

**VIVEKANAND INSTITUTE OF MANAGEMENT & TECHNOLOGY**

**Alampur Hauz, Agra Road, Etawah – 206001 (U.P)**

**AFFILIATED TO CHHATRAPATI SAHU JI MAHARAJ UNIVERSITY (CSJMU), Kanpur**

**Session : 2021 – 2024**

**MINOR PROJECT REPORT**

**On**

**“NETFLIX CLONE”**

A report submitted in partial fulfilment of the requirements for the Award of Degree of

**Bachelor of Computer Application**

**Under the Guidance of Submitted By**

**MR UDIT JAIN ARBAZ AHMAD ANSARI**

**Asst.Professor Roll no. 21015000310**

**BCA(5TH SEM)**

**CERTIFICATE**

It is certified that the minor project title **“NETFLIX CLONE”** is a- bonafide record of the work done by under the guidance and supervision.

The work is worth for submitting the award of the degree of bachelor of computer application of CSJMU Kanpur.

**Place**- Etawah **Principal**

**Date**- **Dr Anand Kumar Dixit**

**CERTIFICATE**

This to certify that the project report entitled

**“NETFLIX CLONE “** Submitted by **ARBAZ AHMAD ANSARI** during the academic year 2023-2024 is a bonafied piece of work conducted under the supervision and acknowledge. I wish his success in all his future endeavours guidance. The data sources have been fully.

**Under the Guidance of Principle**

**MR UDIT JAIN Dr. Anand Kumar Dixit Asst.Professor**

**ABSTRACT**

The Netflix Clone project endeavors to replicate the immersive streaming experience of the renowned streaming platform while serving as an educational exercise for web development enthusiasts. Leveraging HTML, CSS, and JavaScript.

the project focuses on designing a responsive user interface that mirrors Netflix's aesthetic appeal. Through the integration of APIs, users can access a curated library of movie and TV show data, enabling dynamic content display.

The implementation of user authentication enhances the user experience, allowing personalized recommendations and watch history tracking. Furthermore, the project emphasizes responsive design principles, ensuring seamless functionality across various devices. By undertaking this Netflix Clone,

Developers gain practical insights into front-end development, API integration, and user authentication, fostering a comprehensive understanding of modern web technologies and design practices. This project not only hones technical skills but also provides a creative outlet for designing a compelling and user-friendly streaming platform interface.

**ACKNOWLEDGEMENT**

I would like to express my heartfelt gratitude to all those who have been instrumental in the successful development of the NETFLIX CLONE. This project has been a journey of exploration, learning, and collaboration, and I am deeply thankful for the support and guidance received from various individuals.

I extend my sincere thanks to Director **DR. U.S. Sharma** for providing the necessary resources and support that allowed us to bring this quiz application to fruition. The facilities provided were crucial to the accomplishment of this project.

Special appreciation goes to **Miss. Neetu Saxena**, the Head of the Department, for their constructive feedback and continuous encouragement throughout the development of the quiz application.

I am particularly grateful to my supervisor and teacher for their unwavering support and valuable insights during the creation of the quiz application. Their guidance played a pivotal role in shaping the application and ensuring its success.

**ARBAZ AHMAD ANSARI**

**INDEX**

S.NO CONTENT PAGE NO

1. Introduction 1
2. Requirement 2

1. Testing 3-4
2. Code Snippet 5-15
3. Screenshot 16
4. Limitation / Future Scope 17
5. Conclusion 18

**Introduction**

Netflix, a global entertainment juggernaut, has transcended the traditional landscape of television and cinema, redefining how audiences consume content. Established in 1997 by Reed Hastings and Marc Randolph, Netflix originated as a DVD rental-by-mail service before metamorphosing into the streaming giant we know today. With a subscription-based model, it offers an extensive library of movies, TV shows, documentaries, and original productions.

What sets Netflix apart is its on-demand streaming, allowing users to watch content at their convenience across a myriad of devices.

Netflix revolutionized binge-watching culture, releasing entire seasons of shows at once, providing viewers with unprecedented control over their viewing experiences.

As of my last knowledge update in January 2022, Netflix boasts a vast international subscriber base, illustrating its unparalleled influence on the entertainment industry. Its continual adaptation to technological trends and commitment to original, diverse content solidify Netflix as a trailblazer, shaping the future of digital entertainment.

