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User Experience Design

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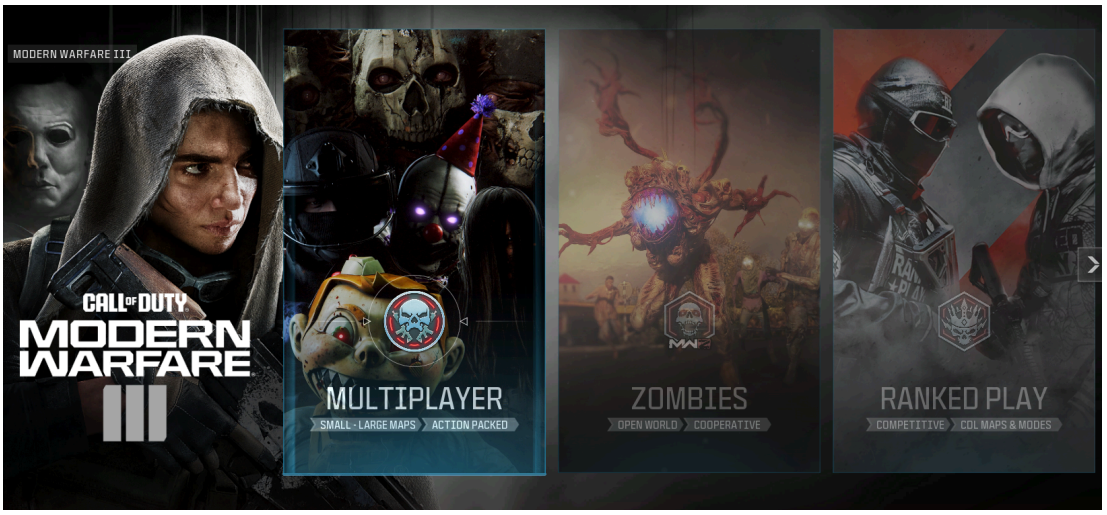
1. Product Selection: *Call of Duty: Modern Warfare 3* (PC, PS5, XBOX Series S/X)



(Fig. 1: *Call of Duty Modern Warfare 3* logo[1]).

