



A TECHWELL EVENT

T18

Test Process

Thursday, October 4th, 2018 1:30 PM

Why "Why...?" Can Be the Most Important Question for QA to Ask

Presented by:

Jane Jeffers

Riot Games

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Jane Jeffers

A QA architect on League of Legends at Riot Games, Jane Jeffers has more than seven years in the games industry. Before moving into the MOBA (Multiplayer Online Battle Arena), she worked on multi-platform AAA RTS titles such as the Battle for Middle Earth II and Command & Conquer 3. As a content specialist on League of Legends, Jane has built much of the QA process around features that allow players to personalize their experience, fusing her previous black box testing background with a qualitative approach in the agile arena.

Why "Why...?" Can Be the Most Important Question for QA to Ask

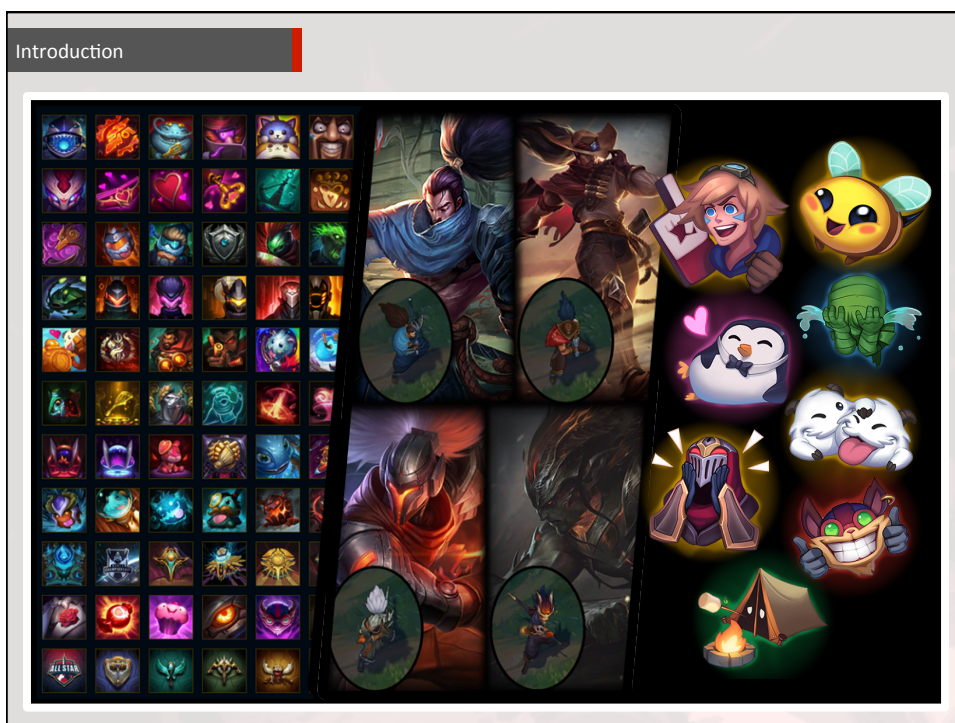
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Introduction

R I O T
G A M E S

LEAGUE OF
LEGENDS





AGENDA

- 1 Introduction**
- 2 Product Whys**
- 3 Process Whys**
- 4 People Whys**
- 5 Final Thoughts**