**Hardware/Software Requirement**

## 

**HARDWARE : -**

Microprocessor intel Core i3 or more

* 4GB RAM
* 256GB SSD
* Keyboard , Mouse
* Display Card
* Color Monitor

**SOFTWARE :-**

* Visual Studio (latest Version)
* Node JS
* Internet Connection

**PLATEFORM :-**

* Windows ( Project will be Developed On Window 10pro ).

**TESTING**

Testing a Netflix clone project involves validating various aspects to ensure a seamless and user-friendly experience. Here's a brief overview of testing areas:

**1. Functionality Testing:**

- Ensure that all features work as intended, including user authentication, content playback, search functionality, and recommendation algorithms.

- Test different user roles (guest, registered user) to validate their respective permissions.

**2. Compatibility Testing:**

- Verify the Netflix clone's compatibility across different browsers (Chrome, Firefox, Safari, Edge) to ensure consistent functionality.

- Test on various devices (desktops, tablets, smartphones) to ensure responsiveness.

**3. Performance Testing:**

- Evaluate the application's loading times, especially for images and videos, to guarantee a smooth streaming experience.

**4. Security Testing:**

- Validate user authentication and authorization mechanisms to ensure data security.

**5. Usability Testing:**

- Assess the user interface for intuitiveness and ease of navigation.

- Test the responsiveness of the design and layout across different screen sizes.

**6.Cross-Device Testing:**

- Ensure a consistent user experience across various devices, including smart TVs, gaming consoles, and streaming devices.

**7. Load Testing:**

- Simulate a large number of concurrent users to assess the application's performance under heavy load.

**8. Accessibility Testing:**

- Confirm that the Netflix clone complies with accessibility standards, making it usable for individuals with disabilities.

**CODE SNIPPET**

LOGIN PAGE:-

WEB PAGE :-

SCORE PAGE :-

1.LOGIN PAGE:-

**HTML:**

**<!DOCTYPE html>**

**<html lang=”en”>**

**<head>**

**<meta charset=”UTF-8”>**

**<meta http-equiv=”X-UA-Compatible” content=”IE=edge”>**

**<meta name=”viewport” content=”width=device-width, initial-scale=1.0”>**

**<link rel=”stylesheet” href=**[**https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.3/css/all.min.css**](https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.3/css/all.min.css) **integrity=”sha512-iBBXm8fW90+nuLcSKlbmrPcLa0OT92xO1BIsZ+ywDWZCvqsWgccV3gFoRBv0z+8dLJgyAHIhR35VZc2oM/gI1w==” crossorigin=”anonymous” />**

**<link rel=”stylesheet” href=”style/style.css”>**

**<link rel=”icon” href=”img/logo.png”>**

**<title>Netflix</title>**

**</head>**

**<body>**

**<div class=”upper”>**

**<div class=”logo”>**

**<a href=”#”>**

**<img src=”img/Netflix-Logo.png” class=”img-logo”/>**

**</a>**

**</div>**

**<div class=”login-div”>**

**<form class=”login”>**

**<h1>Sign In</h1>**

**<div class=”input-text”>**

**<input type=”text” id=”inputEmail” name=”email” placeholder=”Email or phone number” onfocus=”inputOnFocus(this)” onblur=”inputOnBlur(this)”/>**

**<div class=”warning-input” id=”warningEmail”>**

**Please enter a valid email or phone number.**

**</div>**

**</div>**

**<div class=”input-text”>**

**<input type=”password” id=”inputPassword” name=”password” placeholder=”Password” onfocus=”inputOnFocus(this)” onblur=”inputOnBlur(this)”/>**

