

Higher Nationals

Internal verification of assessment decisions – BTEC (RQF)

INTERNAL VERIFICATION – ASSESSMENT DECISIONS			
Programme title	BTEC Higher National Diploma in Computing		
Assessor		Internal Verifier	
Unit(s)	Unit 36- User Experience and Interface Design		
Assignment title	User experience design for E-video cloud		
Student's name			
List which assessment criteria the Assessor has awarded.	Pass	Merit	Distinction
INTERNAL VERIFIER CHECKLIST			
Do the assessment criteria awarded match those shown in the assignment brief?	Y/N		
Is the Pass/Merit/Distinction grade awarded justified by the assessor's comments on the student work?	Y/N		
Has the work been assessed accurately?	Y/N		
Is the feedback to the student: Give details: • Constructive? • Linked to relevant assessment criteria? • Identifying opportunities for improved performance? • Agreeing actions?	Y/N Y/N Y/N Y/N		
Does the assessment decision need amending?	Y/N		
Assessor signature		Date	
Internal Verifier signature		Date	
Programme Leader signature (if required)		Date	
Confirm action completed			

Remedial action taken Give details:			
Assessor signature		Date	
Internal Verifier signature		Date	
Programme Leader signature (if required)		Date	

Assignment Feedback Form

Student Name/ID			
Unit Title	Unit 36- User Experience and Interface Design		
Assignment Number		Assessor	
Submission Date		Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	

Assessor Feedback:

LO1 Research User Experience and Interface Design in relation to end user requirements in a User Interface concept

Pass, Merit & P1 ☐ P2 ☐ M1 ☐ M2 ☐ D1 ☐

Distinction Descripts

LO2 Plan a User Experience map and Interface Design for a User Interface concept for a target end use

Pass, Merit & Distinction P ☐ P4 ☐ M3 ☐ M4 ☐ D2 ☐

Descripts

LO3 Build a User Interface concept and test it with end users for enhancement purposes

Pass, Merit & P5 ☐ P6 ☐ M5 ☐ M6 ☐

Distinction Descripts

LO4 Evaluate user feedback and test results from interaction with the User Interface concept to determine improvements

Pass, Merit & P7 ☐ P8 ☐ M7 ☐ D3 ☐

Distinction Descripts

Grade:	Assessor Signature:	Date:
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Resubmission Feedback:

Grade:	Assessor Signature:	Date:
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Internal Verifier's Comments:

Signature & Date:

* Please note that grade decisions are provisional. They are only confirmed once internal and external moderation has taken place and grades decisions have been agreed at the assessment board.

Assignment Feedback

Formative Feedback: Assessor to Student			
Action Plan			
Summative feedback			
Feedback: Student to Assessor			
Assessor signature		Date	
Student signature		Date	

Pearson Higher Nationals in Computing

Unit 36: User Experience and Interface Design
Assignment

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EXECUTIVE SUMMARY

A well-thought-out and responsive user interface (UI) and user experience (UX) are crucial as e-video cloud (EVC) grows in both user base and offers. In order to accomplish the company's strategic business objectives, this research argues that EVC must intensify its attention on UX and UI design and make more investments in these fields.

At the moment, EVC works in a cutthroat digital environment where customer expectations are always changing. In addition to increasing user happiness and engagement, an excellent UX/UI design is a crucial differentiation in the congested online video platform industry. Maintaining existing users, drawing in new ones, and eventually growing the platform's market share and income all depend on this investment in UX and UI.

The fundamentals of UX and UI design, their functions within the software development life cycle (SDLC), and the industry standard tools are all covered in detail in this paper. It goes on to examine several UI designs and the testing specifications that go along with them, outlining the benefits and drawbacks of each to support their use in the context of EVC.

By placing a high priority on UX and UI, EVC will be able to anticipate user requirements in addition to meeting market expectations. This will result in a more engaging and intuitive user interface that is in line with user behaviors, emotions, and attitudes. The report's suggestions are meant to steer EVC in the direction of a more user-centric strategy, guaranteeing the company's continuous expansion and prosperity in the digital entertainment sector.

INTRODUCTION TO UX AND UI DESIGN

Modern software development is not complete without User Experience (UX) and User Interface (UI) design, which are vital in making sure that digital goods are not only useful but also pleasurable and effective to use. Understanding the differences between UX and UI is essential to comprehending how they work together to affect user pleasure and product success.

Understanding User Experience (UX)

The term "user experience" (UX) refers to every facet of a customer's engagement with a business, its offerings, and its services. Creating user experiences that are simple, effective, fulfilling, and enjoyable overall is the main objective of user experience (UX). This entails taking into consideration the company goals and objectives of controlling and guiding the user's experience in addition to comprehending the wants, values, skills, and limits of the users. The goal of user experience (UX) techniques is to enhance how well users interact with and perceive the product and any connected services.

