[LOGO]

Streaming Website

Requirements Specification

Version 1.1

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1. Executive Summary

1.1 Project Overview

This streaming website will be designed to provide an enjoyable and seamless experience for content enthusiasts. The website will offer a vast selection of content, ranging from the latest blockbusters to classic films, organized by genre, popularity, and other criteria to help users easily find what they're looking for.

The website will be visually appealing and user-friendly, and most importantly not lackluster, with an intuitive interface that allows users to easily navigate the site and find the content they want. It will utilize a search bar that allows users to quickly find specific content and a recommendation system that suggests content based on the user's viewing history or preferences.

In addition to providing a large selection of content, the website will also include social features, such as a comment section that may or may not be connected to mainstream social platforms, party watching to enjoy content with friends, and possibly a blogging section for people to share opinions, ideas and much more. This can help foster a sense of community among content fans and provide a space for discussion and sharing of opinions.

The website will be optimized for multiple devices, including desktop computers, tablets, and mobile phones, to ensure that users can easily access the site and watch their favorite content from wherever they are without the annoying visual uncomfortability that comes with watching desktop content on a mobile device.

The website may also offer additional features, such as the ability to create and save favorite lists, download content for offline viewing, and access exclusive content not available elsewhere due to regional constraints.

Overall, the content streaming website will be designed to provide an immersive and enjoyable experience for content enthusiasts, making it easy for them to discover and watch their favorite content from anywhere and at any time.

1.2 Purpose and Scope of this Specification

Here will be shown the outline of the design and development of a streaming website, detailing the entire process with a focus on design and user needs.

This specification covers a range of topics related to the project, including:

- A comprehensive overview of the website's features and functionalities
- Technical aspects of the system, including processes and views
- User and system requirements
- Detailed analysis of functional and non-functional requirements

- Use cases and scenarios, demonstrating how users will interact with the website
- Dependencies and constraints related to the project

However, this specification does not cover:

- Legal requirements or compliance considerations related to the website
- Financial or auditing aspects of the project
- The aim of this specification is to provide a clear roadmap for the design and development of the streaming website, focusing on the needs of users and ensuring that all aspects of the project are fully documented and considered.

In scope

This document addresses requirements related to phase 2 of Project A:

- modification of Classification Processing to meet legislative mandate ABC.
- modification of Labor Relations Processing to meet legislative mandate ABC.

Out of Scope

The following items in phase 3 of Project A are out of scope:

- modification of Classification Processing to meet legislative mandate XYZ.
- modification of Labor Relations Processing to meet legislative mandate XYZ.

(Phase 3 will be considered in the development of the requirements for Phase 2, but the Phase 3 requirements will be documented separately.)

2. Product/Service Description

The streaming website is designed to provide users with a vast collection of movies and TV shows to watch online. It should offer an excellent user experience, including easy navigation, high-quality playback, and personalized recommendations based on users' viewing habits.

Content: One of the most critical factors for a streaming website is the content available to users. The platform's success hinges on the ability to offer a wide range of movies and TV shows that appeal to different audiences.

User experience: A streaming website's user interface and experience is critical to attracting and retaining customers. It should be easy to navigate, visually appealing, and provide seamless playback without buffering or interruption.

Compatibility: The platform will mainly be optimized for a desktop view model, however smartphone, tablet, and tv compatibility will be implemented.

Security: Security is of utmost importance in a streaming website. Users entrust the platform with their personal and possibly financial information, in case of implementing a subscription option, and therefore, it is essential to ensure that the site's security protocols are robust and secure.

Speed and reliability: Streaming websites must be fast and reliable to provide a seamless viewing experience. The website must be able to handle large amounts of traffic without slowing down or crashing.

Licensing agreements: Obtaining licensing agreements for movies and TV shows is crucial to the success of a streaming website. Without licensing agreements, the platform may not have access to high-quality content, making it less attractive to users.

Revenue model: Finally, the revenue model of the website is a crucial factor. The website must generate enough revenue to cover licensing fees, hosting costs, and other expenses associated with running the platform. Common revenue models include subscription-based services, pay-per-view, or advertising-based revenue models.

2.1 Product Context

Content providers: The website relies on partnerships with content providers such as movie studios and TV networks to license and acquire the movies and TV shows available on the platform.

Payment processing: The website interfaces with payment processing systems to enable users to pay for subscriptions or pay-per-view content.

Devices and operating systems: The website must be compatible with various devices and operating systems to provide a seamless viewing experience for users.

Analytics and data tracking: The website may use analytics and data tracking systems to monitor user behavior and preferences, which can help provide personalized recommendations.

A diagram to show the major components of the larger system, interconnections, and external interfaces might look like this:

[Image of a diagram showing the movie streaming website at the center, with arrows pointing to content providers, payment processing systems, devices, and operating systems, and analytics and data tracking systems.]

With connections to content providers, payment processing systems, devices, operating systems, analytics, and data tracking systems, the streaming website serves as the system's hub. To give customers a flawless viewing experience and bring in money for the company, the website connects with these services.

2.2 User Characteristics

Admin:

- Primary administrator - can alter anything on the website
- Secondary administrators - users that can add entries, change or monitor other users

Viewers:

- Visitor - unregistered users visiting the website for viewing movies
- Registered users - users already signed up for our services that may or may not have been notified
- Limited users - registered or not users who are not eligible to experience all the options available on the website, be that due to age restrictions or personal preferences (kid users).

Content Creator:

- Bloggers or reviewers - that want to provide reviews for the content
- Artists - users who choose to upload fan art on the website

2.3 Assumptions

Internet connection: It is assumed that users have a stable internet connection to access the website and stream movies or TV shows.

Device compatibility: It is assumed that the website is compatible with commonly used devices and operating systems, such as smartphones, tablets, smart TVs, and laptops.

User expertise: It is assumed that users have basic computer skills and are comfortable navigating websites to find and stream content.

Licensing agreements: It is assumed that the website can secure licensing agreements for the content it wants to offer, without any legal or contractual limitations.

Availability of subtitles and audio tracks: It is assumed that the website can provide subtitles and audio tracks in different languages for movies and TV shows to cater to a global audience.

Content restrictions: It is assumed that the website can enforce content restrictions based on user age.

2.4 Constraints

Audit functions: The website may require audit functions, such as an audit trail or log files, to monitor user activity and ensure data security. These functions could constrain the design options by requiring specific data storage and retrieval methods.

Access, management, and security: Access, management, and security requirements could constrain the design options by requiring specific user authentication methods, user permissions, and encryption protocols.

