

Postmortem Review

Optional Group Activity

Overview

An issue arose the other afternoon where users weren't able to access the profile pages on our web application. In this exercise, you will work to come up with some possible action items so this doesn't happen again.

Objectives

In this lab, you will learn how to perform the following tasks:

- Examine the View Profile Page user journey
- Examine the postmortem
- Create a list of action items

Task 0. Getting ready

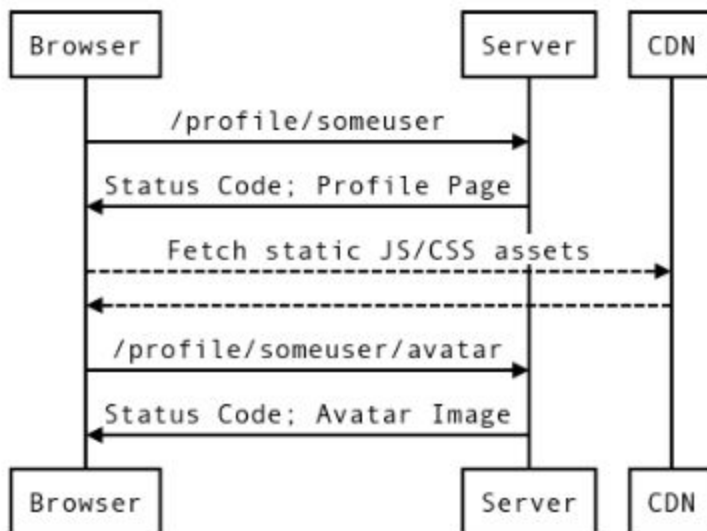
If you are attending an in-person, instructor-led event, please take a moment to form up into teams of approximately 4 people. If you are attending virtually, please do the exercise on your own.

Task 1. Examine the View Profile Page user journey

Take a moment and review the View Profile Page user journey.

View Profile Page

Players can log in to their game account, view their settlement, and make profile changes from a web browser. A player loading their profile page is a simple journey that we will go through together in the workshop.



Task 2. Examine the postmortem

Take a few moments and examine this postmortem.

Postmortem: Blank Profile Pages

Impact

From 08:43 to 13:17 CEST, users accessing their profile pages received incomplete responses. This rendered them unable to view or edit their profile.

Root Causes and Trigger

The proximate root cause was a bug in the web server's handling of unicode HTML templates. The trigger was commit a6d78d13, which changed the profile page template to support localization, but at the same time accidentally introduced unicode quotation marks (U+201C “, U+201D ”) into the template HTML. When the web server encountered these instead of the standard ASCII quotation mark (U+0022 "), the template engine aborted rendering of the output.

Detection

Because the aborted rendering process did not throw an exception, the HTTP status code for the incomplete responses was still 200 OK. The problem thus went undetected by our SLO-based alerts. The support and social media teams manually escalated concerns about a substantially increased level of complaints relating to the profile page at 12:14 CEST.

Lessons Learned

Things that went well:

- Support and social media teams were able to find the correct escalation path and successfully contact the ops team.

Things that went poorly:

- HTTP status code SLIs could not detect incomplete responses.
- Web server used a severely outdated, vendored version of the templating engine with a substantially broken unicode support.

Where we got lucky:

- User profile page is relatively unimportant to our revenue stream.

Task 3. Create a list of action items

1. Have a member of the team create a Google Document and share it with the rest of the team members. Yes, if you prefer paper and pencil, whiteboard, or another type of document, feel free to run with it.
2. As a group, come up with a short list of Action Items based on what you know about what went wrong. Most importantly, how can we make sure it doesn't happen again in the future and what do we need to do to close the

measurement gap so we could spot it if it did. Feel free to make any needed assumptions.

Review

Congratulations!

You took a quick description of a postmortem in a running system and put some thought into what should be changed to make sure this issue never happened again.