name couldn't be “beta”, and it needed to be applied to many different items. Those items needed renaming too. What do we call this group of unfinished and fragmented games? What actually needed a name?

#### My approach

- 1) I challenged the idea of what a “beta” was, and did a quick exercise to group similar items.
- 2) I researched industry terminology to see what words both partners and players were already using.
- 3) I questioned the premise for not using “beta”, and persuaded the team to consider changing our legal documents instead, so we use the right word everywhere.
- 4) I brainstormed with the product manager some alternatives and documented our ideas.
- 5) I suggested a more plain-language, clear alternative to the PMs proposed final name, and got immediate cross-functional approval.

### Step 1: Categorizing the items

I noticed in the proposal that there were 2 distinct categories of items. There were unfinished games for testing purposes, and finished games for generating sales. I organized them below:

<u>Unfinished Game (Testing)</u>	<u>Finished Game (Sales)</u>
Open Betas	Free Trials
Closed Betas	Demos
Early Access Testing	

These were all very common terms. I suggested we use the same terms internally and externally. But since “beta” was already used as a different publishing milestone in our legal docs, that had to change.

### Step 2: Industry research

The question I kept hearing was “What do we call the category that contains betas?” I struggled with the question. Did the category even need a name? Could we simply say “Game version” or “Game type”? So I looked into the words the industry used.

> What is a beta (or alpha)?

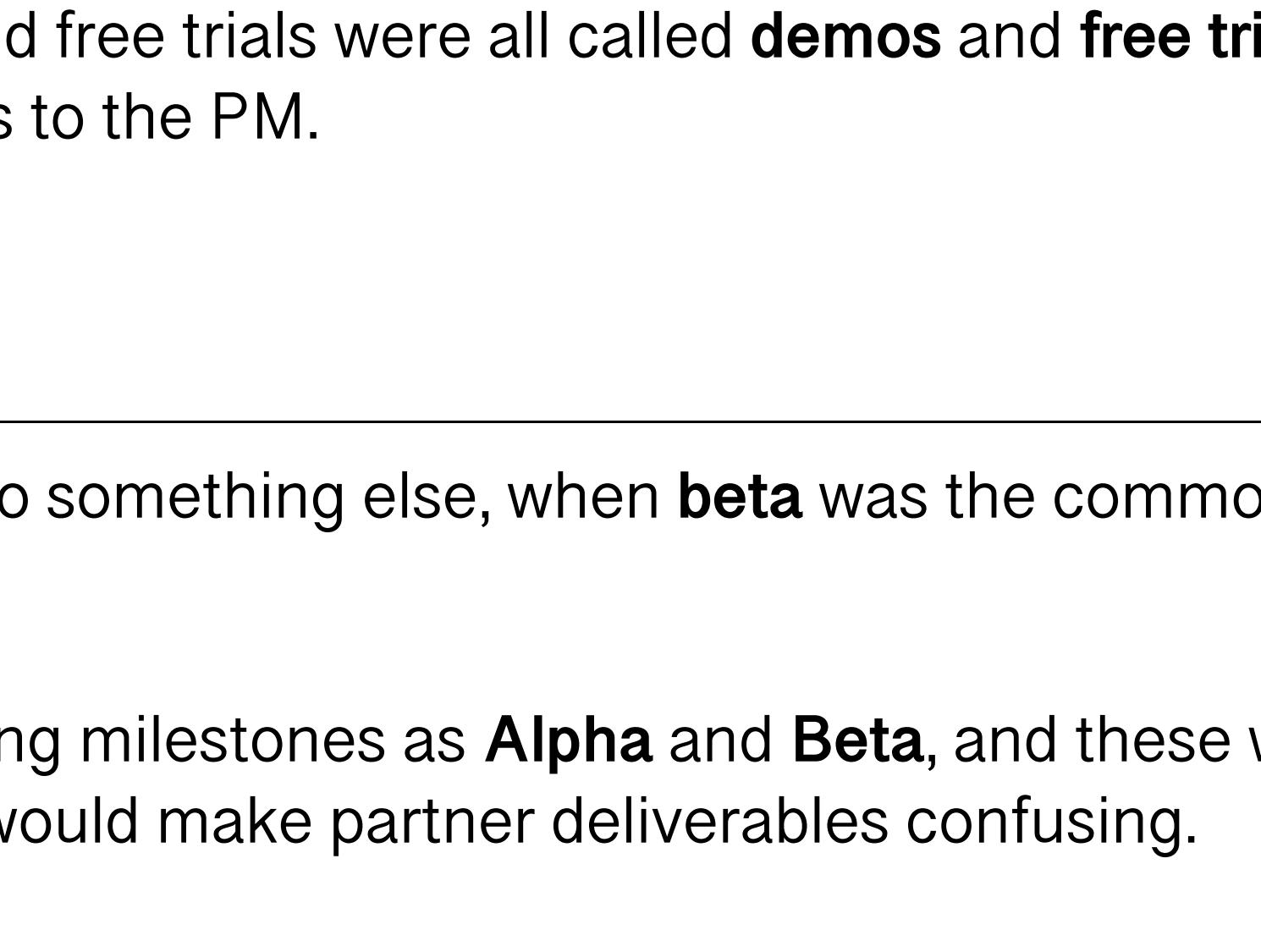
✓ What is a demo?  
A demo is a limited version of a game intended to let interested gamers try it before purchase. Demos usually offer a very limited window into the game—usually just a few levels or features.