Criticality of the application: The criticality of the streaming website could constrain the design options by requiring high availability, failover mechanisms, and disaster recovery procedures to minimize downtime.

System resource constraints: Limits on disk space or other hardware limitations could constrain the design options by requiring optimization of storage and processing resources, potentially limiting the functionality or scalability of the system.

Design or other standards: Design or other standards, such as programming language or framework, could constrain the design options by requiring specific development tools, libraries, or APIs.

2.5 Dependencies

Content availability: The website's content availability may depend on securing licensing agreements with various studios and distributors. The requirements for the website would need to be adjusted accordingly to ensure that the content can be acquired and made available in a timely manner.

Third-party services: The website may depend on third-party services, such as payment gateways, content delivery networks, or social media platforms. The requirements for the website would need to be adjusted to ensure compatibility with these services.

Database integration: The website may need to integrate with an existing database or data source. The requirements for the website would need to be adjusted to ensure that data can be properly imported, exported, and managed.

Platform compatibility: The website may depend on specific technologies or platforms, such as a particular web server, operating system, or browser. The requirements for the website would need to be adjusted to ensure compatibility with these platforms.

Availability of APIs: The website may need to access data or functionality through APIs provided by other services. The requirements for the website would need to be adjusted to ensure compatibility with these APIs.

Development timelines: The development of certain features or modules may depend on the completion of other features or modules. The requirements for the website would need to be adjusted to ensure that dependencies are properly identified and addressed.

3. Requirements

- Describe all system requirements in enough detail for designers to design a system satisfying the requirements and testers to verify that the system satisfies requirements.
- Organize these requirements in a way that works best for your project. See Appendix DAppendix D, Organizing the Requirements for different ways to organize these requirements.
- Describe every input into the system, every output from the system, and every function performed by the system in response to an input or in support of an output. (Specify what functions are to be performed on what data to produce what results at what location for whom.)
- Each requirement should be numbered (or uniquely identifiable) and prioritized.
  See the sample requirements in Functional Requirements, and System Interface/Integration, as well as these example priority definitions:

  Priority Definitions

  The following definitions are intended as a guideline to prioritize requirements.

  - Priority 1 – The requirement is a “must have” as outlined by policy/law
  - Priority 2 – The requirement is needed for improved processing, and the fulfillment of the requirement will create immediate benefits
  - Priority 3 – The requirement is a “nice to have” which may include new functionality

  It may be helpful to phrase the requirement in terms of its priority, e.g., "The value of the employee status sent to DIS **must be** either A or I" or "It **would be nice** if the application warned the user that the expiration date was 3 business days away". Another approach would be to group requirements by priority category.
- A good requirement is:
  - Correct
  - Unambiguous (all statements have exactly one interpretation)
  - Complete (where TBDs are absolutely necessary, document why the information is unknown, who is responsible for resolution, and the deadline)
  - Consistent
  - Ranked for importance and/or stability
  - Verifiable (avoid soft descriptions like “works well”, “is user friendly”; use concrete terms and specify measurable quantities)
  - Modifiable (evolve the Requirements Specification only via a formal change process, preserving a complete audit trail of changes)
  - Does not specify any particular design
  - Traceable (cross-reference with source documents and spawned documents).

3.1 Functional Requirements

The following table is an example format for requirements. Choose whatever format works best for your project.

For Example:

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_05	The website should allow users to browse and search for movies, TV shows, and other video content.	Users should be able to search for content using different criteria such as title, genre, actor, director, and release year.	High	7/05/23	
BR_LR_08	The website should allow users to view details about each movie or TV show, including a summary, cast and crew information, ratings, and reviews.	Users should be able to watch their chosen content without interruptions or buffering, with options for adjusting the video quality to suit their internet connection.	High	7/05/23	
BR_LR_10	The website should provide users with personalized recommendations based on their viewing history and preferences.	Users should receive recommendations for movies and TV shows based on their viewing history, ratings, and watchlist.	Medium	7/05/23	
BR_LR_16	The website should allow users to rate and review movies and TV shows.	Users should be able to rate and review movies and TV shows they have watched, with an option to see other users' ratings and reviews.	Medium	7/05/23	
BR_LR_18	The website should provide users with the ability to download content for offline viewing.	Users should be able to download movies and TV shows for offline viewing on their devices, with restrictions on the number of downloads and time limit for watching the downloaded content.	Low	7/05/23	
	The website should provide users with the ability to resume playback from where they left off.	Users should be able to resume playback of movies and TV shows from where they left off, across different devices and platforms.	Medium	7/05/23	
	The website should allow users to subscribe to different plans with different features and prices.	Users should be able to choose from different subscription plans with varying features, prices, and duration, with options for upgrading or downgrading their subscription.	High	7/05/23	

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
	The website should allow users to cancel their subscription at any time.	Users should be able to cancel their subscription at any time, with options for refund or prorated credit based on the remaining subscription period.	High	7/05/23	
	The website should provide users with a customer support system.	Users should be able to contact customer support for assistance with any issues or queries they may have, with options for email, chat, or phone support.	Medium	7/05/23	

3.2 Non-Functional Requirements

3.2.1 Product Requirements

Requirements which specify that the delivered product must behave in a particular way e.g. execution speed, reliability, etc.
Our product is a fun, easy to use, fast and reliable website making sure that anyone from anywhere can use it whenever they want.

3.2.1.1 **User Interface Requirements**

Our goal is to make our website usable for anyone so we don't have a specific user target. Since we have a wide range of users, our biggest thing to keep in mind is to make it easy and fun to use.
We studied color theory and tried to choose colors that are vibrant and attractive but also not too strong to hurt the eyes. We tried to make our website simple and attractive.

- The color palette used in the platform should be light
- The website is user friendly
- Generally, the user does not need to use functional keys

3.2.1.2 **Usability**

As we said, our range of users is wide so we will make sure our website will be easy to use and the user does not need too many skills.

- The user creates an account and logs in
- The account can be used from multiple devices
- The user scrolls to find the movie/serial he seeks
- The user can see movie recommendations from other users
- The user can leave a comment and share art or edits about their favorite movie/serial

3.2.1.3 **Efficiency**

It refers to the ability of the website to provide an easy and fast way for users to access and watch the content they want.

1. Quick loading times: The website should load quickly, allowing users to access the content they want without delays.
2. Easy navigation: The website should have clear and intuitive navigation, allowing users to find the content they want quickly and easily.