Exploring User Interface (UI) Design

The process of creating software or electronic device interfaces with an emphasis on aesthetics is known as user interface (UI) design. The goal of interface designers is to make things that are enjoyable and simple for consumers to use. Graphical user interfaces and other types, such as voice-controlled interfaces, are referred to as UI design. The buttons, icons, typography, spacing, and color palettes that make up user interface components. A product's functionality may be interacted with by the user with ease, efficiency, and enjoyment when it has a well-designed user interface (UI).

Standard Tools in UX/UI Design

The selection of UX and UI design tools is wide and diverse, providing designers with a wide range of features to help them produce visually striking designs. In this field, tools including as Sketch, Adobe XD, and Figma are essential. Sketch is a popular for simple interfaces because of its well-known simplicity and emphasis on vector UI design. For individuals who are already a member of the Adobe ecosystem, Adobe XD's array of tools for producing intricate interactive prototypes and its inclusion in the Adobe Creative Suite may be advantageous. Figma is unique in that it is a browser-based interface that enables numerous designers to collaborate on a design at the same time.

Impact of UX/UI in the Software Development Life Cycle (SDLC)

The software development life cycle (SDLC) may be greatly improved by including UX and UI design. This will also increase user satisfaction. These disciplines may be included early in the software development life cycle (SDLC) to help detect possible user concerns and preferences before the development phase, which can save time and money on reworks. Methodologies like Lean UX and Agile UX have shown to be successful in incorporating UX into the SDLC. These methods encourage an iterative process that prioritizes quick user input, flexible planning, and a collaborative approach to UX design—all essential components of creating effective user-centered software.

FORMS OF UX/UI AND THEIR TESTING REQUIREMENTS

There are many different styles of User Experience (UX) and User Interface (UI) design, each suited to certain interaction modalities and user requirements. It is essential to comprehend these types and the particular testing needs associated with them in order to guarantee that a product is both useful and enjoyable to use. An extensive summary of numerous popular UX/UI forms and the testing requirements for them is provided below:

Graphical User Interfaces (GUIs)

User interfaces that include visual representations on digital control panels are most often known as GUIs. With simple gestures like clicking or touching, users may directly modify the windows, icons, and menus on this form.

Testing Requirements

- **Usability Testing:** This tests how easy and intuitive the interface is for new and returning users. It focuses on the efficiency of completing tasks, user satisfaction, and overall ease of navigation within the application.
- **Compatibility Testing:** Ensures that the GUI functions correctly across different devices, operating systems, and web browsers, maintaining consistent look and functionality.
- **Accessibility Testing:** Verifies that the interface can be used by people with various disabilities, such as visual, motor, auditory, or cognitive impairments. This includes checking color contrast, keyboard navigability, and screen reader compatibility.

Command Line Interfaces (CLIs)

CLIs allow users to interact with the system through text commands. This form is often preferred by technical users due to its precision and control capabilities.

Testing Requirements

- **Functional Testing:** Tests whether the CLI accepts the correct commands and outputs the appropriate responses, verifying that all functions perform as expected.
- **Performance Testing:** Assesses the system's responsiveness, stability, and speed, particularly under heavy usage or stress conditions.

- **User Documentation Testing:** Ensures that the documentation provides accurate, comprehensible instructions and help for users, facilitating easier adoption and troubleshooting.

Voice User Interfaces (VUIs)

VUIs enable interaction through voice commands. This form is becoming increasingly popular with the rise of virtual assistants like Amazon Alexa, Google Assistant, and Apple Siri.

Testing Requirements

- **Voice Recognition Accuracy Testing:** Measures how accurately the system identifies and interprets spoken inputs, crucial for ensuring user commands are understood and acted upon correctly.
- **Natural Language Processing Testing:** Evaluates the system's ability to understand and process speech in a way that mimics human conversation, including handling various accents, dialects, and colloquialisms.
- **User Satisfaction Testing:** Gauges user contentment with the interface's performance, focusing on speed, reliability, and overall experience during voice interactions.

Gesture-Based Interfaces

Gesture-based interfaces detect and respond to physical gestures made by the user. Common in devices like smartphones, tablets, and systems that require spatial interaction, such as virtual reality.

- **Gesture Recognition Testing:** Checks the accuracy and responsiveness of the interface to user gestures, ensuring that all intended gestures are recognized correctly without false positives or negatives.
- **Ergonomics Testing:** Assesses whether the gestures required by the interface are comfortable and natural for users to perform, especially over extended periods.
- **Environmental Testing:** Evaluates how different physical environments affect the interface's performance, such as varying lighting conditions or physical spaces.

Justification for UI/UX Forms in Testing

The intended user base for the program and its particular requirements should be taken into consideration while choosing a UI form and testing strategy. A GUI, for instance, would be suitable for a consumer application that requires no technical expertise and is intended for a wide audience. On the other hand, a developer tool that gains from automation and scripting could be more appropriate for a CLI. Optimizing the user experience for the chosen UI form should be the main goal of testing. For example, A/B testing of GUIs is necessary to identify the optimal layout and design components that result in increased user happiness and engagement. Every testing technique is selected to improve the interface's ability to provide a smooth and efficient user experience.