PRODUCT



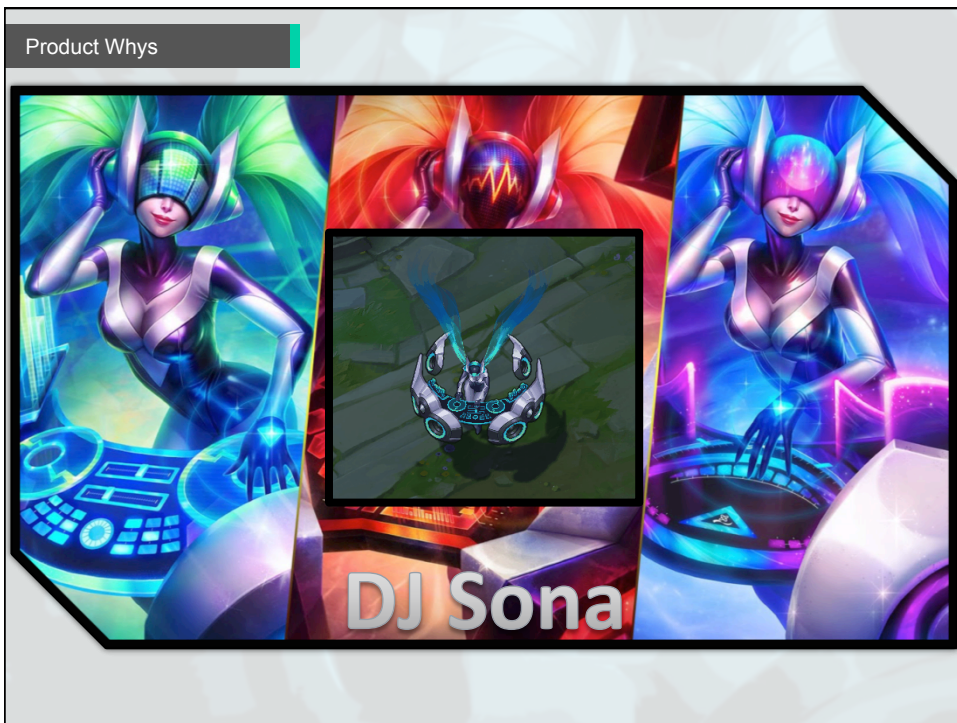
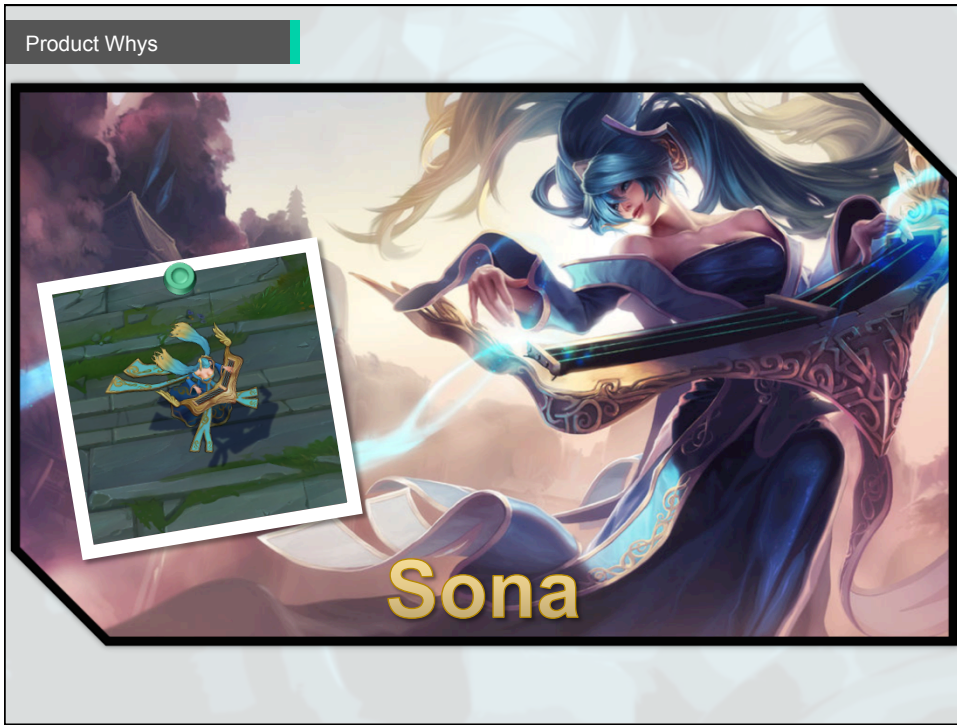
Product Whys

