

# PatchBay

## Requirements Document

One-line description: A lightweight, game-based forum where each game has its own hub for discussion, news, mods, and clips.

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# Requirements Gathering

## Purpose or objectives for Requirements Gathering User Study:

age band, student/work status), platforms, and play patterns, where they discuss games, how they find patch notes, news, mods; how they decide compatibility, pain points with existing tools.

## Choice of user study and user sample:

What user study we chose: Survey

Target users: Young people who play video games

Use dual perspective: No

## Draft of the User Study Survey

### Category 1 — Demographics & Context

1. Age (single-select): 16–17 / 18–20 / 21–24 / 25–30 / 31+ / Prefer not to answer
2. Status (single-select): High-school student / College/University student / Working full-time / Working part-time / Other / Prefer not to answer
3. Prefer Language (single-select): English / Chinese / Japanese / French / Arabic / Russian / Other
4. PC OS used most for gaming (single-select): Windows / macOS / Linux / Other

### Category 2 — Gaming Habits

5. PC gaming hours per week (single-select): <5 / 5–10 / 11–20 / 21–35 / >35
6. Typical session length (single-select): <1h / 1–2h / 2–3h / >3h
7. Top genres you play (multi-select): Action / RPG / Strategy / FPS / MOBA / Simulation / Indie / Other
8. Play style (single-select): Mostly single-player / Mostly multiplayer / Mix of both
9. Use of game mods (single-select): Never / Rarely / Sometimes / Often / Always

### Category 3 — Community & Media Behaviours

10. Where do you discuss games now? (multi-select): Reddit / Discord / Steam Community / Game-specific forums / Social media (e.g., X) / Other
11. Pain points with current platforms (multi-select): Fragmented info / Poor search / Spoilers / Toxicity / Hard to track patch-specific

threads / Mod compatibility unclear / Hard to find trustworthy creators / Other

12. Share or upload clips/guides? (single-select): Never / Rarely / Sometimes / Often

#### Category 4 — Modding & Tools

13. Installed a mod in the past 12 months? (single-select): No / Yes—1–3 times / Yes—4–10 / Yes—>10

14. Biggest modding blockers (multi-select): Unsure about version compatibility / Broken dependencies / Malware risk / Confusing instructions / Slow downloads / No ratings/reviews / Other

15. How important are these features? (5-point Likert each: Not important → Extremely important; include “No opinion”)

- Version-compatibility badges
- Malware scanning on uploads
- Spoiler controls for posts/videos
- Unified per-game hub (news + mods + threads)
- Creator pages with reputations & release notes
- Auto dependency check for mods