TOOLS ARE PIVOTAL IN UX/UI DESIGN

Sketch is a well-known vector-based design tool that is excellent at producing user interfaces and user experiences quickly. It offers a large symbol library and a full suite of plugins, making it easier to reuse parts between projects. Sketch is a favored tool among designers because to its

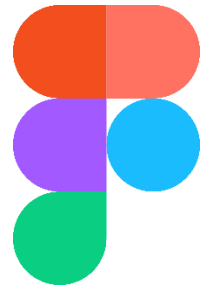


speed and simplicity, but it is only compatible with macOS, which might be a drawback in cross-platform development settings.

Adobe XD , Adobe's all-inclusive UX/UI design tool, Adobe XD, enables the production of wireframes, prototypes, and animations. Its smooth integration with other Adobe Creative Cloud apps increases its usefulness for customers who are already a part of that ecosystem. Real-time collaboration is crucial for team-based projects, and Adobe XD facilitates it. Its reliance on the Adobe ecosystem can be seen as less adaptable than those of other stand-alone products, however.



Figma , Multiple users may edit the same file at once using Figma, a browser-based UI/UX design tool that specializes in real-time collaboration. It is perfect for developing at scale since it has capabilities like responsive design component library and version control. Because Figma is web-based, it may be used on any platform, albeit slower internet connections or more complicated projects may cause performance issues.



Axure RP is an effective tool for modeling intricate software applications since it is designed for building complicated prototypes with conditional logic and dynamic content. Although it has a higher learning curve than other tools, it facilitates the construction of interactive prototypes and thorough wireframes, which may put off those who prefer more straightforward project solutions.



END-USER REVIEW AND PERSONA DEVELOPMENT FOR EVC PLATFORM

End-User Categorizations and Selection

Casual Viewers

Users that use the site solely for pleasure and amusement are known as casual watchers. Their main priorities are variety of viewing choices, fast information availability, and simplicity of usage. Even though they may not use the site often, they anticipate receiving excellent service whenever they do interact. This group's requirements include easy-to-use navigation, strong search capabilities, tailored suggestions, and a visually appealing interface. Their objectives are to find and consume material quickly and to spend as little time as possible getting to know the platform.

Content Creators

Influencers, independent video producers, and little production firms make up this category; they use the platform to market and distribute their material. The aspects of the platform that affect audience metrics and content management are very important to content providers. They need sophisticated content uploading and editing tools, thorough data on viewer interaction, monetization choices, and strong content protection protocols. Their primary objectives are to retain control over the dissemination of their content while optimizing its reach and income.

Educational Users

Educators, learners, and organizations using the platform for instructional reasons are examples of educational users. This audience is interested in information that is arranged clearly and can be quickly incorporated into lesson plans. They need capabilities like learning management system compatibility, annotations, playlists, and chapter markers in addition to other instructional tools. Enhancing the learning process via readily available and well-structured educational information is the aim of educational users.

Industry Professionals

Professionals in the industry include analysts, marketers, and entrepreneurs who use the platform to get customer insights, conduct market research, or promote goods and services. They need access to alternatives for advertising, sophisticated analytics tools, market trend information, and data exporting capabilities. Industry professionals want to efficiently contact their target consumers and use platform data for strategic decision-making.

Tech Enthusiasts

Early adopters of new technology, tech aficionados are eager to learn about the newest features and advancements available on the platform. They value cutting-edge technology and often provide insightful commentary on recent advancements. They need beta testing possibilities, access to the newest features, and a platform that can accommodate cutting-edge formats like virtual and augmented reality in addition to high-quality video. Their objectives are to remain on the cutting edge of technology and have an impact on the creation of new platform features.

Selection for Persona Development: Casual Viewer

Casual Viewers are chosen for further persona development because of their extensive influence on platform popularity and income. This user population is a significant component, and its growth and engagement are essential to the broader user base. Gaining insight into the inclinations and actions of casual viewers will enable the EVC platform to be more effectively customized to suit their requirements, guaranteeing a smooth and enjoyable watching experience.

Persona Development for EVC Platform

Profile Summary

Priyanka Fernando, a 32-year-old IT consultant who lives in Colombo, Sri Lanka, is the persona created for this study. Priyanka is an example of the Casual Viewer demographic that incorporates

streaming into everyday life. She enjoys both useful and visually beautiful interfaces as a professional in a career that is heavily reliant on technology.

Behavioral Traits

Priyanka mostly utilizes streaming services to relax after work on weekdays. She appreciates a service that provides a broad range of genres and has a strong interest in foreign movies and television shows. Because of her mobile lifestyle, she is tech-savvy and favors systems that provide seamless integration across numerous devices.

Goals and Motivations

Finding a dependable streaming service that offers top-notch material to suit her wide range of interests is Priyanka's main objective. Her drive stems from her need to keep abreast of national and worldwide media trends. Accessing her material from any device is a secondary objective, so she may begin viewing on her laptop and then move to her smartphone or tablet if necessary.