3. Search functionality: The website should have a robust search function that allows users to search for specific movies or shows easily.
4. Sorting and filtering options: The website should provide sorting and filtering options that allow users to sort content by categories such as genre, release year, rating, or popularity.
5. Seamless playback: The website should provide a smooth playback experience, with no buffering or interruptions, ensuring that users can watch the content they want without any issues.

Performance Requirements

Specify static and dynamic numerical requirements placed on the system or on human interaction with the system:

- Static numerical requirements may include the number of terminals to be supported, the number of simultaneous users to be supported, and the amount and type of information to be handled.
- Dynamic numerical requirements may include the number of transactions and tasks and the a mo mount of data to be processed within certain time period for both normal and peak workload conditions.

All of these requirements should be stated in measurable form. For example, "95% of the transactions shall be processed in less than 1 second" rather than “an operator shall not have to wait for the transaction to complete”.

3.2.1.3.1 Space Requirements

Space requirements refer to the amount of storage space needed to host the movies and shows on our website. This includes the size of the media files themselves, as well as any additional storage needed for backups, user data, and other website-related files. The space requirements will depend on the number and size of the media files we plan to offer on our website, as well as any additional features we plan to include.

3.2.1.4 **Dependability**

Refers to the reliability and consistency of the streaming website's performance. Users should be able to access the website and stream content without experiencing frequent interruptions, crashes, or other technical issues. Dependability also encompasses the website's ability to recover from errors or failures, ensuring that users can continue to use the website without significant disruption.

Availability

Include specific and measurable requirements for:

- Hours of operation
- Level of availability required
- Coverage for geographic areas
- Impact of downtime on users and business operations
- Impact of scheduled and unscheduled maintenance on uptime and maintenance communications procedures
- reliability (e.g., acceptable mean time between failures (MTBF), or the maximum permitted number of failures per hour).

Reliability

In our streaming website, reliability means that users can consistently access and view movies and shows without encountering technical issues or interruptions.

To achieve this, we have considered factors such as server uptime, network bandwidth, and the quality of streaming video. Some specific usability requirements that may contribute to reliability include:

1. Availability: The website should be available and accessible to users at all times.
2. Speed: Users should be able to stream movies and shows quickly and without interruption.
3. Error handling: The website should be able to handle errors gracefully and provide users with clear feedback when something goes wrong. For example, if a video fails to load, the website should display an error message that explains the problem and provides guidance on how to resolve it.

Monitoring

The goal of monitoring is to ensure that the website is meeting the needs of its users and providing a positive user experience.

There are several aspects of the website that can be monitored, including:

1. Performance: Monitoring the website's performance involves measuring how quickly the pages load, how responsive the site is to user interactions, and how often errors occur.
2. Availability: Monitoring the availability of the website involves ensuring that it is up and running at all times, with minimal downtime or outages.
3. User behavior: Monitoring user behavior involves tracking how users interact with the website, such as which pages they visit most frequently, how long they stay on the site, and what actions they take.
4. Content quality: Monitoring the quality of the content involves ensuring that the movies and shows available on the website are of high quality and that

Maintenance

Refers to ensuring that the website is functioning properly and providing a good user experience on an ongoing basis.

Some specific maintenance requirements for a streaming website may include:

1. Regularly updating the website's content to ensure that users have access to the latest movies and shows.
2. Ensuring that the website's servers are reliable and can handle a high volume of traffic.
3. Testing the website regularly to identify and fix any technical issues that may arise.
4. Providing customer support to users who are experiencing issues with the website.
5. Monitoring user feedback and making improvements to the website based on that feedback.

Integrity

This means ensuring that the website functions as expected, with minimal errors or glitches, and that the content is always available and accessible to users.

Some specific examples of integrity requirements for a streaming website might include:

1. The website should be able to handle high traffic volumes without crashing or slowing down.
2. The streaming video player should be reliable and stable, with minimal buffering or playback issues.
3. The website should be secure, with robust measures in place to protect user data and prevent unauthorized access.
4. The content library should be regularly updated and curated to ensure that all content is accurate and up-to-date.
5. The website should be compliant with relevant laws and regulations related to copyright and intellectual property.

3.2.1.5 **Security**

To ensure that the system is protected from malicious or accidental access, modification, disclosure, destruction, or misuse we prioritized:

- Maintain Security During Web App Development
- Use Exception Management
- Implement proper logging

3.2.2 Organizational Requirements

Clear project goals and objectives: Define the goals and objectives of the project, such as the type of content to be streamed, the target audience, and the features to be included on the website.

Effective project management: Develop a project plan that includes timelines, milestones, and deliverables. Assign responsibilities and establish communication channels to ensure everyone involved in the project is on the same page.

Robust technical infrastructure: Ensure that the website is built on a reliable technical infrastructure that can handle the volume of traffic and streaming content. The infrastructure should also provide a secure and scalable platform for future growth.

Content management system: Implement a content management system that allows for easy upload and management of content, including videos, audio, and images.

User experience and design: Design a website that is intuitive, visually appealing, and easy to navigate. Ensure that the website is optimized for different devices, including desktops, laptops, tablets, and mobile phones.

Regulatory compliance: Ensure that the website complies with all relevant regulations, such as data privacy laws, copyright laws, and accessibility standards.

3.2.2.1 **Environmental Requirements**

3.2.2.2 **Operational Requirements**

3.2.2.3 **Development Requirements**

3.2.3 External Requirements

– Requirements which arise from factors which are external to the system and its development process e.g. interoperability requirements, legislative requirements, etc.

3.2.3.1 **Regulatory Requirements**

3.2.3.2 **Ethical Requirements**

3.2.3.3 **Legislative Requirements**

Specify the requirements derived from existing standards, policies, regulations, or laws (e.g., report format, data naming, accounting procedures, audit tracing). For example, this could specify the requirement for software to trace processing activity. Such traces are needed for some applications to meet minimum regulatory or financial standards. An audit trace requirement may, for example, state that all changes to a payroll database must be recorded in a trace file with before and after values

3.2.3.3.1 Accounting Requirements

3.2.3.3.2 Security Requirement

1.Secure Login: The website should have secure login procedures to ensure that only authorized users can access the site and its content.
2.Encryption: All user data, including usernames, passwords, and credit card information, should be encrypted to protect it from unauthorized access.
3.//Secure Payment Processing: Payment processing should be done using a secure payment gateway, which encrypts the credit card information during the transaction.
4.User Authentication and Authorization: The website should have a robust authentication and authorization system to ensure that users can access only the content they are authorized to view.
5.Content Protection: The website should have measures in place to protect its content from piracy and unauthorized distribution. This may include digital rights management (DRM) technologies.
6.Regular Security Audits: The website should be subjected to regular security audits to identify and address any vulnerabilities in its system.
7.Secure Hosting: The website should be hosted on a secure server that is regularly updated with the latest security patches and updates.
8.Firewall Protection: The website should have a firewall in place to prevent unauthorized access to its server and network.
9.Secure Communication: All communication between the website and its users should be encrypted using SSL/TLS protocols.
10.User Data Protection: The website should have measures in place to protect user data from loss, theft, or unauthorized access. This may include regular backups, disaster recovery procedures, and data encryption.