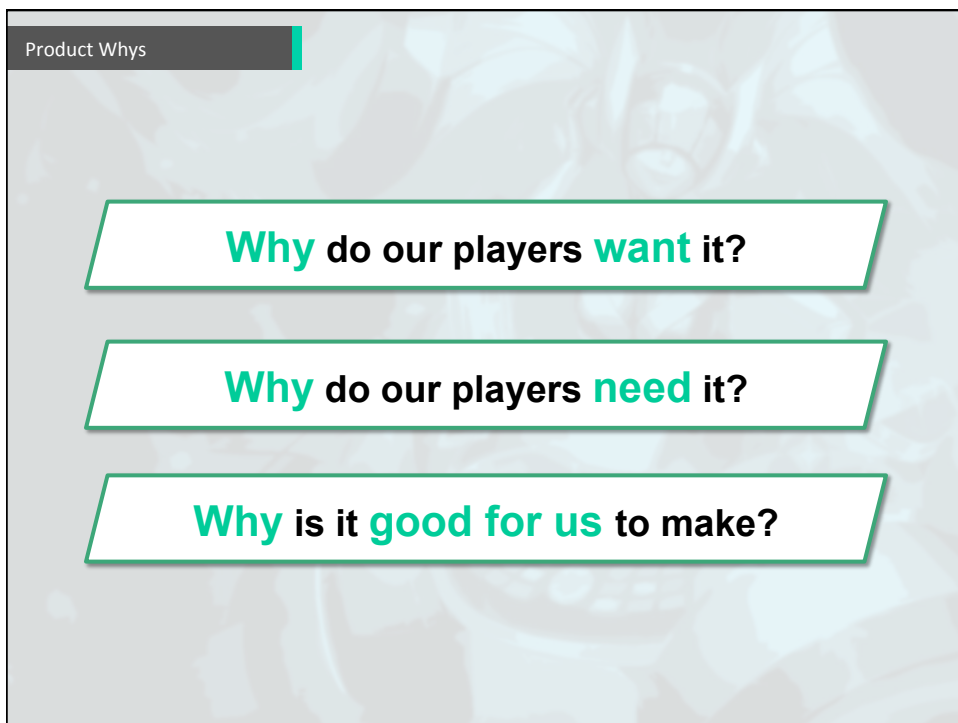
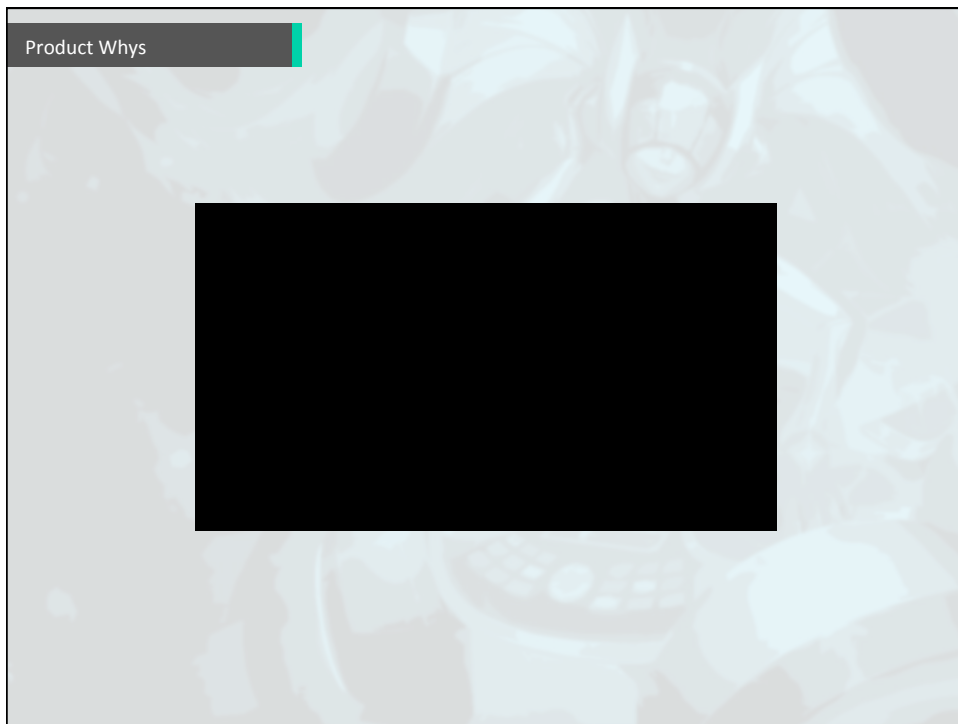
Why do our players **want** it?

Why do our players **need** it?

Why is it **good for us** to make?