### Data Visualization and Analysis

	Age	Status	PreferLanguage	PC_OS	HoursPerWeek	SessionLength	TopGenres	PlayStyle	UseOfMods	DiscussPlatforms	PainPoints	ShareClips	InstalledModspastYea	ModBlockers
1	18–20	College/University student	English	Windows	11–20	1–2h	['RPG', 'FPS', 'Indie']	Mix of both	Often	['Reddit', 'Discord', 'Steam Community']	['Fragmented info', 'Poor search', 'Mod compatibility unclear']	Sometimes	Yes—4–10	[Unsure about version compatibility, 'Broken dependencies', 'No ratings/reviews']
2	21–24	College/University student	Chinese	Windows	21–35	2–3h	['MOBA', 'Action']	Mostly multiplayer	Sometimes	['Discord', 'Game-specific forums']	['Toxicity', 'Hard to track patch-specific threads']	Rarely	Yes—1–3 times	[Confusing instructions, 'No ratings/reviews']
3	25–30	Working full-time	English	Windows	5–10	1–2h	['Strategy', 'Simulation']	Mostly single-player	Sometimes	['Reddit', 'Steam Community']	['Fragmented info', 'Spoilers']	Never	Yes—1–3 times	[Malware risk, 'Confusing instructions']
4	21–24	College/University student	English	Windows	11–20	2–3h	['FPS', 'Action']	Mostly multiplayer	Rarely	['Discord']	['Toxicity', 'Poor search']	Often	No	[No ratings/reviews]
5	18–20	College/University student	English	Windows	>35	>3h	['MOBA', 'FPS']	Mostly multiplayer	Often	['Discord', 'Reddit']	['Toxicity', 'Fragmented info', 'Hard to track patch-specific threads']	Often	Yes—>10	[Broken dependencies, 'Slow downloads']
6	21–24	College/University student	English	Windows	11–20	1–2h	['Indie', 'RPG']	Mix of both	Often	['Steam Community', 'Game-specific forums']	['Mod compatibility unclear', 'Poor search']	Rarely	Yes—4–10	[Unsure about version compatibility, 'Broken dependencies']
7	25–30	Working part-time	English	Windows	<5	<1h	['Strategy', 'Indie']	Mostly single-player	Rarely	['Reddit']	['Fragmented info']	Never	Yes—1–3 times	[Confusing instructions]
8	21–24	College/University student	English	Windows	21–35	2–3h	['RPG', 'Simulation']	Mix of both	Always	['Discord', 'Steam Community']	['Mod compatibility unclear', 'Broken dependencies']	Sometimes	Yes—>10	[Broken dependencies, 'Unsure about version compatibility']
9	31+	Working full-time	English	Windows	5–10	1–2h	['Strategy', 'RPG']	Mostly single-player	Sometimes	['Game-specific forums', 'Reddit']	['Poor search', 'Spoilers']	Rarely	Yes—4–10	[Malware risk, 'No ratings/reviews']
10	18–20	College/University student	Chinese	Windows	21–35	>3h	['MOBA', 'Action', 'FPS']	Mostly multiplayer	Sometimes	['Discord', 'Social media (e.g., X)']	['Toxicity', 'Fragmented info']	Often	Yes—1–3 times	[Confusing instructions, 'Slow downloads']
11	21–24	College/University student	English	Windows	11–20	1–2h	['RPG', 'Indie']	Mix of both	Often	['Discord', 'Steam Community']	['Mod compatibility unclear', 'Hard to find trustworthy creators']	Sometimes	Yes—4–10	[Unsure about version compatibility, 'No ratings/reviews']
12	25–30	Working full-time	English	Windows	5–10	1–2h	['Simulation', 'Strategy']	Mostly single-player	Rarely	['Reddit', 'Game-specific forums']	['Poor search', 'Spoilers']	Never	Yes—1–3 times	[Confusing instructions, 'Malware risk']

- **User profile & context:** Respondents are mainly college students aged 18–24, playing on Windows in 1–3h sessions, 11–35h/week.
- **Community behavior:** Discord and Reddit (plus Steam Community) dominate for discussion.
- **Modding behavior:** Most have installed mods recently; blockers center on compatibility uncertainty, broken dependencies, and confusing instructions/slow downloads.
- **Risk & trust:** High mean ratings for malware scanning and version badges indicate strong demand for safety and clarity.
- **Information structure:** Frequent complaints about fragmentation and poor search validate a unified, filterable hub design.
- **Spoiler sensitivity:** Mid-high importance suggests spoiler controls are valued but secondary to compatibility/safety.

## **Insights from the Results**

Surveyed young Windows PC gamers cite fragmented platforms, weak search, and mod-compatibility uncertainty as the key pains, so the app must deliver a unified per-game hub with version badges, automated dependency checks, and malware scanning, while spoiler controls and creator pages remain secondary priorities.

# **Requirements Generation**

## **Personas and Scenarios:**

*Mari Nguyen (23, Douglas Student, Casual Gamer)*

- **Background:** Plays Valorant and Genshin Impact 3–4 times per week.
- **Goals:** Wants quick, quiet updates about games without endless chat.
- **Frustrations:** Discord servers and Reddit threads are too noisy.
- **Scenario:** During class breaks, Mari opens PatchBay → taps her game hub → reads the newest patch summary → likes that it's short and visual.
- **Motivation:** Save time and focus on official info and concise posts.

*Karan Singh (27, Content Creator)*

- **Background:** Creates gameplay clips and short guides on YouTube.
- **Goals:** Upload clips to one place where fans of each game gather.