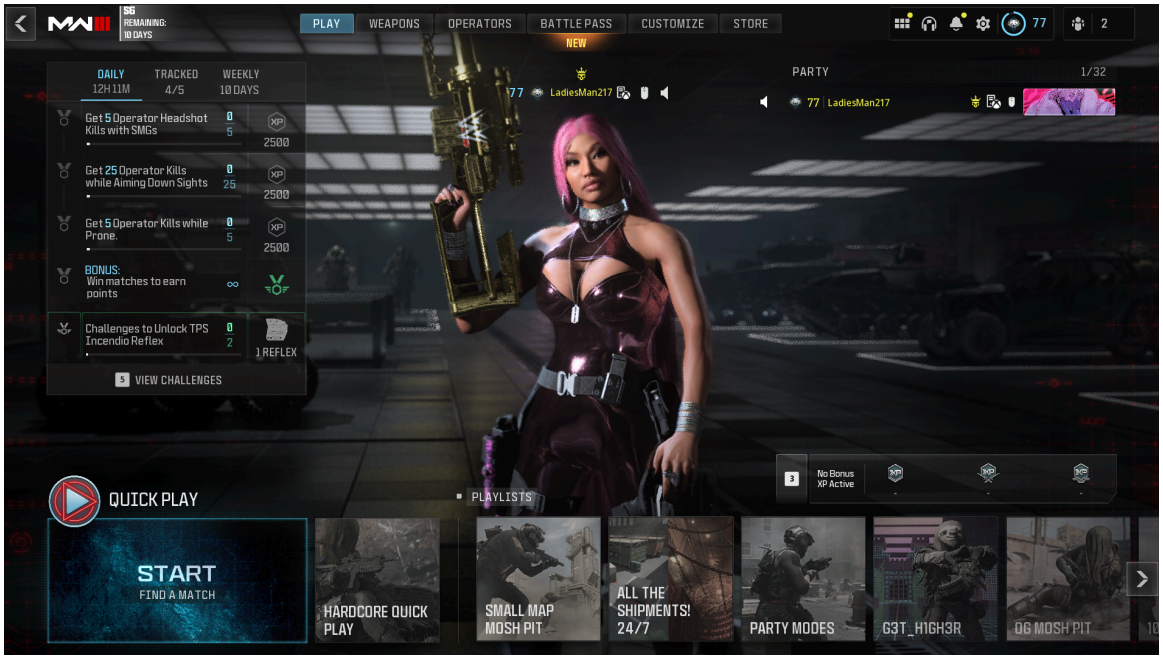
2. Initial Review

2.1 Initial Impressions



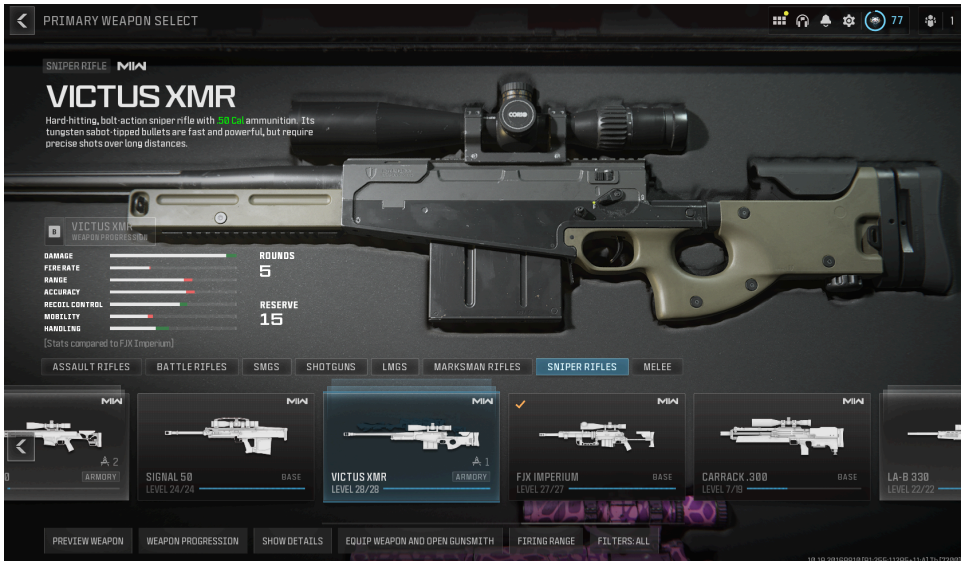
(Fig. 2: *Call of Duty: Modern Warfare 3*'s main menu [2]).

The user interface maintains a structure similar to previous *Call of Duty* titles, which can be both a strength and a weakness. This familiar layout makes it easy for returning players to navigate between modes. However, newer users of the series will struggle to navigate the user interface due to its over-cluttered menus, especially in multiplayer mode. There is a heavy reliance on nested menus and pop-up screens, which can overwhelm users when customizing loadouts, viewing challenges, or navigating progression systems causing frustration.



(Fig. 3: *Call of Duty: Modern Warfare 3*'s multiplayer menu[3]).

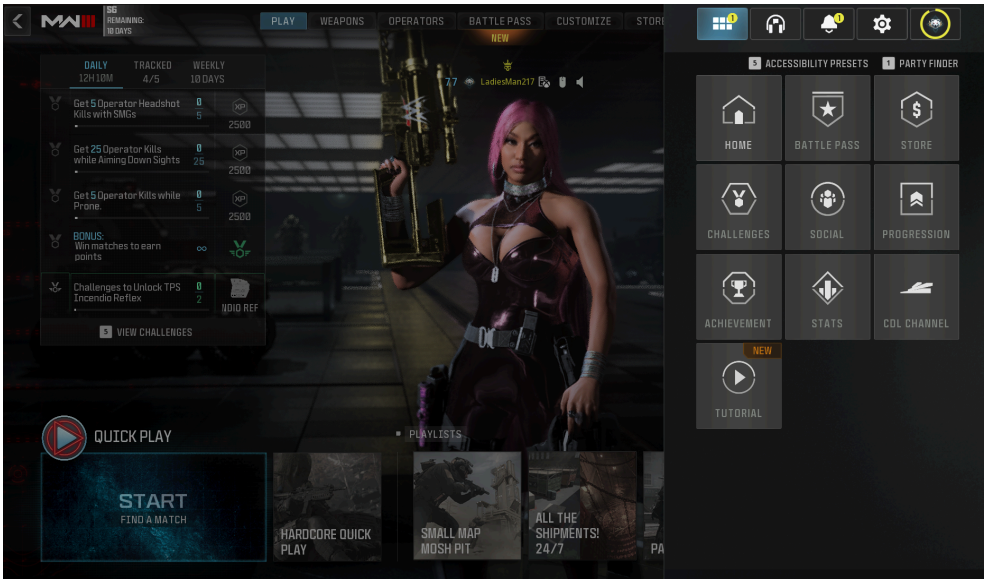
2.2 Navigation



(Fig. 4: *Call of Duty: Modern Warfare 3*'s primary weapon select[4]).

The navigation in *Modern Warfare 3* feels fragmented, as the cluttered menus and confusing progression paths undermine a more streamlined experience. This is particularly evident in the loadout feature, where extensive weapon customization options are hampered by poor organisation, as players must sift through a mix of old and new attachments and skins, which creates an overcomplex and tedious weapon system.

2.3 Overall User Experience



(Fig. 5: *Call of Duty: Modern Warfare 3*'s side menus[5]).

Overall, while the UI in *Modern Warfare 3* retains some familiar elements of the series, its lack of refinement and poor integration of new and old content significantly detract from the user experience.

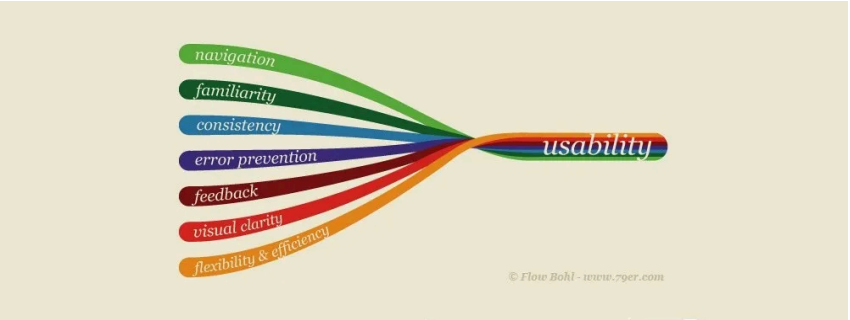


(Fig. 6: *Call of Duty: Modern Warfare 3* in-game HUD[6]).