Frustrations

A crowded user interface that makes navigating difficult is one of Priyanka's biggest annoyances, especially when she's trying to locate new material or certain genres. She is particularly dissatisfied with streaming services that provide a small or antiquated range of material, as well as those that regularly lag or have technical problems as a result of inadequate optimization for Sri Lankan internet bandwidths.

Empathy Map

Think & Feel:

Priyanka feels relaxed when she can easily navigate and use the streaming service without technical disruptions. She gets annoyed with services that have complex interfaces or inefficient customer support.

Hear:

She often hears recommendations from colleagues and friends about what to watch next. Advertisements on social media also influence her perception of what's trending and worth watching.

See:

Priyanka sees promotional content for new shows on her social media feeds and appreciates well-designed, clean, and informative interfaces. She notices when platforms have high-quality visuals and user-friendly layouts.

Say & Do:

Priyanka frequently discusses her favorite shows in online forums and with friends. She actively searches for and tries out new streaming services to compare their offerings.

Pain:

Her main pain points are related to poor content discovery mechanisms and interfaces that do not support efficient navigation. Additionally, inconsistent streaming quality due to her local internet constraints often mars her viewing experience.

Gain:

She gains satisfaction from discovering new shows and enjoys platforms that provide personalized content recommendations. The ability to watch content on various devices seamlessly is a significant plus.

Experience Map

1. **Awareness:** Priyanka first learns about EVC through a Facebook ad highlighting the availability of both Sri Lankan and international content.
2. **Consideration:** Intrigued, she explores the EVC website, where clear information and attractive promotions encourage her to sign up.
3. **Adoption:** She begins using EVC regularly, appreciating its robust catalog and multi-device functionality.
4. **Advocacy:** Satisfied with her experience, Priyanka recommends EVC to friends and family, particularly praising its user-friendly interface and diverse content range.

Customer Journey Map

1. **Trigger:** Priyanka's interest is piqued by an online ad showcasing a new international series available exclusively on EVC.
2. **Initial Engagement:** She signs up via a user-friendly interface, impressed by the straightforward process.
3. **Decision:** After a trial period where she explores various features, Priyanka subscribes to a premium plan.
4. **Active Use:** She regularly streams her favorite content, utilizing features like content recommendation and multiple device accessibility.
5. **Pain Points:** Occasionally, she experiences slower streaming speeds during peak hours.
6. **Resolution:** EVC addresses her feedback by optimizing streaming quality for varying internet speeds, which improves her overall satisfaction with the service.

DEVELOPMENT METHODOLOGY AND TESTING PLAN

Selection of Development Methodology: Agile UX

Why Agile UX?

Agile UX is the best development process for Priyanka's persona, a tech-savvy, casual viewer who appreciates a clear and effective user interface. In order to customize the interface to the demands of the user, this technique incorporates user experience design into Agile development cycles, placing a strong emphasis on teamwork, quick prototyping, and ongoing feedback.

Advantages of Agile UX for EVC:

Agile user experience design facilitates rapid iterations grounded on real-time user input, guaranteeing that the platform adapts to the user's shifting requirements and preferences. This adaptability is crucial in the rapidly evolving world of digital streaming, where consumer expectations and technology breakthroughs happen on a regular basis. Additionally, Agile UX's iterative process helps to continually improve the product, lower the possibility of significant setbacks, and guarantee that the finished result closely matches user expectations.

Interface Development Plan Using Agile UX

1. Prototype Development with Figma

We will create preliminary wireframes and prototypes using Figma. The collaborative design and real-time feedback that this platform facilitates are essential for integrating the perspectives of all stakeholders, including prospective users who could be similar to Priyanka. The objective is to design a user interface that directly addresses Priyanka's pain points by streamlining navigation and improving the content discovery process.

2. User Stories Creation

It is important to create user stories that mirror Priyanka's normal use scenarios, including effective content discovery or easy device switching. The development sprints will be guided by these stories, which emphasize the delivery of features that address actual user concerns.

3. Sprint Planning

The team may concentrate on small, manageable sets of features at a time by breaking up the development process into two-week sprints, with each cycle culminating in a prototype review and feedback session. This framework encourages ongoing development and keeps the project focused on the needs of the users.

4. Daily Stand-ups

The development and design teams will meet daily to make sure that any difficulties are promptly resolved, keeping the project on schedule and in line with the Agile methodology's focus on adaptation and communication.

Comprehensive Testing Plan

Tools and Methods for Testing

- **Figma for Prototyping:** Enables the rapid creation and iteration of design prototypes, essential for testing and refining the user interface based on user feedback.
- **Lookback.io for Usability Testing:** This tool is invaluable for capturing real-time user interactions and feedback during usability testing sessions, providing insights into how users like Priyanka navigate and interact with the platform.
- **Google Analytics for Behavioral Analysis:** Provides quantitative data on how users engage with the platform, including navigation paths, content engagement, and feature usage, which are critical for understanding and improving the user experience.