3.3 Domain Requirements

Everything related to the domain that might be needed in the project shall be mentioned here. Sometimes the domain Requirements might be thought of as part of either functional or non-functional requirements.

- The data entered to open an account will be stored in the database and none of the data will not be displayed in the user's profile, except the user name

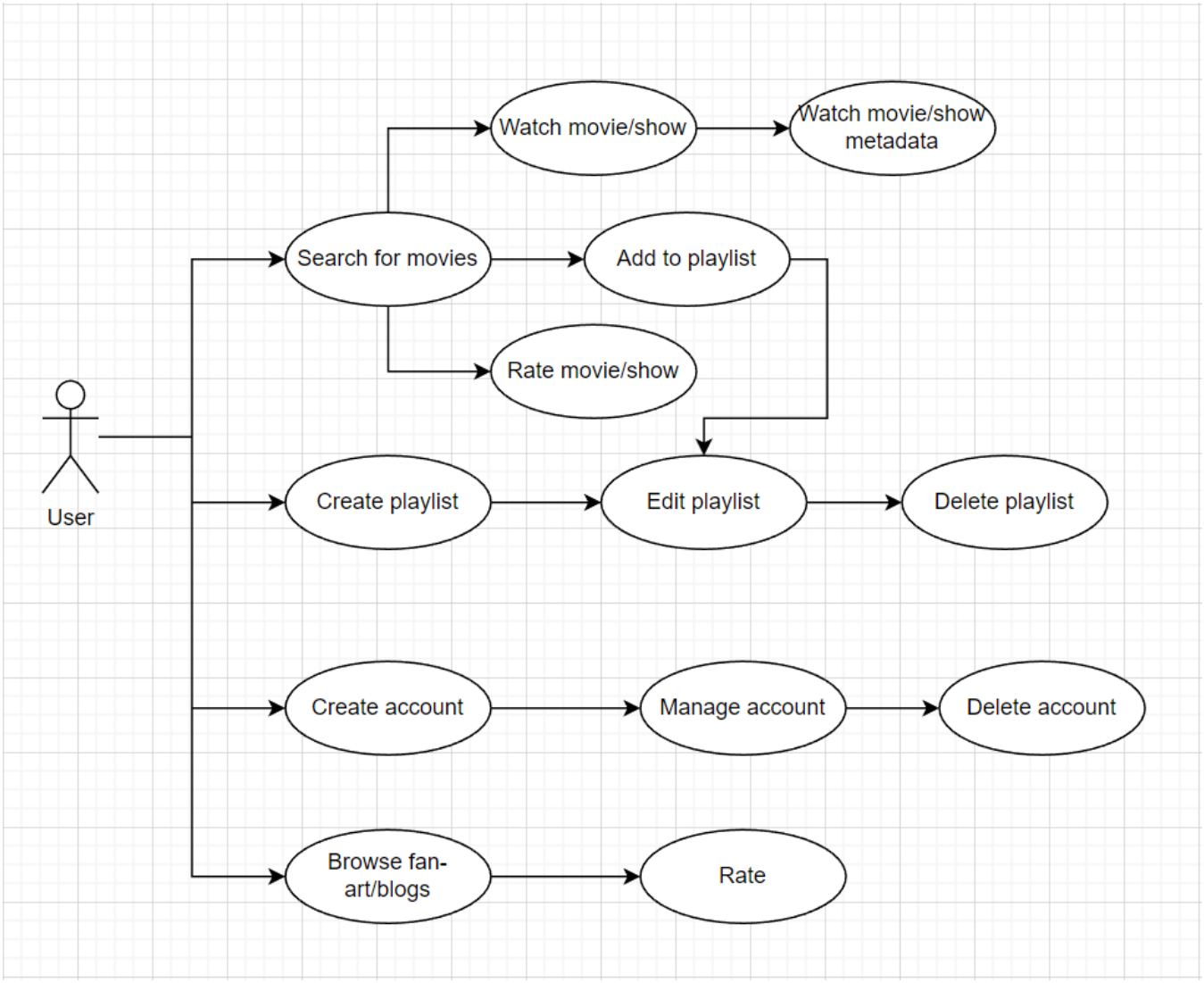
A.1.1.1.

Please provide all necessary non-functional requirements, similar to the requirements explained in the lesson slides or in the textbook.