Modern Warfare 3 does offer several strong elements, particularly for fans of *Call of Duty's* fast-paced multiplayer gunplay. The familiarity and flexibility in combat mechanics stand out as key positives for many players. Building upon this, *Modern Warfare 3* includes a robust set of accessibility features that aim to cater to a wide range of player needs, from visual and auditory accommodations to motor and cognitive adjustments tailoring the specific requirements to the user.

3. UX Design Principles

3.1 Usability



(Fig. 7: What is usability? The ultimate guide[7]).

Usability is defined as “the extent to which a system, product, or service can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use”[8]. This concept relates to how easily users can accomplish their goals using a product. It includes aspects such as simplicity, efficiency, and error prevention.

It is essential that a product should be easy to learn and use, with minimal barriers or friction. Good usability enables users to navigate the system without frustration, leading to a positive experience.

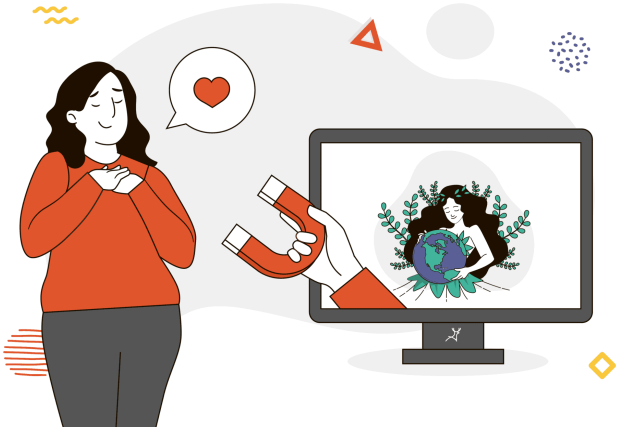
3.2 Accessibility



(Fig. 8: The evolution of digital accessibility over the decades[9]).

Accessibility refers to how effectively users can utilize products and services to achieve their goals. By prioritizing accessibility, designers enable individuals with diverse abilities and disabilities to perceive, understand, navigate, engage with, and contribute to online content more easily[10]. Maximizing a product's ease of use for all ability levels can lead to universal design, fostering a positive user experience for everyone.

3.3 Emotion

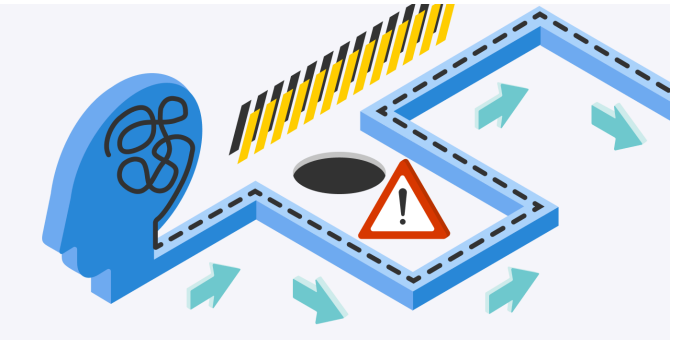


(Fig. 9: Design is an effective tool to capture your audience's heart[11]).

In user experience design, incorporating thoughtful visuals, animations, and storytelling, can evoke emotional responses from users, enhancing their satisfaction and loyalty, which creates an attachment to the product and repeated engagement.

One example of emotional design is attractiveness. In his book *Emotional Design: Why We Love (or Hate) Everyday Things*[12], Donald A. Norman explains, "Attractive things do work better–their attractiveness produces positive emotions, causing mental processes to be more creative, more tolerant to minor difficulties."[13]

3.4 Clarity



(Fig. 10: Clarity for a UX design[14]).

Clarity in UX design is crucial for enabling users to interact with a product easily, efficiently, and without unnecessary frustration, thereby enhancing usability, accessibility, and overall satisfaction.

All messages, whether conveyed verbally or visually, are intended to be understood by their target audience. Therefore, clarity and comprehension should always be prioritised. However, the message must be engaging and visually appealing to initially capture attention. When designers create the user experience, they need to balance aesthetics with clarity[15].

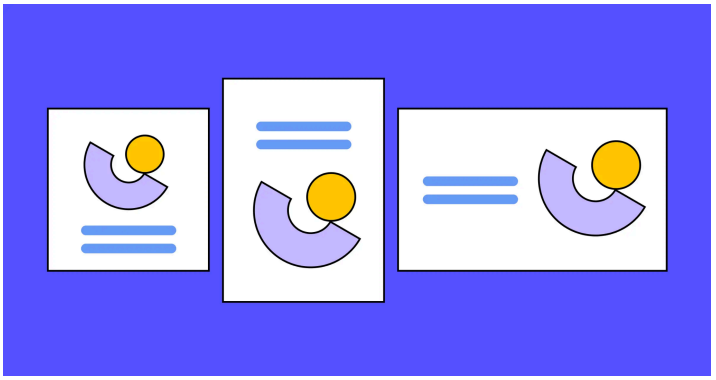
3.5 Efficiency



(Fig. 11: Mastering UX Metrics: How to measure efficiency like a pro[16])

Efficiency in user experience design refers to how quickly and easily users can complete tasks or achieve their goals while interacting with a product, system, or interface [17]. A design that prioritizes efficiency reduces the time, effort, and mental strain needed to perform actions, resulting in a smoother and more enjoyable experience.