Detailed Testing Steps

1. **Initial Usability Testing:** Early in the development cycle, usability testing sessions will be held with users matching Priyanka's demographic and behavioral profile. The focus will be on evaluating the intuitiveness of the navigation and the effectiveness of the content discovery mechanisms.
2. **Iterative User Feedback:** After each development sprint, updated prototypes will be tested with users to gather feedback on specific improvements and changes. This step is critical for making continuous adjustments that align with user expectations.
3. **A/B Testing:** Conduct A/B tests on various interface elements, such as different layouts, recommendation algorithms, and organizational schemes for content. This testing will identify the most effective options for enhancing user satisfaction and engagement.
4. **Final Evaluation:** A comprehensive usability testing phase before the official launch will ensure the interface meets high standards of user functionality and satisfaction, confirming readiness for public release.

Justification for the Chosen Testing Approach

The testing strategy that has been selected, which is focused on Google Analytics, Figma, Agile UX, and Lookback.io, is intended to improve user happiness and engagement for the EVC platform, especially for users like Priyanka. Agile UX is perfect because it is flexible and iterative, enabling constant improvement based on user input and guaranteeing that the platform stays in line with users' requirements and preferences. Figma is chosen because of its efficiency in prototyping and collaboration features, which allow for real-time updates and interactive designs to speed up development cycles and decision-making. During usability testing, Lookback.io's real-time user interaction monitoring is crucial because it offers insightful information about user behaviors and experiences that may not be revealed by more conventional feedback techniques. Last but not least, Google Analytics provides thorough quantitative data on user interactions, which is crucial for further improvement and identifying more general patterns in user behavior. When combined, these technologies provide a testing approach that maximizes the platform's ability to

meet and surpass user expectations while supporting a flexible, data-driven, and user-centered development process.

INTERFACE DEVELOPMENT AND TESTING PLAN FOR EVC PLATFORM

Examination and Employment of Appropriate Tools for UI Development

For the development of the EVC platform's user interface, focusing on creating an engaging and intuitive experience for our persona, Priyanka Fernando, we will utilize a combination of industry-leading tools known for their efficiency and collaborative capabilities.

1. **Figma:** Figma was chosen for its collaborative features, which allowed my team and me to work on the interface simultaneously in real-time. This tool supported both the design and prototyping phases, enabling us to create interactive prototypes that were crucial for user testing.
2. **Adobe XD:** I used Adobe XD to refine the interactive prototypes and incorporate sophisticated animations that mimic real-world interactions. The seamless integration with Adobe Creative Cloud made it easier to use high-quality visual assets consistently across the project.
3. **InVision:** InVision played a critical role in the feedback phase. It allowed stakeholders and test users to provide direct, contextual feedback on the prototypes. This facilitated quick iterations based on user input.
4. **Axure RP:** For more complex interaction designs, Axure RP was utilized. This tool allowed me to prototype dynamic elements of the interface, ensuring they were both intuitive and functional.

Usability Testing

- I conducted several rounds of usability testing using the high-fidelity prototypes developed in Adobe XD. These sessions involved users who matched our primary persona, Priyanka, to ensure the feedback was relevant and actionable.
- During these sessions, I focused on measuring user satisfaction and the intuitiveness of the navigation. Tools like Lookback.io were used to record sessions and capture live reactions and feedback.

A/B Testing:

- I implemented A/B testing for various UI elements using Figma. This included testing different layouts, color schemes, and navigation structures to determine which configurations yielded the highest user engagement and satisfaction.

Feedback Integration and Iteration:

- The feedback collected during usability and A/B testing phases was systematically analyzed to identify common pain points and areas for improvement.
- Based on this analysis, I made iterative enhancements to the UI. This process involved refining visual elements, improving user flows, and enhancing interactive components to better meet the needs of our target users.