A slide titled "Product Whys" with a dark teal header. The background is a light teal color with a faint, stylized image of a character's face. Three white, rounded rectangular boxes with green borders are stacked vertically, each containing a question starting with "Why".





Validation Testing



Are we making the right thing?

Requirements



Are our requirements in line with what we're trying to accomplish?

Verification Testing



Where do we focus our testing?



What test cases do we prioritize?

Quality Bar & Defect Management



Where should we set the bar?



**What defects can we ship with?
What must we fix now vs. later?**

Product Whys

Risk Assessment & Mitigation Strategy



What risks should we prioritize?

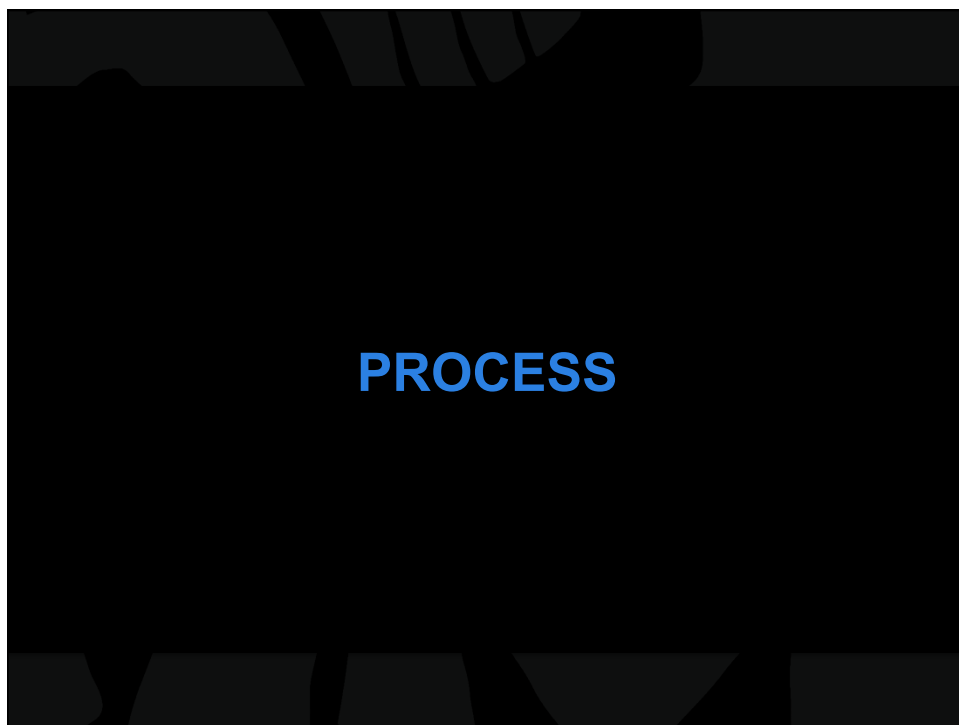


How should we handle failures?

Product Whys

Forbes Article:

“League of Legends’ DJ Sona is the Mona Lisa of Microtransactions”



Process Whys

5 Whys & Root Cause Analysis

Originally developed by Sakichi Toyoda, **5 Whys** is a technique used to determine the root cause of a problem or defect by repeating the question:

“Why?”

Process Whys

5 Whys & Root Cause Analysis

Problem: The game crashes

- 1 Why? The game failed to load a character animation
- 2 Why? The game cannot find the animation file
- 3 Why? The file is incorrectly named
- 4 Why? The animator failed to use standard naming conventions
- 5 Why? The animator doesn't know the naming conventions
The tool did not block non-standard names