3.6 Consistency

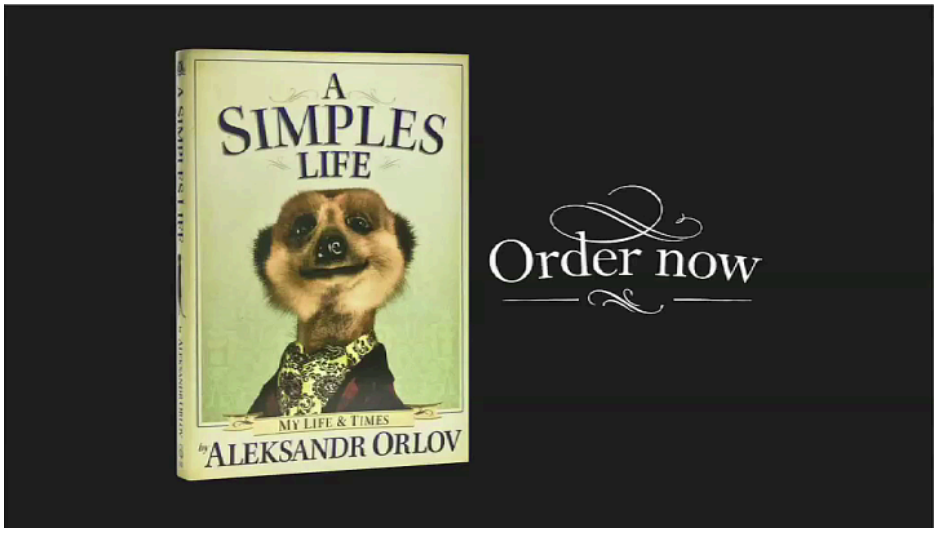


(Fig. 12: What are the design consistency principles?[18]).

In user experience, consistency means that all elements of a product's information should have a unified design, including format and style, within a single or across multiple interfaces[19].

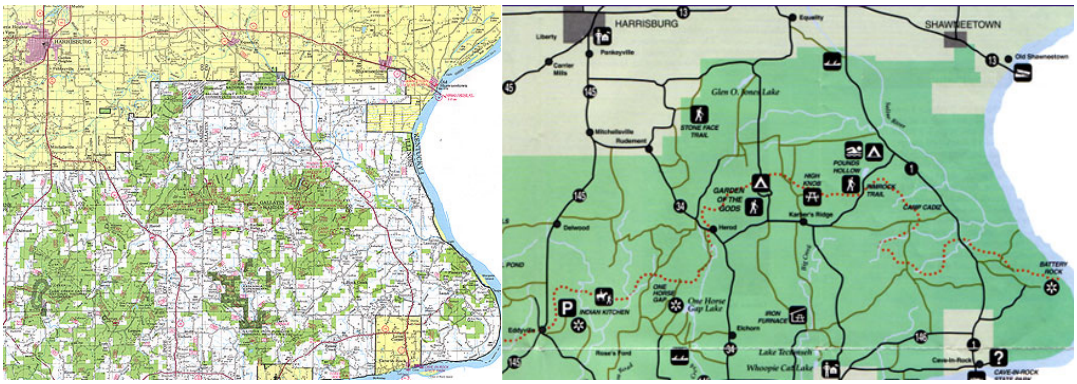
Consistency enhances efficiency and clarity by ensuring users do not need to learn new representations for each task. This is crucial for enhancing user retention by minimizing cognitive effort and reducing product confusion and frustration.

3.7 Simplicity



(Fig. 13: A Simples Life: The Life and Times of Aleksandr Orlov[20]).

Designing with simplicity in mind can give a product an intuitive, streamlined experience that minimizes cognitive load. By emphasizing simplicity, designers can create better interfaces that enable users to achieve their goals more quickly and efficiently, enhancing their overall experience [21].



(Fig. 14: Detailed map vs a visually simple map[22]).

Designers must always consider the user's needs when simplifying a design, as both oversimplification and excessive complexity can negatively impact the user experience. For example, in the maps shown above (Fig. 14), we see two representations of the same area: one detailed and the other simplified. The simplified map is likely intended for tourists who only need to know the main roads and notable landmarks. On the other hand, the detailed map would be more beneficial for a truck driver, who requires precise information in case of road closures or specific directional queries.

3.8 Flexibility

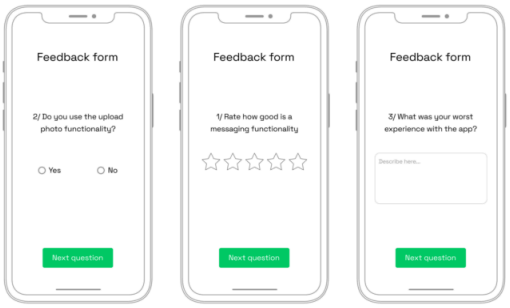


(Fig. 15: Process Flexibility: 4 Key approaches and how to use them[23]).

A flexible and efficient system supports users in familiarizing themselves with the product and allows them to complete tasks in various ways that match their personal working styles[24].

Flexibility is important because it enables users with different cognitive and skill levels to complete tasks in various ways. New users may require guidance to perform tasks, while experienced users can utilize shortcuts and advanced features to speed up frequently performed actions[25].

3.9 Feedback



(Fig. 16: How to incorporate feedback in product UI/UX design: from insight to interface[26]).

UX research specialist Jared Spool states “Design is the rendering of intent. The designer imagines an outcome and puts forth activities to make that outcome real. Feedback tells the designer whether or not the activities are succeeding”[27].