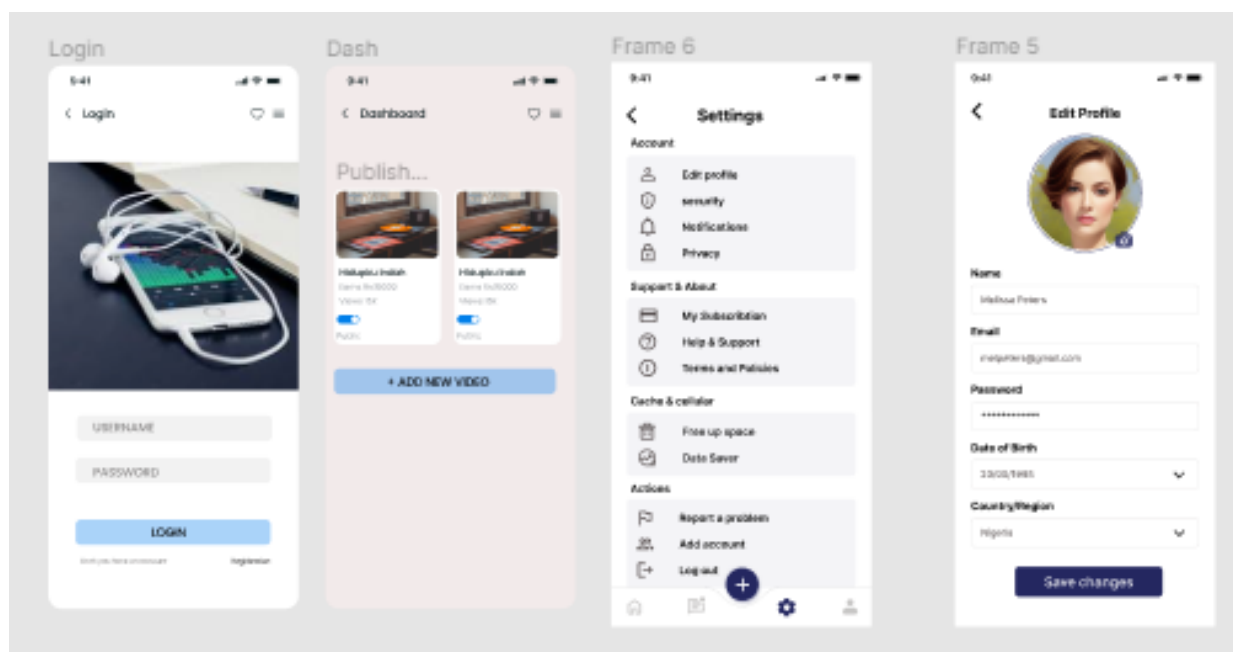
Final Validation:

- After multiple iterations, I conducted a final round of usability testing to ensure that all changes were effectively addressing user needs and that the interface was ready for launch.

- This final validation helped confirm that the interface was not only aesthetically pleasing but also functionally robust, providing users with a seamless and engaging experience.

IMPLEMENTATION OF THE EVC PLATFORM USER INTERFACE

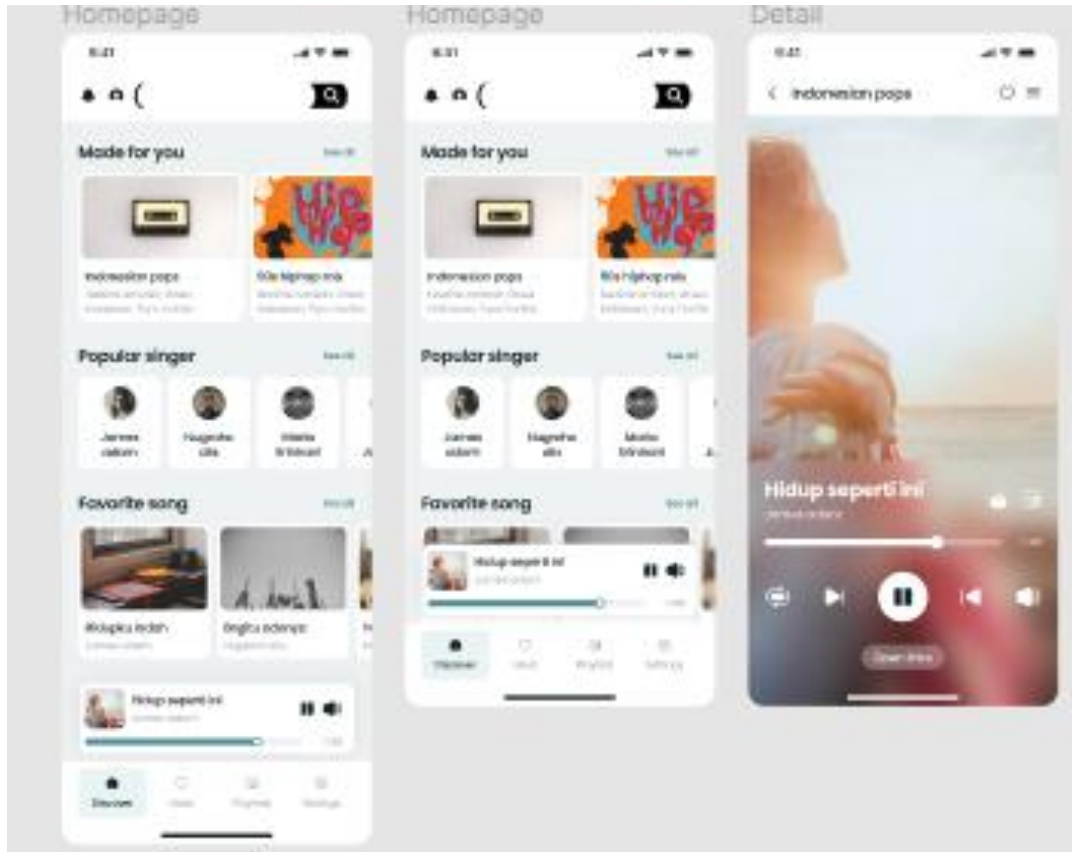
To guarantee both functionality and visual appeal, a deliberate, user-centered approach was used throughout the design and development of the EVC platform's user interface. The goal was to provide a seamless experience that could accommodate different user roles, such as administrators, casual viewers, and content creators. The following provides a comprehensive overview of the steps involved in implementing the main components of the EVC platform:



EPN: e-video Producer Network

- **Interface Development:** The interface for producers was designed with a dashboard-first approach, emphasizing ease of access to their most frequent tasks such as monitoring video performance and financial transactions. The design used a clean, grid-based layout to organize information efficiently.