Process Whys

5 Whys & Root Cause Analysis

Problem: The game crashes

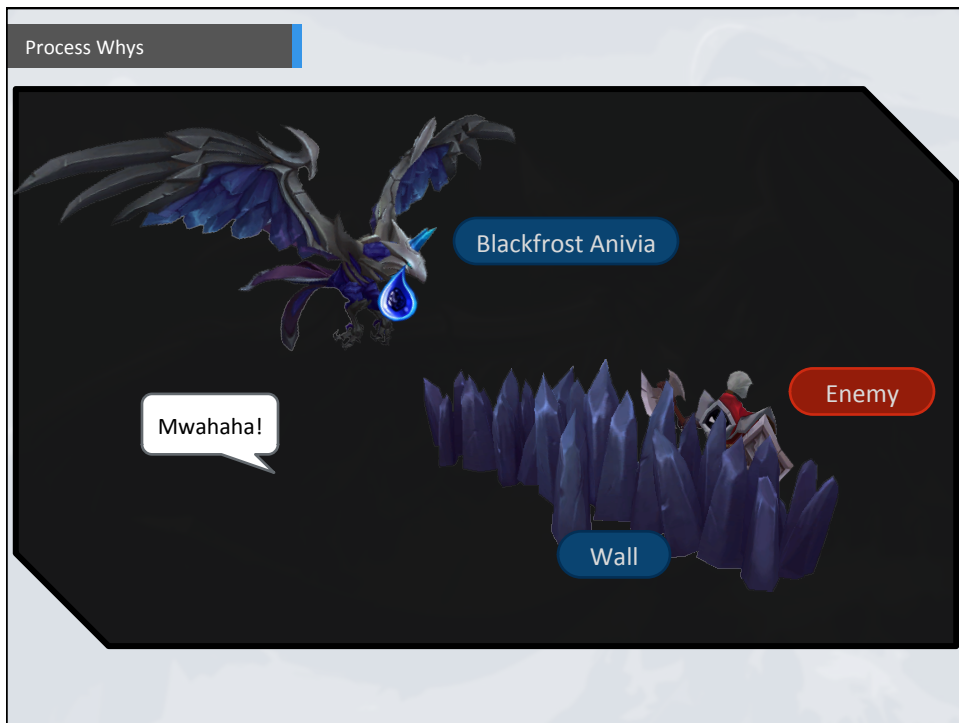
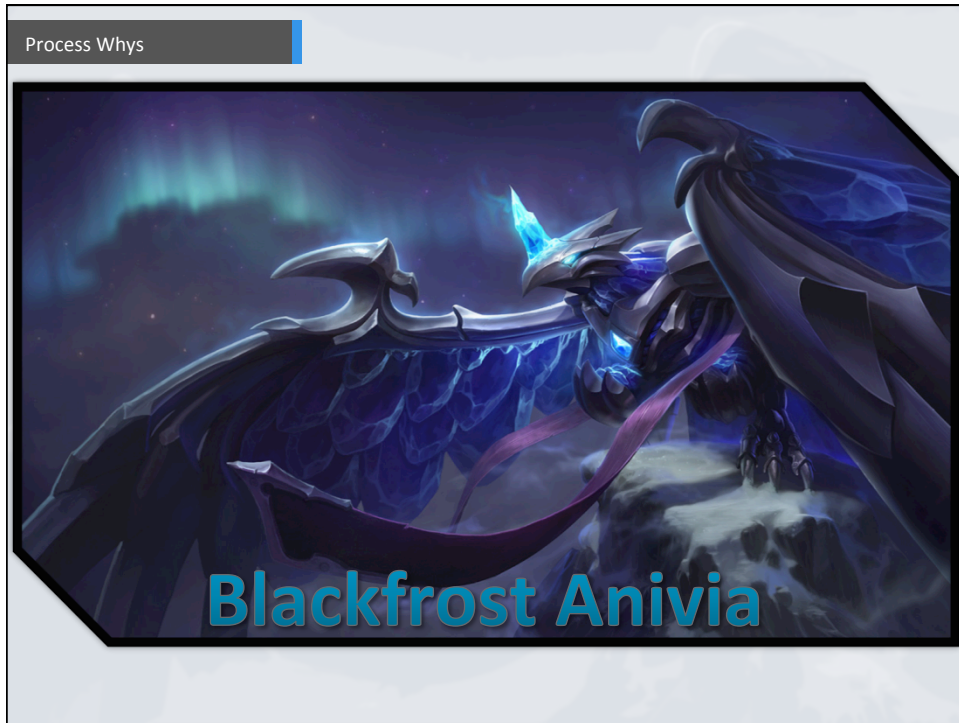
1 Why? *“QA didn’t catch it” is never a root cause!*