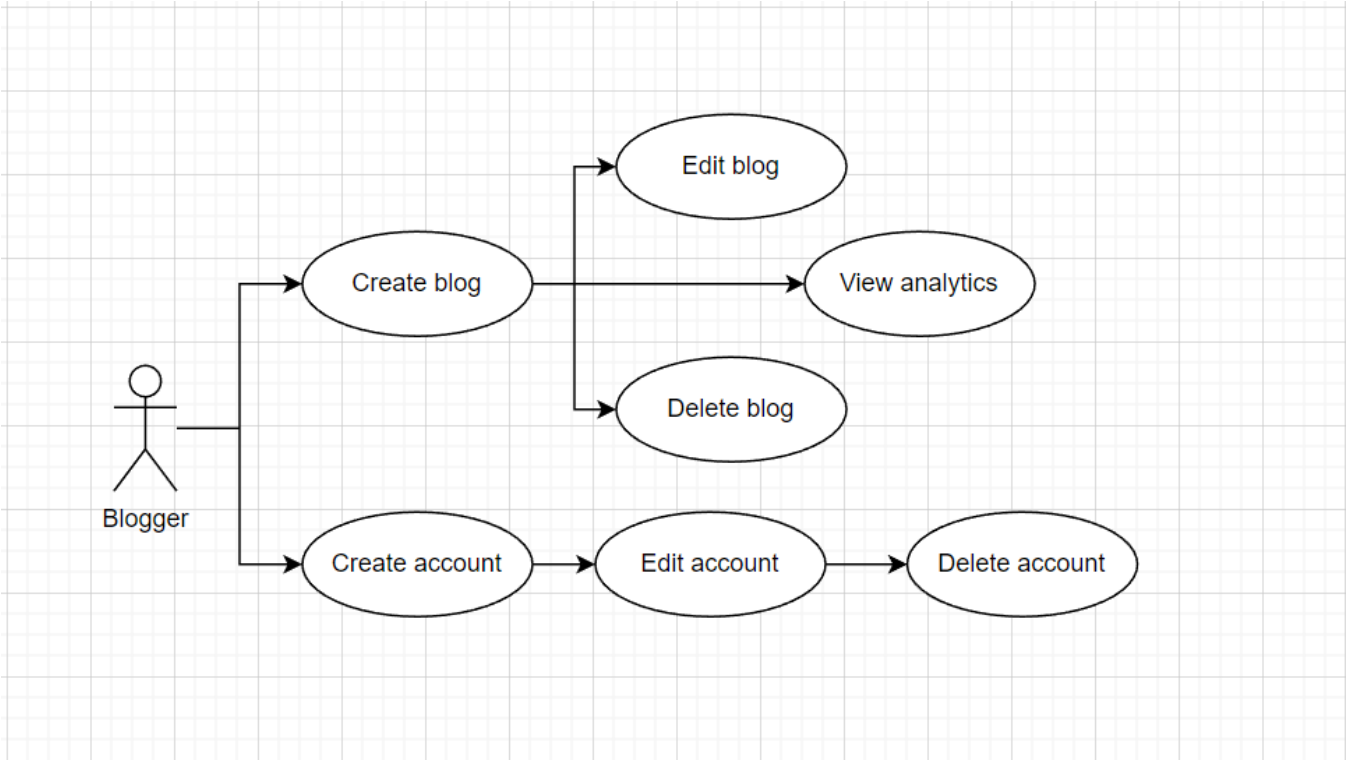
4. User Scenarios/Use Cases

4.1 Use Cases

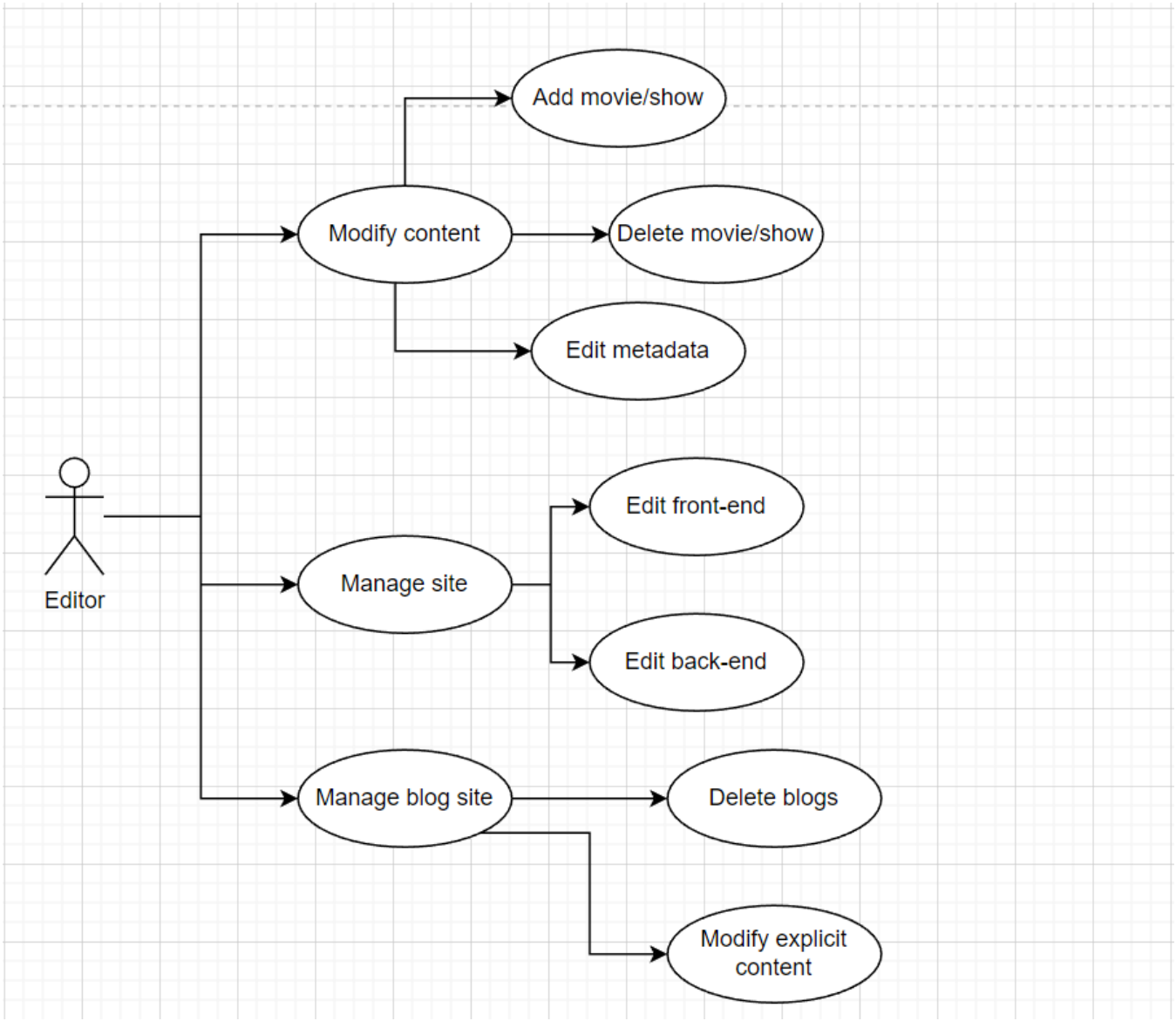
4.1.1 User



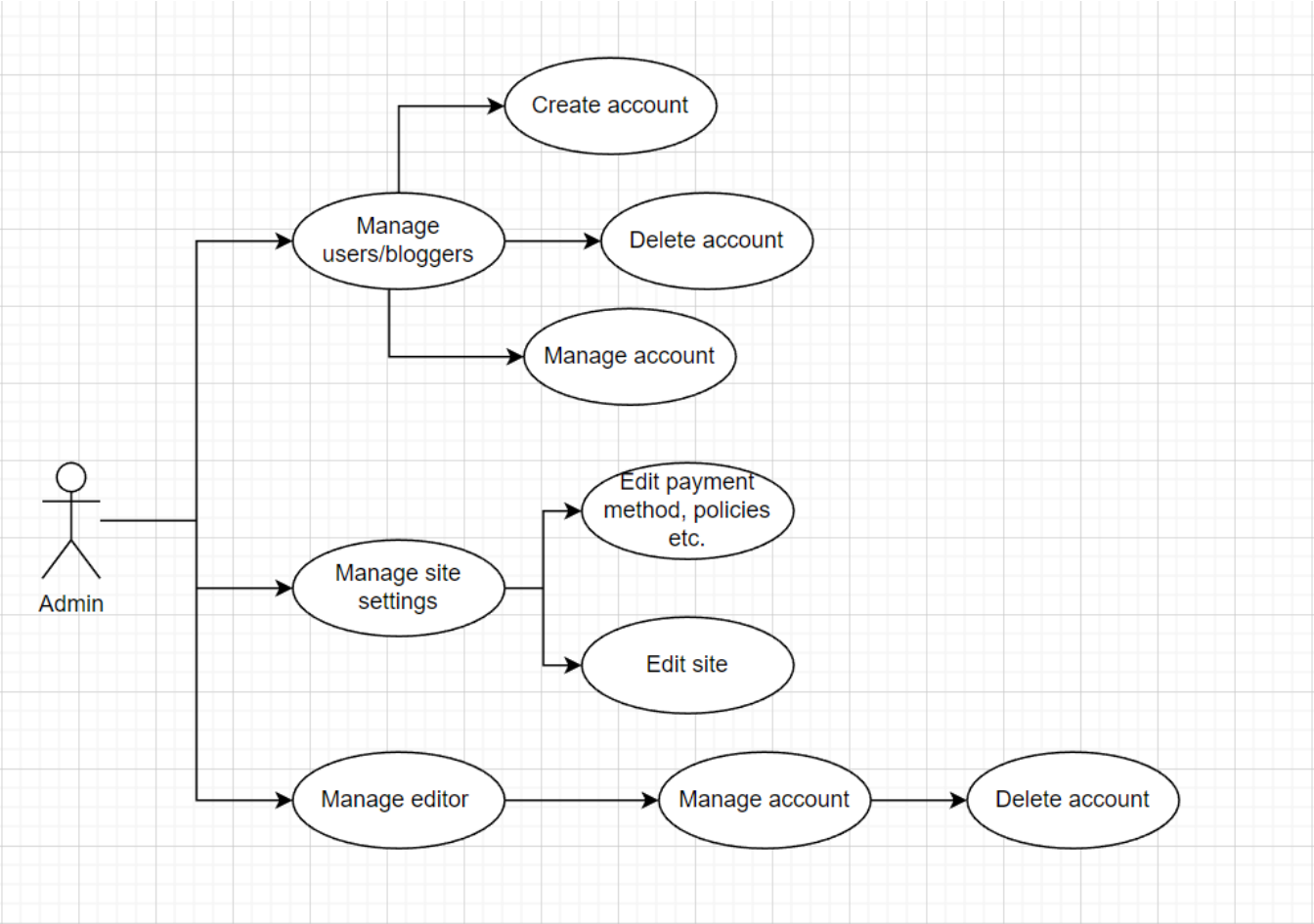
4.1.2 Blogger


Edit blog
Create blog
View analytics
Delete blog
Blogger