- **Frustrations:** Re-uploading to Discord, Reddit, YouTube and Steam is tedious.
- **Scenario:** Karan uses PatchBay's "Upload Post" feature → adds link + tags → his clip shows in that game hub → gets instant feedback in comments.
- **Motivation:** Centralized platform for content + version tagging.

***Lina Tran (20, Computer Science Student, Mod User)***

- **Background:** Loves trying small mods for Minecraft and Stardew Valley.
- **Goals:** Find compatible mods for specific game versions.
- **Frustrations:** Old mods break after updates; hard to know which works.
- **Scenario:** Lina opens PatchBay → filters mods by patch 1.6 → downloads verified ones → adds a rating to help others.
- **Motivation:** Safe, organized mod browsing with version compatibility info.

**Requirements Generation:**

***Functional Requirements:***

- App shall allow users to create or select a Game Hub for a specific title.
- Game Hub shall display segmented tabs (News/ Patch/ Mods/ Clips).
- App shall allow users to create a post with Title, Description, Link/File, and Tag.
- App shall support version tags to filter content.
- App shall enable commenting and reactions under posts.
- App shall support file upload for image or video from device.
- App shall include a search bar and filter by game version or post type.

***Non-Functional Requirements:***

- Interface must be mobile-first and load under 2 seconds per view.
- Design must use clear contrasts and accessible fonts for readability.
- Storage must securely handle user uploads via Firebase or equivalent.
- App must handle at least 1000 posts per hub without crashing.

**Synthesis of Requirements Gathering and Generation**

**High Priority:**

## **Core Application Structure & Access**

- The app must allow users to **create or select a Game Hub** for a specific game title.
- Each Game Hub must display fixed, categorized tabs: **News / Patches / Mods / Clips**.
- The app must allow users to **register, log in, and log out**, as well as **manage and edit their profile**.
- Users must be able to **follow Game Hubs** to personalize their feed.

## **Content Creation & Management**

- The app must allow users to **create posts** with a *Title, Description, Link/File, and Tags*.
- The app must support **uploading image or video files** from the device.
- Post views must display a **thumbnail and preview text** for easier browsing.
- Post creation must allow the user to designate one link as a **primary Call-to-Action (CTA)** button (e.g., “Watch Now,” “Download Mod”).

### **Medium Priority:**

## **Discovery and Filtering**

- The app must include a **search bar** and **filtering options** by version, type, or tags.
- The app must support **version tags** (e.g., “Patch 1.6”) to organize content.
- The app must allow post creators or moderators to assign **status tags** (e.g., “Verified Compatible,” “Broken”) for mod reliability.

## **Community & Feedback**

- The app must allow users to **comment and reply** under posts.
- The app must include a **5-star rating system** for Mods to assess quality and compatibility.
- The app should allow users to **rate games** based on their engagement or playtime.

### **Low Priority:**

## Notifications

- The app must **notify users of new patch updates** in the hubs they follow.
- Users must be able to **customize notification preferences** (e.g., choose only Patches/News or disable Clips).

# WORK LOG

Muye Li 300388453

Date	Number of Hours	Description of work done
Oct 27, 2025	3	Collect data through school surveys
Nov 3, 2025	3	Data collection through online surveys
Nov 4, 2025	4	Analysis the data, finish the report

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Date	Number of Hours	Description of work done
Oct 10, 2025	2	Come up with an idea for a gaming app and compare it to existing platforms like Discord and Steam
Oct 12, 2025	1.5	Learn about the gaming market and competitors
Oct 20, 2025	2	Create a draft of my idea
Oct 22, 2025	2	Learn and explore how to use Figma to apply to your project
Oct 24, 2025	1	Update GitHub with teammates
Oct 28, 2025	1	Scenario creation with AI and analytics

Oct 29, 2025	2	Read and understand situations and come up with functions and non-functions for those situations
Nov 2, 2025	1	Review and provide levels for functionality
Nov 4, 2025	1	Reviewed, edited, and formatted

## AI Use Section:

AI Tool Name	Version, Account Type	Specific Feature Use
ChatGPT (GPT-5)	Plus	Used to generate ideas, generate scenarios, improve report writing, and improve project documentation.
Gemini	Free	Refer to ideas