2 Why? *QA doesn’t know naming conventions*

3 Why? The file is incorrectly named *QA does not block standard names*

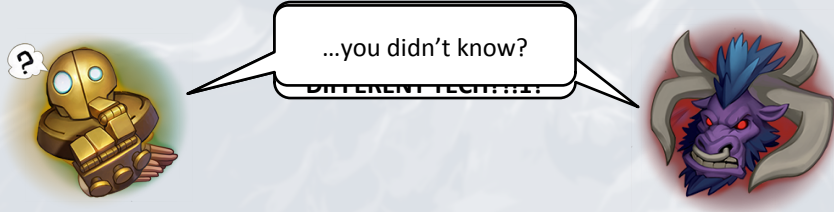
4 Why? The animator failed to use standard naming conventions






Process Whys

During the Retro...



...you didn't know?
DIFFERENT TECHNIQUES!



WHY do we do things
the way we do them?

Documentation



Standardized Design Documents



Explanatory notes in changelists



Comments in bug tickets

Analysis



**Definition of Done changed
to include testing**



**Information Checklist
(who to inform when)**



**Public Beta Environment
Release Readiness standards**

Process Whys

Education



Taught team about QA work



Learned about what tools and systems were failing artists



Introduced artists to the concept of unit testing

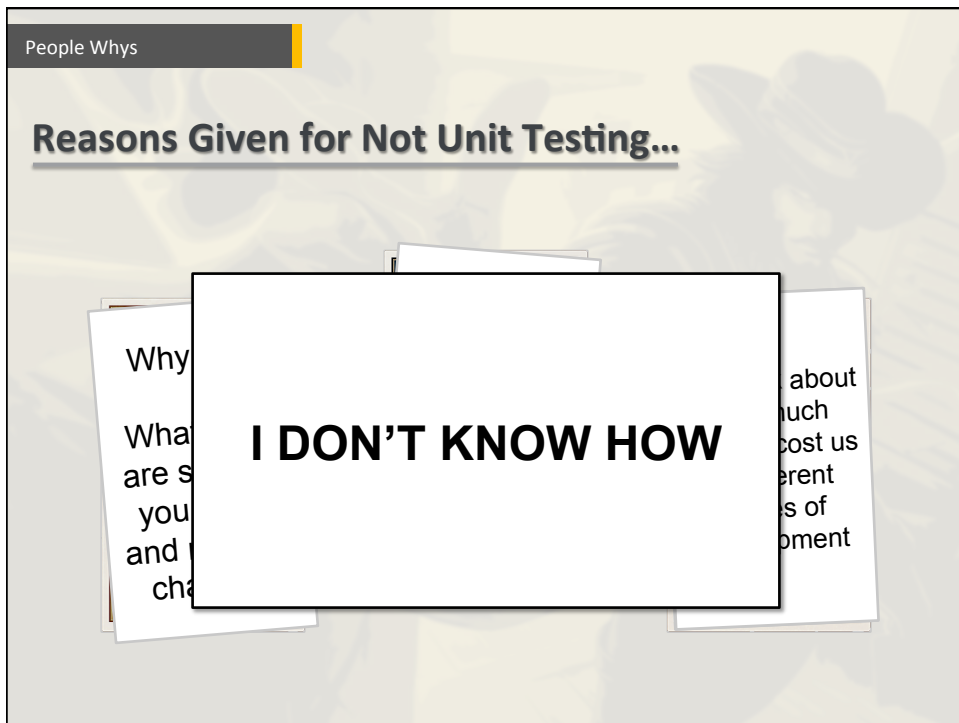
PEOPLE



People Whys

Holistic Quality Ownership

Every Rioter is **accountable** for the **Quality** of their work, resulting in the **sustainable** creation and delivery of world class **player value**.



People Why

Common Issues Unit Test Cards

Common Issues

AUDIO DESYNCS WHEN MOVING THE CAMERA AWAY AND BACK ONTO THE CHAMPION; MOST COMMON DURING RECALLS.

RECALL SFX ARE GLOBAL.

RECALL SFX CAN BE HEARD IN FOW.

SPELL VFX IS MORE QUIET/LOUDER THAN THE BASE.