Create account
Edit account
Delete account

4.1.3 Editor

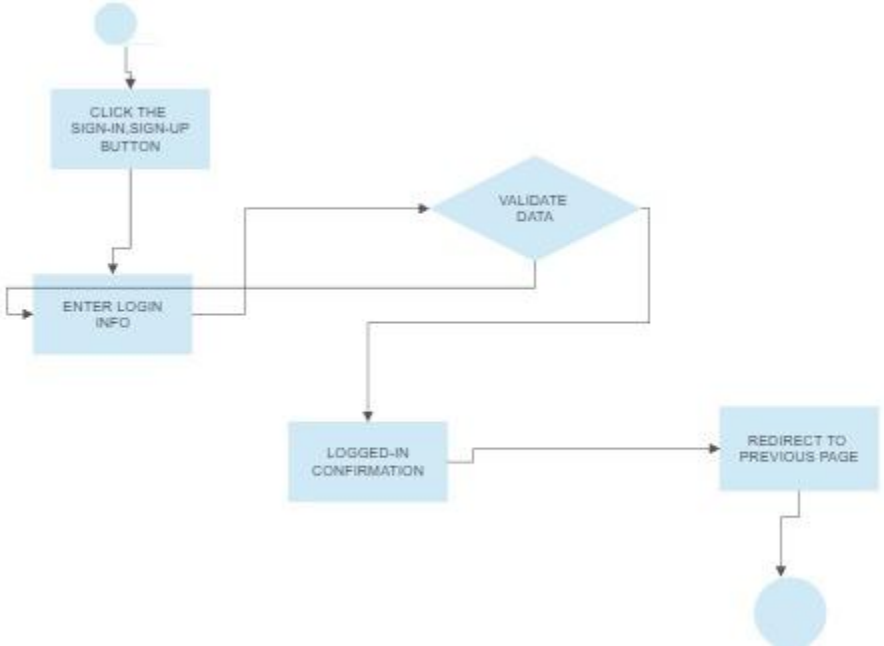

Add movie/show
Modify content
Delete movie/show
Edit metadata
Editor
Edit front-end
Manage site
Edit back-end
Manage blog site
Delete blogs
Modify explicit content