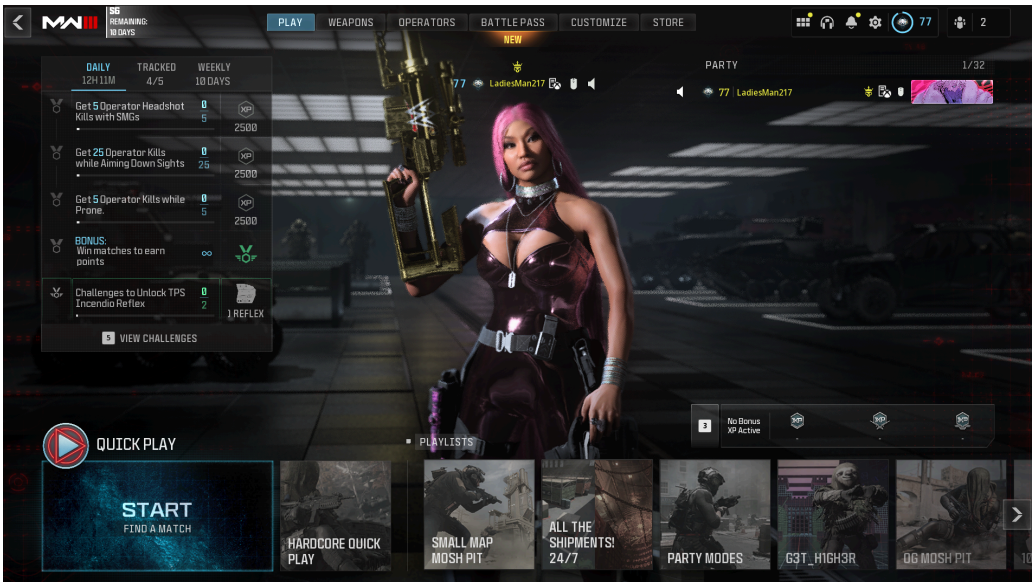
The role of feedback is a building block for designers as it acts as a learning process to improve and innovate their product through further development [28]. Users can provide feedback through prompted notifications or by leaving reviews on the product's store page. Depending on the product, there are apps that can track and automate feedback based on user interactions. For example, Google Analytics can monitor metrics such as the time users spend on a webpage, device usage, bounce rate, and more. The bounce rate represents the percentage of users who leave the product's landing page within 5 to 15 seconds of arriving [29].

4. UX Analysis: *Call of Duty: Modern Warfare 3* (2023)



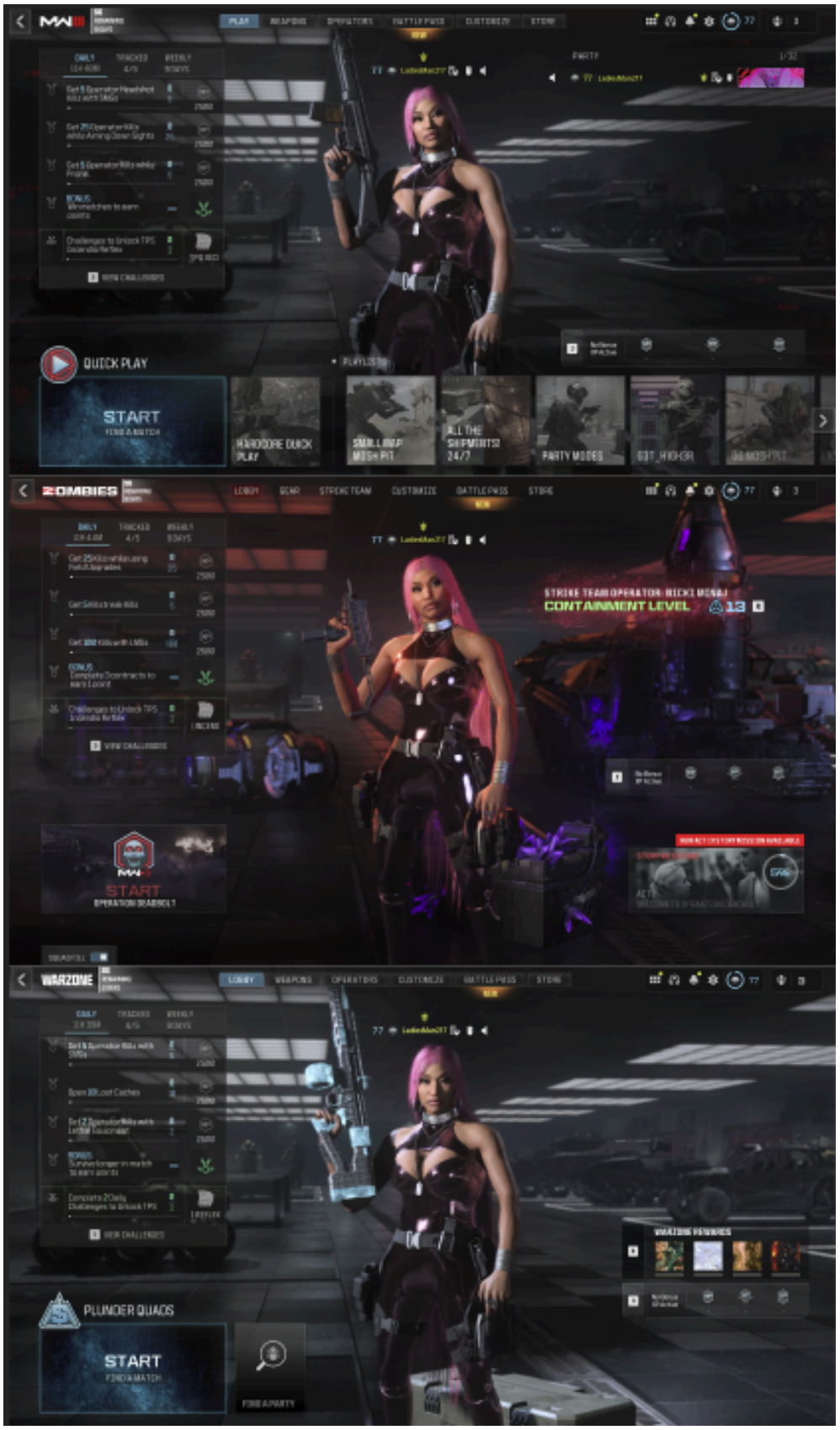
(Fig. 17: *Call of Duty Modern Warfare 3* logo[1]).