**<div class=”warning-input” id=”warningPassword”>**

**Your password must contain between 4 and 60 characters.**

**</div>**

**</div>**

**<div>**

**<button class=”signin-button”>Sign In</button>**

**</div>**

**<div class=”remember-flex”>**

**<div>**

**<input type=”checkbox”>**

**<label class=”color\_text”>Remember me</label>**

**</div>**

**<div class=”help”>**

**<a class=”color\_text” href=”#”>Need help?</a>**

**</div>**

**</div>**

**<div class=”login-face”>**

**<img src=”img/fb-icon.png” height=”20”/><a href=”#” class=”color\_link log\_face”>Login with Facebook</a>**

**</div>**

**<div class=”new-members”>**

**New to Netflix? <a href=”#” class=”signup-link”>Sign up now</a>.**

**</div>**

**<div class=”protection color\_link help”>**

**This page is protected by Google reCAPTCHA to ensure you’re not a bot. <a href=”#”>Learn more.</a>**

**</div>**

**</form>**

**</div>**

**</div>**

**<div class=”bottom”>**

**<div class=”bottom-width”>**

**Questions? Call <a href=**[**tel:1-844-542-4813**](tel:1-844-542-4813) **class=”tel-link”>1-844-542-4813</a>**

**<div>**

**<ul class=”bottom-flex”>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**FAQ**

**</a>**

**</li>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**Help Center**

**</a>**

**</li>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**Terms of Use**

**</a>**

**</li>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**Privacy**

**</a>**

**</li>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**Cookie Preferences**

**</a>**

**</li>**

**<li class=”list-bottom”>**

**<a href=”#” class=”link-bottom”>**

**Corporate information**

**</a>**

**</li>**

**</ul>**

**</div>**

**<div>**

**<select class=”fa select-language”>**

**<option> &#xf0ac; &nbsp;&nbsp;&nbsp;English</option>**

**<option> &#xf0ac; &nbsp;&nbsp;&nbsp;Fran&ccedil;ais</option>**

**</select>**

**</div>**

**</div>**

**</div>**

**<script src=”js/script.js”></script>**

**</body>**

**</html>**

**CSS**

**Body{**

**Margin: 0;**

**Padding: 0;**

**Background: url(“../img/background.jpg”) no-repeat center center fixed;**

**-webkit-background-size: cover;**

**-moz-background-size: cover;**

**-o-background-size: cover;**

**Background-size: cover;**

**Font-family: ‘Helvetica Neue’,Helvetica,Arial,sans-serif;**

**}**

**.img-logo{**

**Height: 94px;**

**Margin-left: 45px;**

**}**

**.upper{**

**Background-color: rgba(0, 0, 0, 0.6);**

**Padding-bottom: 100px;**

**}**

**.bottom{**

**Background-color: rgba(0, 0, 0, 0.85);**

**Color: #757575;**

**}**

**.bottom-width{**

**Max-width: 1000px;**

**Margin: 0 auto;**

**Padding: 30px;**

**}**

**.bottom-flex{**

**Display: flex;**

**Flex-wrap: wrap;**

**Padding: 15px 0 0 0;**

**Margin-block-start: 0;**

**Margin-block-end: 0;**

**}**

**.bottom-flex li{**

**List-style: none;**

**}**

**.list-bottom{**

**Width: 25%;**

**Margin-top: 10px;**

**}**

**.link-bottom{**

**Text-decoration: none;**

**Color: #757575;**

**Font-size: 0.8rem;**

**}**

**.link-bottom:hover{**

**Text-decoration: underline;**

**}**

**.login{**

**Margin: 0 auto;**

**Width: 310px;**

**Background-color: rgba(0, 0, 0, 0.6);**

**Border-radius: 5px;**

**Padding: 30px 70px 143px 70px;**

**}**

**.login h1{**

**Color: white;**

**Padding-bottom: 10px;**

**}**

**.input-text{**

**Margin-bottom: 20px;**

**}**

**.input-text input{**

**Width: 100%;**

**Height: 45px;**

**Background-color: #333;**

**Color: white;**

**Border-radius:5px;**

**Border: none;**

**Outline: transparent;**

**Text-indent: 18px;**

**}**

**.input-text input::-webkit-input-placeholder {**

**Font-size: 1rem;**

**Color: #999;**

**}**

**.input-text input::-moz-placeholder {**

**Font-size: 1rem;**

**Color: #999;**

**Text-indent: 40px;**

**}**

**.signin-button{**

**Margin-top: 20px;**

**Width: 100%;**

**Padding: 13px;**

**Border-radius: 5px;**

**Background-color: red;**

**Color:white;**