4.1.4 Admin

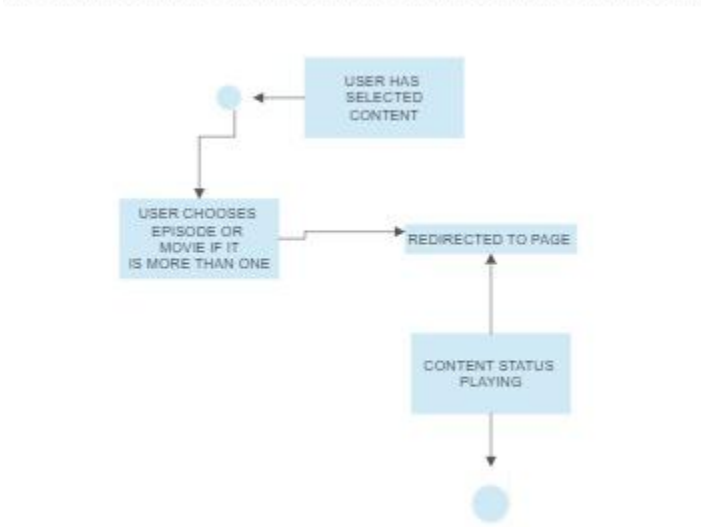


4.2 Activity Diagrams

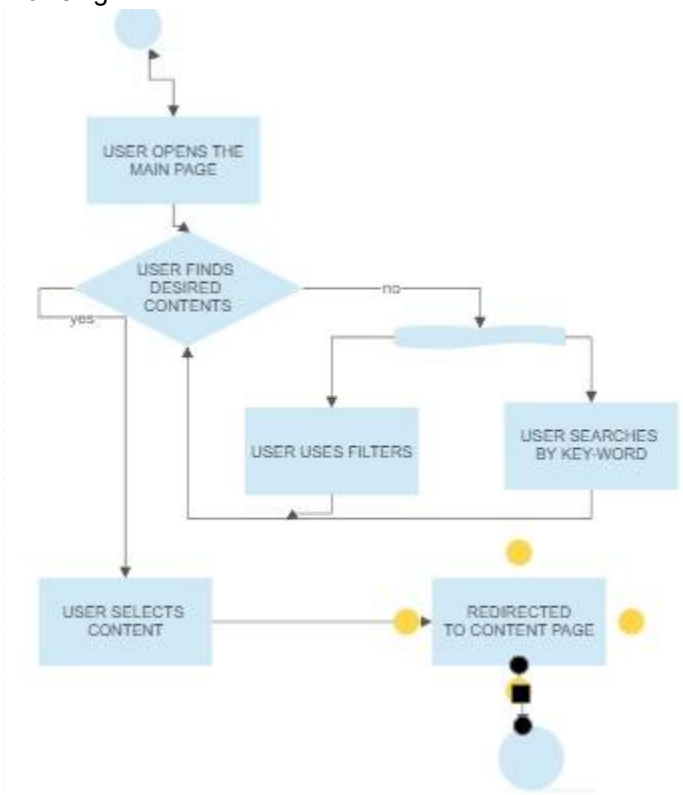
4.2.1 Logging-in Signing-up



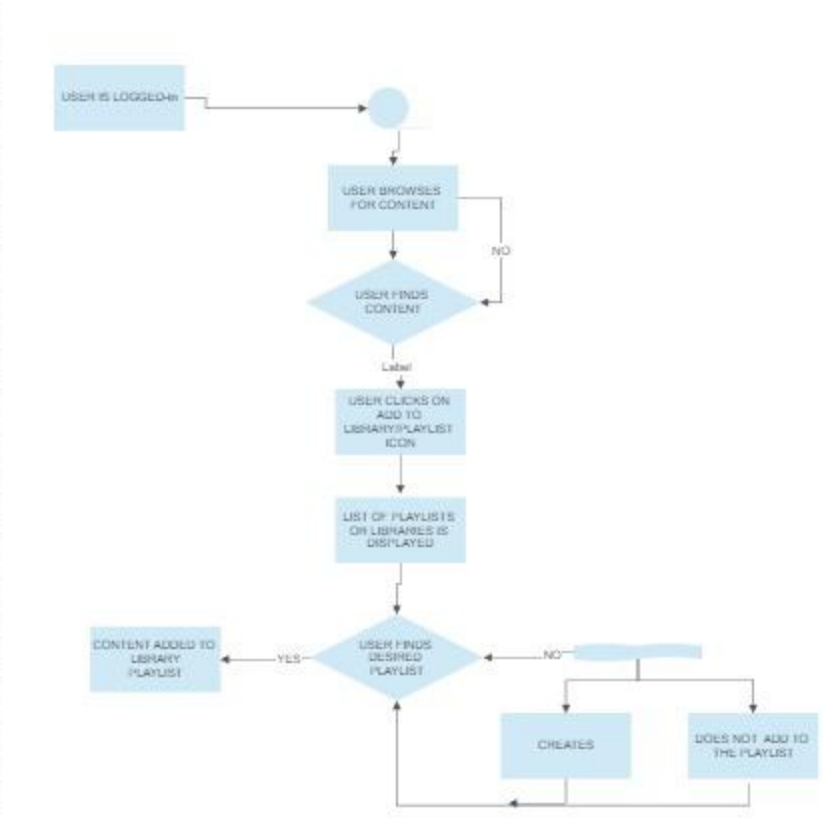
4.2.2 Watching content



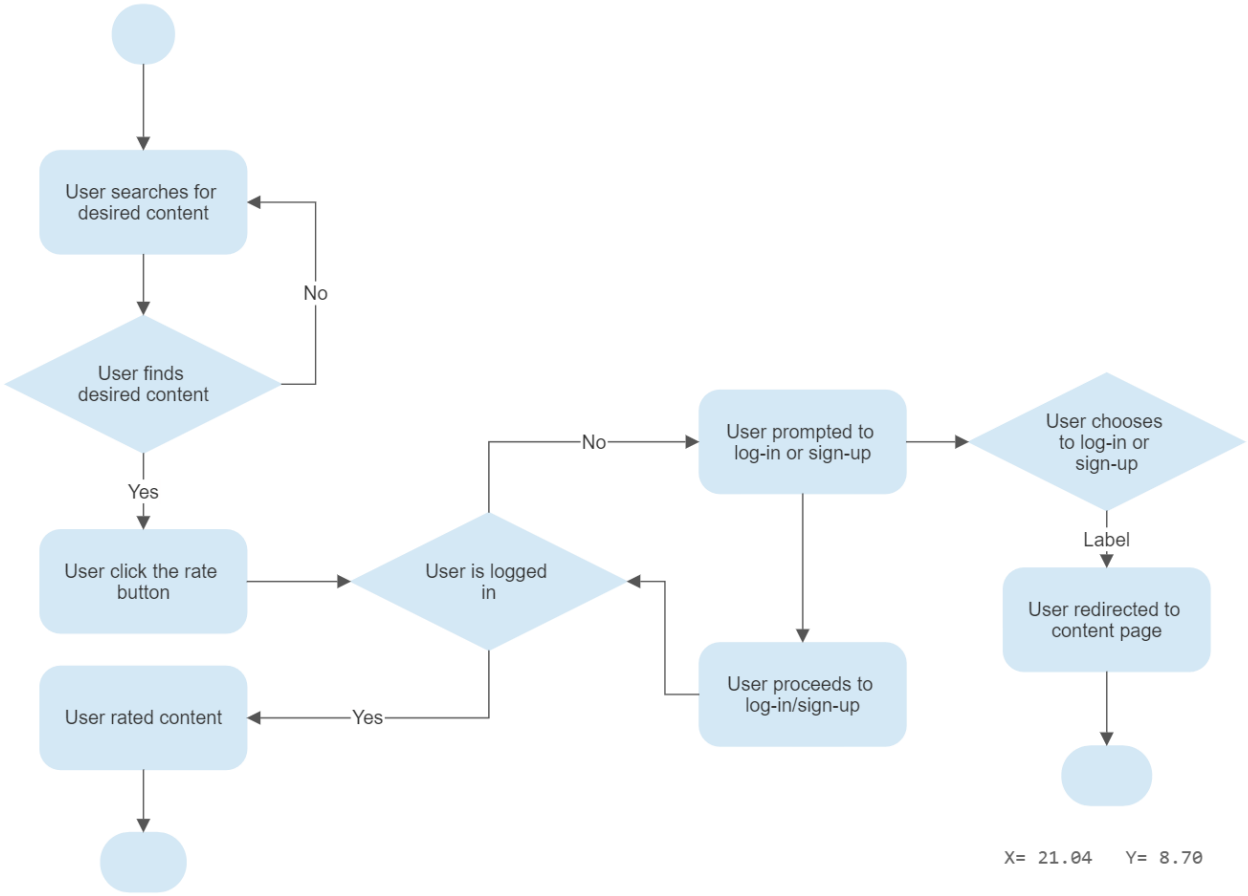