✓ What is a trial?  
Trials are the full version of a game, but with limitations for people who haven't purchased it yet. Unlike a demo, which may only have one or two levels, a trial may be the whole game but only playable for a few hours prior to purchase. If you choose to purchase, the trial unlocks the full game and you don't need to download it again.

**Call of Duty®: Modern Warfare® Open Beta**

Open BETA will be live September 19<sup>th</sup> – 23<sup>rd</sup>.  
Download the BETA now.

[Download Beta](#)



I checked the stores of other game platforms like Nintendo, PlayStation, and Steam. I also checked websites for game developers and publishers to see what language they used.

Across the board, everyone used **Open Beta** and **Closed Beta**. The category was either called **Early Access** or there was no category name at all. Demos and free trials were all called **demos** and **free trials**. I sourced the various websites when bringing my findings to the PM.

### Step 3: Questioning the premise

I asked why we wanted to change the name from **beta** to something else, when **beta** was the common industry term.

There was a legal reason. We identified certain publishing milestones as **Alpha** and **Beta**, and these would come much earlier than an **Open** or **Closed Beta**. This would make partner deliverables confusing.

However... this didn't sit right with me. We should always favor the most accurate term, even if it means extra work. The PM agreed with me, and we proposed to change the legal milestone term instead.

### Step 4: Brainstorming

We still had a problem: “What do we call the category that contains Betas and all other game versions?” We cycled through a few options:

- Game versions
- Releases
- Release versions
- Limited audience releases

I proposed “game versions” to start. These words came most naturally when talking about the concept.

But the PM wanted something that highlighted the publisher value, and proposed “Limited audience releases”.

But “Limited” didn't seem right. It was too narrow to describe early access programs that could have millions of players. What was limited? The time window? The audience?

### Step 5: The final name! Using common language “Betas” & “Custom audiences”

I asked what the main benefit was. “Choice” was the word that came out most. “Chosen audiences”? “Selected audiences”? The next day, the PM sent an email out about the new name: “Settable audiences”.

Red flags went off in my head. Is **settable** a common word? Is it a word people ever use? I feared it would still create confusion.

So I searched for similar words, opened the thesaurus, and thought to myself “what's great about a settable audience?” “What actionable value does it produce?”

The answer: “You can customize who can play this version of the game.” And there it was. Our name. “Custom audiences.”

I suggested “Custom audiences” to all the cross-functional stakeholders, and got immediate positive feedback. Everyone was on board.

### My impact

I took a big concept, identified the root cause of the problem, proposed meaningful, well-researched options, and used my writing knowledge to find common, plain-language words that conveyed exactly what the product manager intended.

In 24 hours, I took a vague idea and turned it into a confident, clear, and actionable final name.

Thanks for reading!  
Come talk to me about UX and poutine.



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