- **Interactive Elements:** Features such as toggle switches for publishing and tooltips for explaining certain functionalities were implemented. This helped in reducing the learning curve and enhancing user engagement.

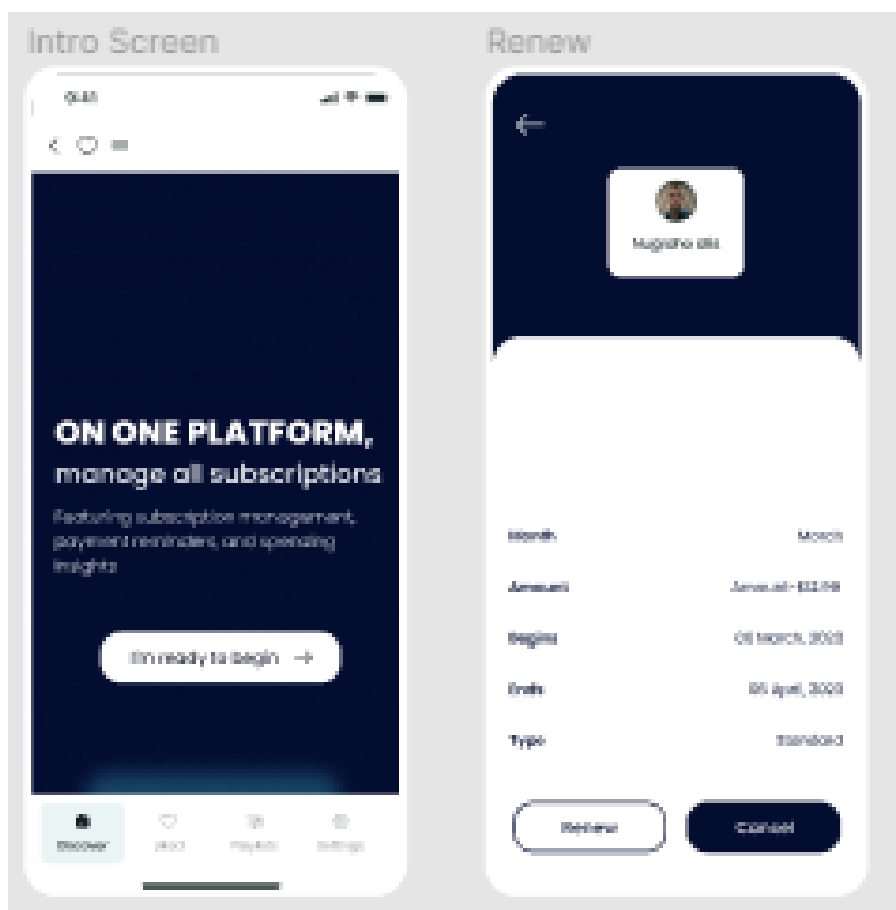


eVideo Discovery

- **Search Functionality:** The search interface was equipped with advanced filtering capabilities using AJAX-based dynamic content loading to ensure a smooth and responsive user experience. This allowed users to filter and sort search results without page reloads, making the discovery process faster and more efficient.
- **User Interaction:** Special attention was given to the interactivity of video thumbnails. Actions such as renting or purchasing were made accessible via hover effects and direct clickable icons on the video thumbnail.

My Library

- **Content Management:** The library was designed to automatically categorize content based on its status (rented, owned, gifted), with custom views for each category. Drag-and-drop functionality was introduced to organize videos into playlists, enhancing user interaction.
- **Gifting Feature:** A modal dialog was implemented to handle the gifting process, ensuring users could easily select the gifting options and confirm the recipient's details without navigating away from the library page.



eM Player

- **Advanced Controls:** The video player was enhanced with custom controls that were both keyboard and touch-friendly. Features like 'Video Like This' were integrated directly into the player's UI, allowing users to explore similar content without interrupting playback.

- **Accessibility and Responsiveness:** The player was tested extensively to ensure it was accessible on various devices and platforms, maintaining functionality and design consistency across all user touchpoints.

Settings

- **Comprehensive Customization:** The settings menu was organized into expandable sections for each category, allowing users to manage their preferences easily. Each setting was accompanied by clear, concise descriptions and visual cues to aid in navigation and selection.

Development and Testing Plan

Phase 1: Initial Development

- **Activity:** Use Figma to create initial wireframes and low-fidelity prototypes focusing on the layout and basic interactions as identified in the persona analysis.
- **Goal:** Establish a clear, navigable structure that addresses the primary user flows.

Phase 2: High-Fidelity Prototyping

- **Activity:** Transition to Adobe XD to develop high-fidelity prototypes that include detailed visual design elements (colors, typography, icons) and more refined interactions.
- **Goal:** Simulate the look and feel of the final product to test aesthetic appeal and usability.