4.1 Navigation & Information Structure



(Fig. 18: *Call of Duty: Modern Warfare 3*'s multiplayer menu[3]).

Since Multiplayer, Zombies, and Warzone share the same user interface (UI), This analysis will focus on the UX design of the multiplayer section. It is important to note that *Modern Warfare 3* maintains a consistent UI across all three game modes. This consistency makes it easier for players, as they do not have to learn a new UI system each time they switch modes. Additionally, with low loading times, this almost seamless transition promotes efficiency through consistency, as players will be familiar with the menu structures.



(Fig. 19: UI Consistency is shown across the Multiplayer, Zombies and Warzone game modes[30]).

When it comes to information architecture, *Modern Warfare 3* makes it easier for players to navigate and stay engaged without getting lost in menus. Important menus, such as game modes, character selection, and loadout selection, are prominently displayed, allowing players to find what they need quickly. This clarity enhances the overall experience.

The loadout menu is organized into distinct sections: weapons, perks, and equipment. This straightforward and consistent layout means players do not have to search extensively for options. While flexible menus allow players to delve deeper into details, such as weapon attachments and progression, they could overwhelm new users with too much information at once. However, the game ensures that essential features remain easily accessible.



(Fig. 20: *Call of Duty: Modern Warfare 3* in-game HUD[6]).

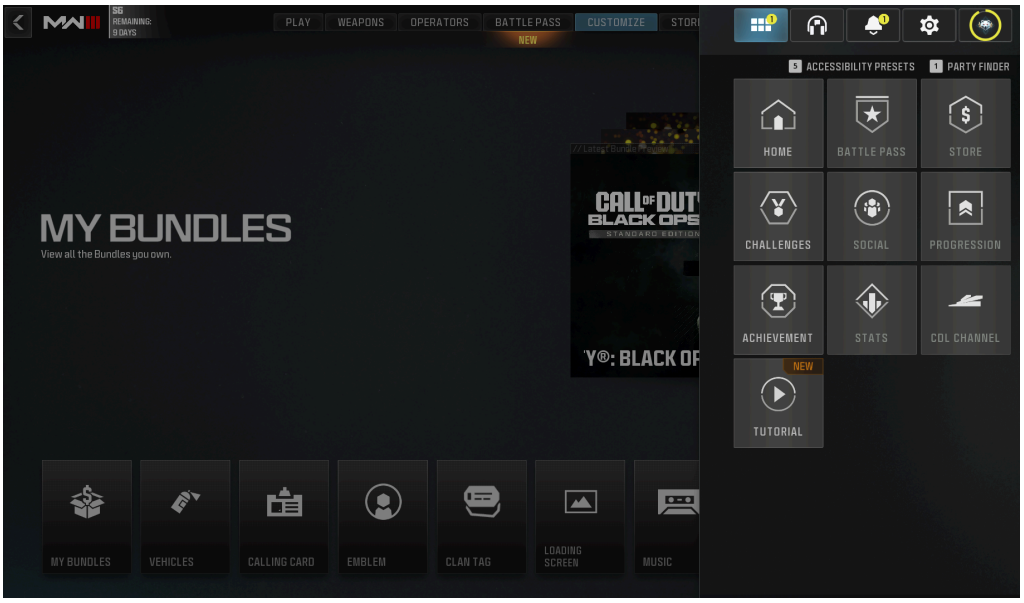
The gameplay effectively reflects the information architecture through the player's heads-up display (HUD). By maintaining a minimalistic HUD, players can concentrate fully on the game while having the ability to swiftly glance at vital information such as health, mini-map, and ammo count. This design prevents disorientation during gameplay while also delivering essential information to players.

4.2 Visual Design

The visual design of *Modern Warfare 3* plays a key role in the overall user experience, with attention to layout, colours, and typography in both the menu UI and the in-game HUD.

The layout is designed to keep players focused on the game while providing guidance without clutter. The main menus and in-game HUD are organized to highlight critical elements in easily accessible areas of the screen. In the multiplayer menus, the UI strikes a balance between functionality and aesthetics by placing the players' and teammates' characters, along with their customized guns, front and centre whilst ensuring that information remains visible in the surrounding area.

The colour palette in previous Call of Duty games featured a gritty, realistic scheme that reflected military themes. In contrast, *Modern Warfare 3* adopts a more minimalistic tone, which gives the user interface a generic modern-day feel. While this simplicity in the colour palette may come across as muted, it effectively suggests that the game is set in a contemporary era. The combination of these straightforward colours with military imagery, such as satellite scans and environmental menu set pieces, enhances player immersion in the game's setting.



