QA Testing Project — YouTube Web Recommendations

Platform

Opera GX 124.0.5705.89(Desktop)

Testing Focus

Manual testing with an exploratory and test design approach

1. Project Overview

This project explores how the YouTube recommendation system reacts to user interaction on the Home page, with a specific focus on likes and ignored content.
The goal of the project was to understand the behavior and logic of a complex recommendation system rather than validate a single isolated feature.

The project was completed as a personal QA initiative and simulates real-world exploratory testing of a system treated as a black box.

2. Scope of Testing

Testing was focused on the YouTube Home page and its recommendation blocks.
Special attention was given to how recommendations change depending on user actions such as liking videos, watching content, and ignoring specific categories.

Three clearly distinguishable content categories were selected to make behavioral changes easier to observe:
Gaming, Motorcycles, and Humor.

3. Test Strategy

Testing was conducted using an exploratory approach combined with basic test design techniques. Instead of predefined scripts, logical hypotheses were created and validated through user interaction.

The main assumption behind the tests was that a like on a fully watched video represents a stronger signal for the recommendation system than passive viewing or fast scrolling.

4. Test Cases

Test Case 1

Title: Increase of Gaming content after multiple likes

Preconditions:
User is logged in to YouTube. The Home page contains mixed content.

Steps:

1. Open the YouTube Home page.
2. Find a video related to the Gaming category.
3. Open the video.
4. Watch the video for at least 30–60 seconds.
5. Click the Like button.
6. Repeat steps 2–5 for 4–6 additional Gaming videos.
7. Return to the YouTube Home page.
8. Refresh the page.
9. Refresh the page one more time.

Expected Result:
Gaming-related videos appear more frequently in recommendations, while other categories become less visible.

Test Case 2

Title: Decrease of Humor content priority when category is ignored

Preconditions:
User is logged in. Recommendations contain Gaming, Motorcycles, and Humor content.

Steps:

1. Open the YouTube Home page.
2. Find and open a Gaming video.
3. Watch the video for at least 30–60 seconds.
4. Click the Like button.
5. Repeat steps 2–4 for 3–5 Gaming videos.
6. Find and open a Motorcycles video.
7. Watch the video for at least 30–60 seconds.
8. Click the Like button.
9. Repeat steps 6–8 for 2–4 Motorcycles videos.
10. Return to the YouTube Home page.
11. Refresh the page.
12. Observe the recommendations.

Expected Result:
Gaming and Motorcycles content becomes dominant, while Humor-related videos appear significantly less often or disappear.

Test Case 3

Title: Priority conflict between two liked categories

Preconditions:
User is logged in. The Home page contains mixed content.

Steps:

1. Open the YouTube Home page.
2. Open a Gaming video.
3. Watch the video for at least 30–60 seconds.
4. Click the Like button.
5. Repeat steps 2–4 for 2–3 Gaming videos.
6. Open a Motorcycles video.
7. Watch the video for at least 30–60 seconds.
8. Click the Like button.
9. Repeat steps 6–8 for 2–3 Motorcycles videos.
10. Return to the YouTube Home page.
11. Refresh the page.
12. Refresh the page again.

Expected Result:
Recommendations include both categories, with slight prioritization of the category with stronger interaction or longer watch time.

Test Case 4

Title: Impact of watch time without likes on recommendations

Preconditions:
User is logged in. The Home page contains mixed content.

Steps:

1. Open the YouTube Home page.
2. Open a Humor video.
3. Watch the video for at least 30–60 seconds.
4. Close the video without liking it.
5. Repeat steps 2–4 for 3–5 Humor videos.
6. Open a Gaming video.
7. Watch the video for at least 30–60 seconds.
8. Click the Like button.
9. Repeat steps 6–8 for 3–5 Gaming videos.
10. Return to the YouTube Home page.
11. Refresh the page.
12. Observe the recommendations.

Expected Result:
Gaming content remains dominant, while Humor content increases only slightly, indicating that watch time alone has less influence than likes.

5. Findings & Observations

During testing, it was observed that likes have a strong and consistent impact on recommendation priorities. Categories receiving active interaction quickly gain visibility, while ignored categories gradually lose presence. When multiple categories receive likes, the system tends to balance recommendations between them, but watch time influences which category becomes more prominent. Recommendation updates are not immediate and often require multiple refreshes or time delays.

6. UX & Logic Observations

From a user experience perspective, the recommendation system lacks transparency. Users are not clearly informed why specific videos appear on the Home page, and sudden changes in content topics may feel confusing or unpredictable. There is no visible feedback explaining how likes or watch behavior influence recommendations, which may reduce user trust in the system. These findings were treated as UX and logic issues rather than functional defects.

7. Bug Reports

Bug Report 1

Title: Liked content category does not immediately affect Home page recommendations

Environment:
YouTube Web, Desktop (Chrome), logged-in user

Severity: Medium
Priority: Medium

Steps to Reproduce:

1. Like 4–6 Gaming videos after watching them for at least 60 seconds.
2. Return to the Home page.
3. Refresh the page once.

Expected Result:
Gaming content should noticeably increase shortly after likes.

Actual Result:
Recommendations remain mostly unchanged after the first refresh and update only after multiple refreshes or time delay.

Bug Report 2

Title: Ignored content category remains visible despite strong interaction with other categories

Environment:
YouTube Web, Desktop (Chrome)

Severity: Low
Priority: Low

Steps to Reproduce:

1. Like multiple Gaming and Motorcycles videos.
2. Ignore all Humor videos.
3. Refresh the Home page several times.

Expected Result:
Humor content should significantly decrease or disappear.

Actual Result:
Humor content continues to appear in recommendations.

Bug Report 3

Title: Lack of transparency in recommendation logic causes unclear user experience

Type: UX / Logic Issue
Severity: Low

Description:
There is no visible explanation or feedback showing why specific videos appear in recommendations, which may confuse users and reduce trust in the system.

8. Tools Used

Testing was performed using a web browser (Opera GX), manual testing techniques, and MS Word for documentation.

9. Conclusion

This project provided hands-on experience with exploratory testing of a complex recommendation system. Logical test scenarios were designed based on observed behavior, and findings were documented without access to internal implementation details. The project demonstrates the ability to think analytically, design meaningful test cases, and evaluate product behavior from a QA perspective.