**Border:none;**

**Font-weight: bold;**

**Font-size: 1.05rem;**

**Cursor: pointer;**

**}**

**.remember-flex{**

**Display: flex;**

**Justify-content: space-between;**

**Margin-top: 10px;**

**Font-size: 0.8rem;**

**}**

**.color\_text{**

**Color: #b3b3b3;**

**}**

**.color\_link{**

**Color: #737373;**

**}**

**.signup-link{**

**Color: white;**

**Text-decoration: none;**

**}**

**.warning-input{**

**Display: none;**

**Color:#e87c03;**

**Margin-top: 0;**

**Font-size: 0.8rem;**

**Margin-top: 6px;**

**}**

**.signup-link:hover{**

**Text-decoration: underline;**

**}**

**.face\_icon{**

**Color: #3b5998;**

**Margin-right: 6px;**

**Font-size: 20px;**

**}**

**.log\_face{**

**Text-decoration: none;**

**Margin-left: 10px;**

**Font-size: 0.8rem;**

**}**

**.login-face{**

**Margin: 50px 0 15px 0;**

**Vertical-align: middle;**

**Color: #8c8c8c;**

**}**

**.new-members{**

**Margin-bottom: 10px;**

**Color: #8c8c8c;**

**}**

**.help a{**

**Text-decoration: none;**

**}**

**.help a:hover{**

**Text-decoration: underline;**

**}**

**.protection{**

**Font-size: 0.8rem;**

**Color: #8c8c8c;**

**}**

**.protection a{**

**Text-decoration: none;**

**}**

**.protection a:hover{**

**Text-decoration: underline;**

**}**

**.tel-link{**

**Text-decoration: none;**

**Color: #757575;**

**}**

**.tel-link:hover{**

**Text-decoration: underline;**

**}**

**.select-language{**

**-webkit-appearance: none;**

**-moz-appearance: none;**

**Background: url(“data:image/svg+xml;base64,”);**

**Background-size: 12px;**

**Background-position-x: calc(100% - 7px);**

**Background-position-y: calc(100% - 14px);**

**Background-repeat: no-repeat;**

**Background-color: #000;**

**Color:#757575;**

**Padding: 14px 20px 14px 14px;**

**Margin: 30px 0 40px 0;**

**Font-size: 0.9rem;**

**Min-height: 40px;**

**Border: 1px solid #333;**

**}**

**.select-language option{**

**Padding-left: 10px;**

**}**

**@media screen and (max-width: 740px){**

**Body{**

**Background: black;**

**}**

**.img-logo {**

**Margin-left: 22px;**

**}**

**.login{**

**Padding: 0 10px 0 10px;**

**Width: 100%;**

**}**

**.login-div{**

**Width: 90%;**

**Margin: 0 auto;**

**}**

**.bottom {**

**Border-top: 1px solid #737373;**

**}**

**.upper{**

**Padding-bottom: 93px;**

**}**

**.list-bottom{**

**Width: 33%;**

**}**

**}**

**@media screen and (max-width: 500px){**

**.list-bottom{**

**Width: 50%;**

**}**

**}**

**JAVASCRIPT**

**Let inputTouched = {**

**Email: false,**

**Password: false**

**}**

**Const inputEmail = document.getElementById(“inputEmail”)**

**Const inputPassword = document.getElementById(“inputPassword”)**

**Const inputWrapperEmail = document.getElementById(“input-wrapper-email”)**

**Const inputWrapperPassword = document.getElementById(“input-wrapper-password”)**

**Const warningEmail = document.getElementById(“warningEmail”)**

**Const warningPassword = document.getElementById(“warningPassword”)**

**Const inputOnBlur = (ev) =>{**

**If(inputTouched.email){**

**If(!validateEmail(inputEmail.value) && !validatePhone(inputEmail.value)){**

**warningEmail.style.display=”block”**

**inputEmail.style.borderBottom=’2px solid #e87c03’**

**}**

**Else{**

**warningEmail.style.display=”none”**

**inputEmail.style.borderBottom=”none”**

**}**

**}**

**If(inputTouched.password){**

**If(!(inputPassword.value.length >= 4 && inputPassword.value.length <= 60)){**

**warningPassword.style.display=”block”**

**inputPassword.style.borderBottom=’2px solid #e87c03’**

**}**

**Else{**

**warningPassword.style.display=”none”**

**inputPassword.style.borderBottom=”none”**

**}**

**}**

**}**

**Const inputOnFocus = (ev) =>{**

**inputTouched[ev.name] = true;**

**}**

**Const validateEmail = email => {**

**Const re = /^(([^<>()[\]\\.,;:\s@”]+(\.[^<>()[\]\\.,;:\s@”]+)\*)|(".+"))@((\[[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\])|(([a-zA-Z\-0-9]+\.)+[a-zA-Z]{2,}))$/;**