OCCURS WITH LEGENDARY SKINS:
MISSING VO INTERACTIONS; USUALLY WHEN SOMETHING HAS BEEN CUT FROM THE SCRIPT/WHEN PLAY RATE ISN'T SPECIFIED.
VO OVERLAPS THE ANNOUNCER.

V.2.0

Front

Details the most common issues for the sub-discipline

Audio Sweep

LOAD INTO THE GAME (SPT/LDL).
WHILE CHAMPION BUILDER AND WAFFLES ARE GREAT, THEY DON'T ALWAYS SHOW WHAT WILL APPEAR IN GAME.

USE ALL SPELLS, EMOTES WITH NEW SFX.

RECALL, BOTH WITH THE CAMERA ON THE CHAMPION, AND MOVING CAMERA ON AND AWAY THE CHAMPION, AS WELL AS WITH A CHAMPION BEING IN FOW.

TRIGGER VO/ITEM INTERACTIONS FOR LEGENDARY SKINS.

TRIGGER VO LINES WHERE THE ANNOUNCER WOULD ALSO SPEAK (KILL CALLS).

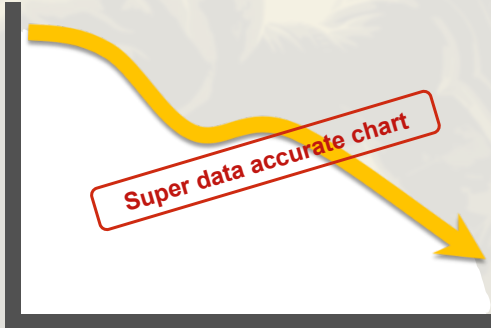
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Back

Instructions for quick tests to check for said issues


People Why

When Cards Are Used...




Common Issues over time

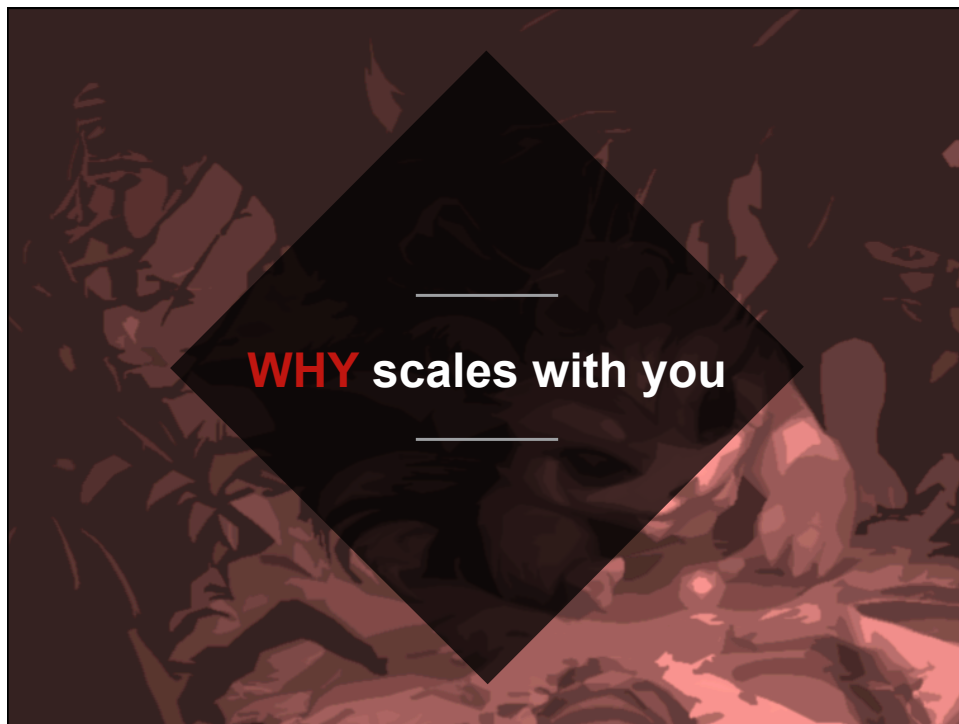
People Whys



When issues stop occurring, they are pulled from the cards and the next most common issues replace them.



FINAL THOUGHTS



Final Thoughts

“The important thing is not to stop questioning. Curiosity has its own reason for existing.”

-Albert Einstein

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