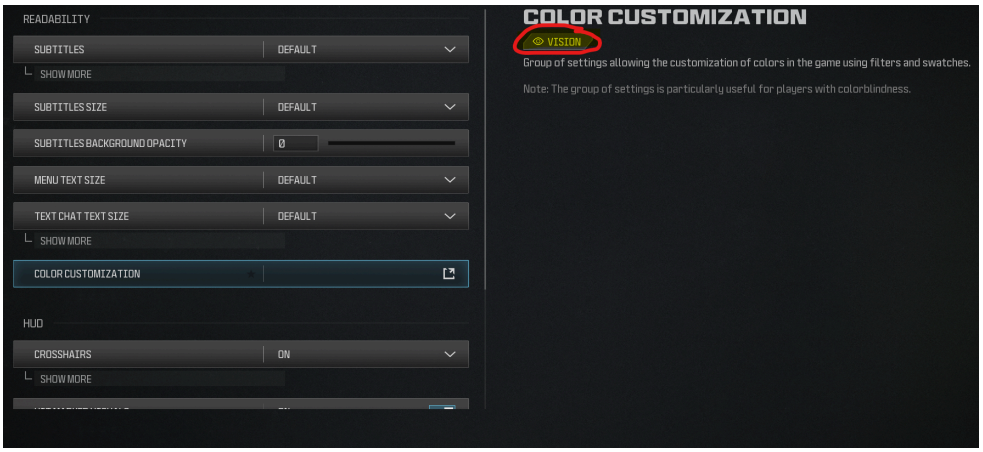
(Fig. 21: UI typography is bold and clear in block capitals[31]).

Modern Warfare 3's typography prioritizes clarity by being functional and straightforward, emphasising legibility. The sans-serif fonts used in the menus and HUD are bold and clear, making it easy for players to read information efficiently. The text size is appropriately scaled to maintain visual consistency across different screen sizes. This approach aligns well with the overall design principles of clarity and usability, allowing players to stay immersed in the game without having to struggle to read the text.

4.3 User interactions

User interactions in *Modern Warfare 3* are designed to be intuitive and responsive, allowing players to engage with the game quickly and efficiently, no matter their device. The buttons are clearly labelled and strategically positioned for easy access to essential functions, such as starting matches or changing character/loadout. The controls are created to minimize the learning curve, enabling players to jump in without difficulty.

4.4 Accessibility & Inclusivity



(Fig. 22: The accessibility filter indicates how the option enhances user experience[32]).

To improve accessibility for a broader range of users, players can customize their HUD in the settings menu at any time. They can adjust various features, for example, the size and colour of the crosshair and subtitles, the shape of the mini-map and whether it rotates. These options are beneficial for players with colour blindness, cognitive difficulties, or hearing impairment. Additionally, the game includes audio cues such as the match commentator, countdown timer, and hit marker sounds, which can aid players with visual impairments.

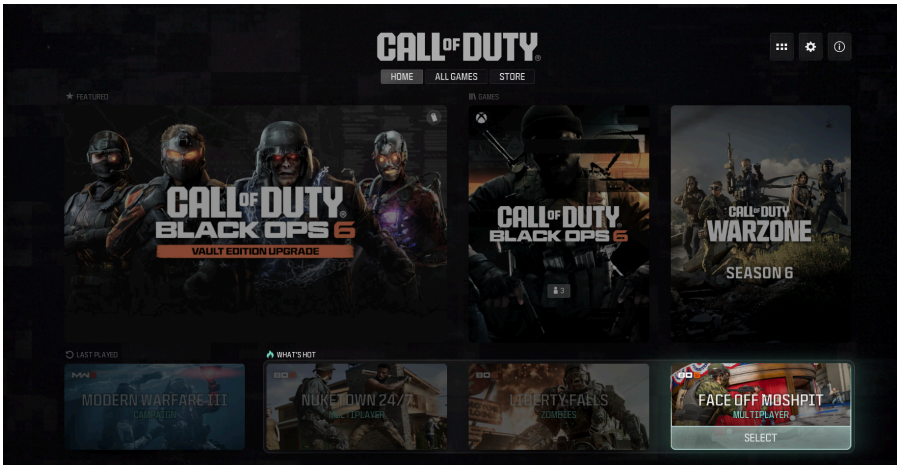


(Fig. 23: Campaign difficulty select[33]).

The game's design choices prioritize inclusivity by providing a variety of difficulty settings for the campaign. In addition, the multiplayer uses a skill-based matchmaking system that pairs players with others who have similar skill levels in player vs player games[34]. This approach allows both new players and veterans to enjoy the game at a level that suits their abilities.

5. Recommendations for Improvements

5.1 *Call of Duty HQ*

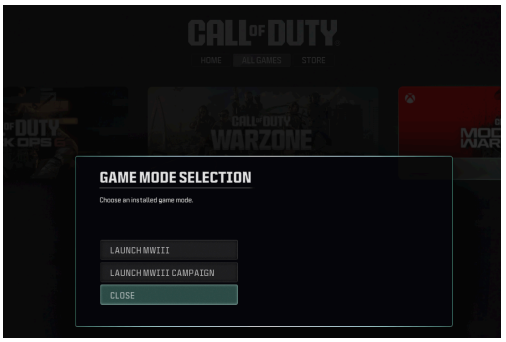


(Fig. 24: *Call of Duty: HQ*'s main menu [35]).