**return re.test(String(email).toLowerCase());**

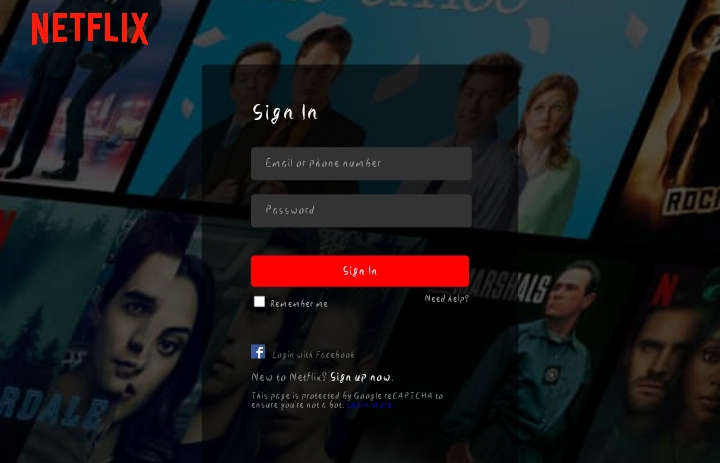
**}**

**const validatePhone = email => {**

**const re = /^[\+]?[(]?[0-9]{3}[)]?[-\s\.]?[0-9]{3}[-\s\.]?[0-9]{4,6}$/im;**

**return re.test(String(email).toLowerCase());**

SCREENSHOT FOR LOGIN PAGE



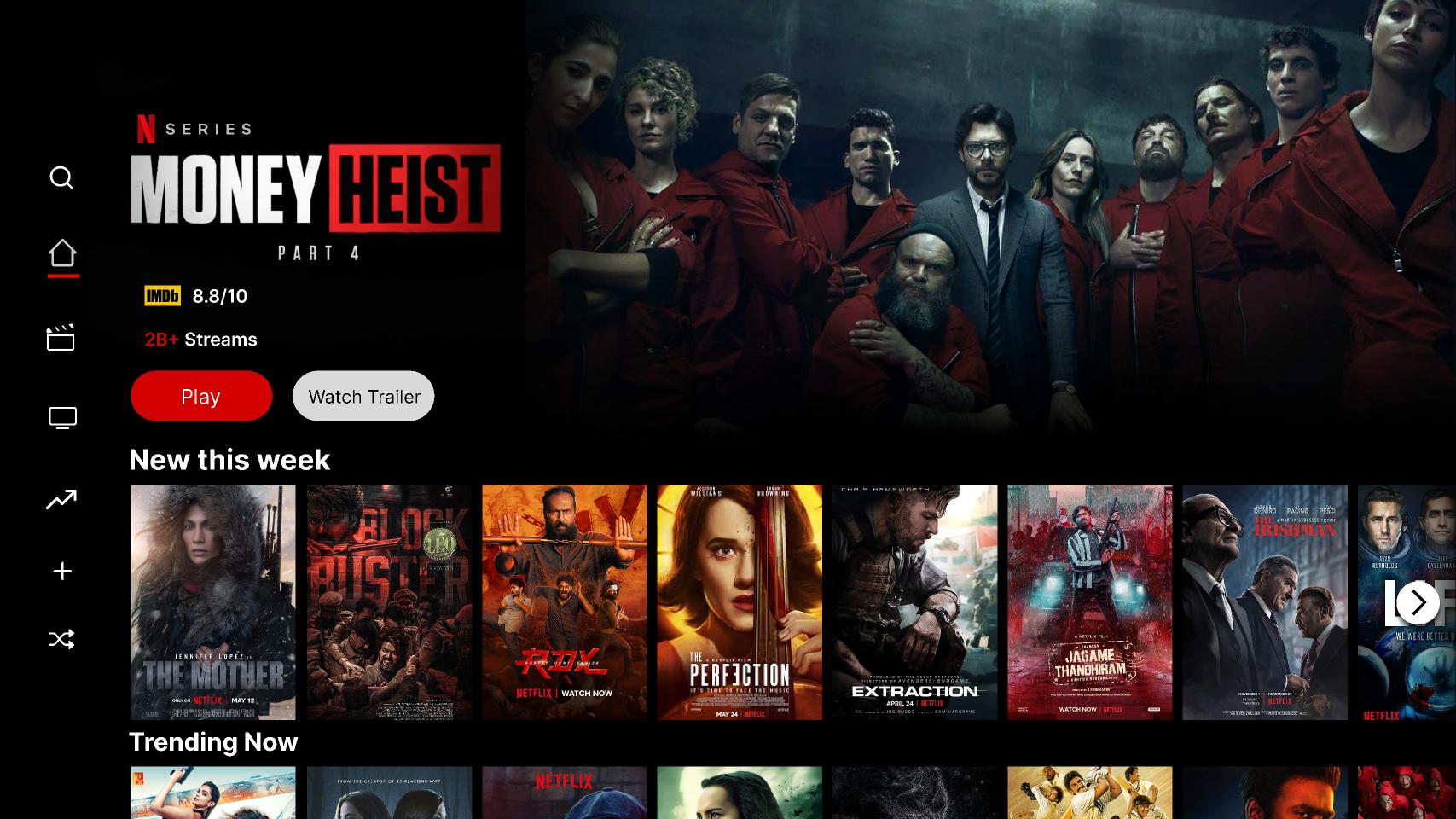
**2.**HOME PAGE:

**HTML**

**CSS**

**JAVASCRIPT**

HOME PAGE



**Limitation Of The Project**

**1. Content Limitations:**

The Netflix clone faces inherent constraints in replicating the extensive and licensed content library of the original platform. Due to legal and copyright restrictions, the clone may lack the diverse range of movies, TV shows, and original productions available on Netflix, limiting its authenticity.

**2. Algorithmic Complexity:**

Emulating Netflix's intricate recommendation algorithms poses a significant challenge. The clone may struggle to deliver the same level of personalized content suggestions and user experience due to the proprietary nature and complexity of Netflix's algorithmic systems.

**3. Legal and Compliance Challenges:**

The Netflix clone may encounter legal hurdles related to intellectual property, licensing agreements, and copyright infringement. Ensuring compliance with industry regulations and securing necessary licenses becomes a complex task, highlighting the legal limitations and potential legal ramifications of attempting to replicate a production-level streaming service.

**Future Scopes**

**1. Augmented Reality (AR) Integration:**

Integrating Augmented Reality into the Netflix clone's frontend could elevate the user experience by overlaying digital content onto the real world. This could transform the way users engage with their favorite shows and movies, creating a more immersive and interactive viewing environment.

**2.** **Blockchain for Content Security:**

The future of the Netflix clone may involve leveraging blockchain technology on the frontend to enhance content security and address issues related to piracy. Implementing decentralized and tamper-proof systems could safeguard intellectual property rights and ensure a more secure streaming ecosystem.

**3. Social Viewing Experiences:**

Expanding social features on the frontend, such as synchronized watching, live chat, and shared playlists, could foster a sense of community among users. The Netflix clone may evolve to offer more interactive and social viewing experiences, blurring the lines between individual and shared entertainment.

**CONCLUSION**

In conclusion, the Netflix clone project encapsulates the essence of web development innovation and serves as a testament to the ever-evolving landscape of digital entertainment. Through the meticulous recreation of a streaming platform, developers gain valuable insights into frontend technologies, user interface design, and the complexities of integrating external APIs. While the clone project offers a glimpse into the multifaceted functionalities of a streaming service, it inherently acknowledges its limitations, particularly in replicating the vast content library and intricate algorithms of the original Netflix.

As a stepping stone in the learning journey, the Netflix clone provides a solid foundation for exploring future advancements. The possibilities are vast, ranging from immersive technologies like Augmented Reality to the integration of blockchain for enhanced content security. The project's future lies in the continual pursuit of innovation, pushing the boundaries of user experience and community engagement within the dynamic realm of online streaming.