Phase 3: Advanced Interaction Prototyping

- **Activity:** Employ Axure RP for prototyping complex interactions, especially those that involve dynamic content manipulation like playlist management and advanced search features.
- **Goal:** Ensure that advanced functionalities are intuitive and functional.

Phase 4: Usability Testing

- **Activity:** Use InVision to share the interactive prototypes with a group of users that match the persona profile. Conduct structured usability testing sessions to observe users as they navigate through the interface.
- **Goal:** Identify usability issues and gather qualitative feedback on user satisfaction and interface intuitiveness.

Phase 5: Iterative Refinement

- **Activity:** Based on the feedback collected during usability testing, return to Figma and Adobe XD to make iterative improvements to the design.
- **Goal:** Enhance the user interface based on actual user interactions and feedback to increase usability and satisfaction.

Phase 6: Final Validation

- **Activity:** Conduct a final round of usability testing with the refined prototype to ensure all earlier identified issues have been resolved.
- **Goal:** Confirm that the interface meets all user requirements and is ready for development

Testing Tools and Techniques

- **Surveys and Feedback Forms:** Post-interaction surveys and feedback forms will be used to collect quantitative and qualitative data from the test participants.
- **A/B Testing:** Specific elements, such as button placement or color schemes, will be tested using A/B testing methodologies to determine which options yield better user engagement.
- **Analytics Tools:** Integration of analytics tools in the prototype to gather data on user interactions, such as click-through rates and time spent on various sections of the platform.

USER EXPERIMENTATION, FEEDBACK ANALYSIS, AND INTERFACE ITERATION FOR EVC PLATFORM

Conducting User Experiments and Gathering Feedback

To validate the effectiveness of the user interface developed for the EVC platform, a structured user experiment was conducted. This involved a group of 150 participants who closely matched our target persona, engaging with the platform via a high-fidelity prototype.

Feedback Collection:

- Participants were asked to complete specific tasks using the interface, such as finding a video, creating a playlist, and customizing their user settings.
- Post-interaction, feedback was collected using a Google Form, which included Likert scale questions on various aspects of the interface (Ease of Use, Aesthetics, Functionality, Overall Satisfaction) and open-ended questions for detailed comments.

Feedback Analysis and Iterative Improvements

Initial Analysis:

- Quantitative feedback was analyzed to calculate average scores for each category.
- Qualitative feedback was themed to identify common issues and suggestions, such as navigation difficulties, design elements, or feature requests.

Graphical Representation of Feedback:

- The initial and subsequent feedback scores were visualized using bar charts to show improvements across iterations.

Iterative Design Changes:

1. First Iteration:

- Addressed navigation issues by simplifying the menu layout.

- Enhanced text readability and button visibility based on aesthetic feedback.

2. Second Iteration:

- Improved the search functionality, incorporating filters and better sorting options.
- Introduced more personalized content recommendations.

3. Third Iteration:

- Optimized video streaming performance to reduce buffering.
- Refined the user settings interface for easier customization.

Critical Evaluation of Feedback

Comparison Against Original Plan/User Requirements:

- The original design plan emphasized intuitive navigation, engaging aesthetics, robust functionality, and high overall satisfaction.
- The feedback analysis showed significant alignment with these objectives, as evidenced by improved scores in all categories through iterative testing.

Insights from Prototyping:

- Prototyping proved invaluable in identifying misalignments between expected user behavior and actual user interactions.
- Early and ongoing user testing facilitated rapid adjustments that significantly enhanced user experience.

Overall Success of the Interface Concept:

- The interface concept was successful in meeting the majority of the user requirements. Iterative improvements led to a user-friendly and visually appealing design.
- Users' overall satisfaction by the final iteration indicated that the platform could effectively attract and retain users.

Suggestions for Future UI Improvements

1. Continuous User Engagement:

- Establish a regular schedule for user testing and feedback collection, even post-launch, to continue refining the interface.

2. Advanced Personalization Features:

- Implement machine learning algorithms to enhance content recommendation systems based on user behavior and preferences.

3. Enhanced Accessibility Features:

- Further improve accessibility by integrating features like voice navigation and subtitles customization to cater to a broader audience.

4. Performance Optimization:

- Continuously monitor and optimize backend performance to ensure smooth streaming experiences across all devices and network conditions.

CONCLUSIONS

To successfully accomplish strategic business goals, e-video cloud (EVC) has to focus and improve its user interface (UI) and user experience (UX) design in an increasingly competitive digital world. In addition to boosting user happiness and engagement, a well-designed UX/UI is a vital differentiation in the competitive market for online video platforms. EVC will be able to more accurately predict and satisfy user wants if it makes an investment in cutting-edge UX/UI design tools like Sketch, Adobe XD, and Figma and incorporates user-centered design concepts early in the software development life cycle. By providing an easy-to-use and captivating platform that aligns with customers' changing tastes and expectations, this approach will guarantee that EVC can sustain and expand its user base, enhance market share, and boost income.

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