Call of Duty HQ serves as the hub for the latest *Call of Duty* titles. However, its use is mandatory for playing any recent game in the series. Currently, the hub is inefficient and does not allow for a seamless transition between different *Call of Duty* games. For example, when a player opens *Modern Warfare 3*, they are first greeted by the HQ. They must then click on *Modern Warfare 3* within the menu, which closes the hub and launches the game.

By requiring players to navigate through the *Call of Duty* hub rather than directly accessing their chosen game, *Call of Duty HQ* sacrifices efficiency and clarity, potentially leading to player frustration. The hub fails to provide real value without the ability to transition smoothly between titles. Therefore, allowing players to launch any *Call of Duty* game directly, without being forced to use a 78 gigabytes hub, would significantly enhance the overall usability experience.

5.2 Campaign Navigation

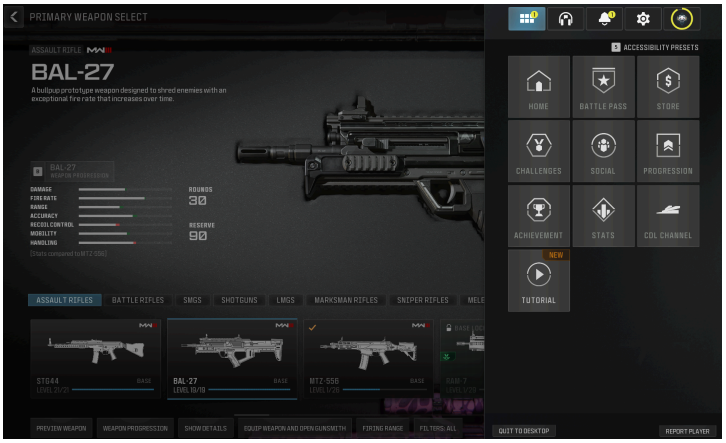


(Fig. 25: Launch MWIII or MWIII campaign[36]).

The main menu of *Modern Warfare 3* consists of Multiplayer, Zombies, and Warzone. Unfortunately, if a user wants to play the Campaign, they must exit to the *Call of Duty HQ* and reload *Modern Warfare 3*, and only then will they be prompted to play the Campaign.

The lack of usability and clarity can be frustrating for players who enter the multiplayer mode while trying to find the Campaign. This creates inconsistency, especially since modes like multiplayer, zombies and Warzone each have their own dedicated menus, while the Campaign is hidden away in a separate application. Keeping the Campaign isolated in the *Call of Duty HQ* app offers no benefits to the user experience. This issue could be easily resolved by providing a clear dedicated menu for the Campaign alongside Multiplayer and other modes.

5.3 Cluttered Menus & Creating a Loadout



(Fig. 26: Create a loadout menu[37]).

While *Modern Warfare 3*'s main menus are easy to navigate, the submenus can overwhelm new players, especially when creating loadouts with 126 customizable weapons options. With 96 optic sight variations and numerous options for barrels, foregrips, and more, players may feel inundated by choices. To improve the user experience, the game could benefit from limiting attachments or introducing a feature to favourite specific weapons and attachments, enhancing usability and accessibility.

5.4 User Feedback



(Fig. 27: Fortnite report feedback[38]).

Many popular games today incorporate various forms of feedback within their systems. Feedback is essential for any service that supports online play. It is important to monitor player feedback closely; if it is ignored, users may become frustrated, leading to poor user retention and potential failure of the product. Currently, aside from online forums outside of the game, there are no systems in place for users to provide feedback. Therefore, it is crucial for *Modern Warfare 3* to implement a mechanism that allows players to share their input effectively.

This feedback feature could be implemented in several ways, including bug reports, player experiences after matches, and general assessments. Any form of feedback from users should be carefully analysed, as it can lead to actionable insights and the implementation of new features that enhance the overall user experience.

5.5 Too minimalist



(Fig. 28: Call of Duty: Modern Warfare 3 in-game HUD[6]).

Overall, the minimalist design in *Modern Warfare 3* effectively focuses on gameplay and maintains clarity. However, it may not appeal to all players. Some may appreciate the simplicity and directness of the interface, while others might prefer a more detailed design that offers additional context and engagement.

To enhance accessibility and flexibility, *Modern Warfare 3* could allow players to choose from different presets—one that maintains the minimalist aesthetic and another that embraces a more traditional, gritty realism in visual design.

6. Conclusion

The developers of *Modern Warfare 3* have crafted a user experience that prioritizes clarity, efficiency, and immersion, demonstrating a strong understanding of the needs of both new and veteran players. By adopting a minimalist approach to user interface (UI) and visual design, they ensure that players can quickly access critical information without unnecessary complexity. The intuitive menu layouts, thoughtful colour choices, and straightforward typography create a cohesive experience, emphasising functionality and keeping players focused on the action.

However, this streamlined design has its downsides. Some players may find the minimalism overly restrictive, lacks depth and misses opportunities for richer, more informative interfaces. Features like detailed visual feedback, enhanced stat tracking, or more dynamic menus could have introduced additional layers of engagement. Furthermore, certain options, such as advanced customization settings, are buried within multiple menu layers, which may disrupt the flow for players wanting to make quick adjustments.

Despite these drawbacks, *Modern Warfare 3*'s user experience design creates a seamless, engaging experience that enhances gameplay by removing barriers, allowing players to focus on what matters most: the action.

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