4.2.3 Browsing



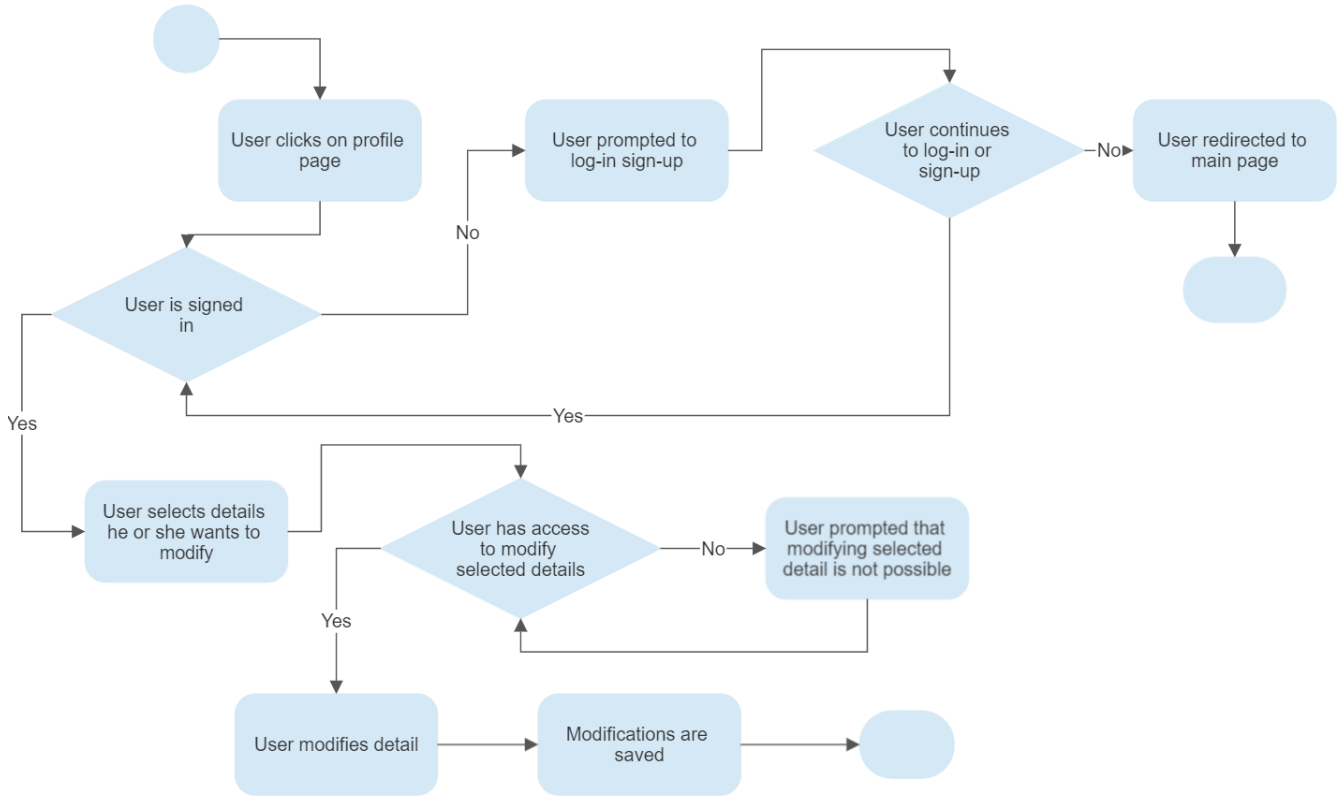
4.2.4 Add to playlist/library



4.2.5 Rate content



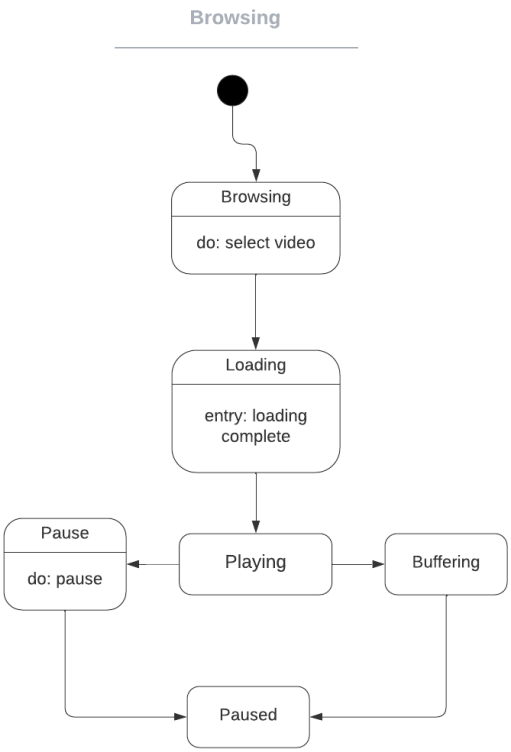
4.2.6 Manage account



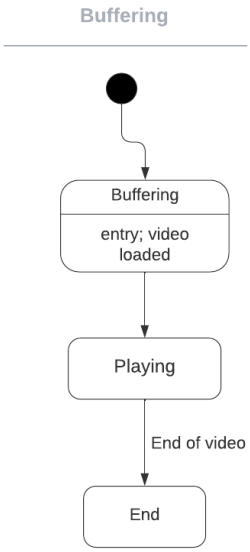
X= 1.54 Y= 1.18

4.3 State Diagrams

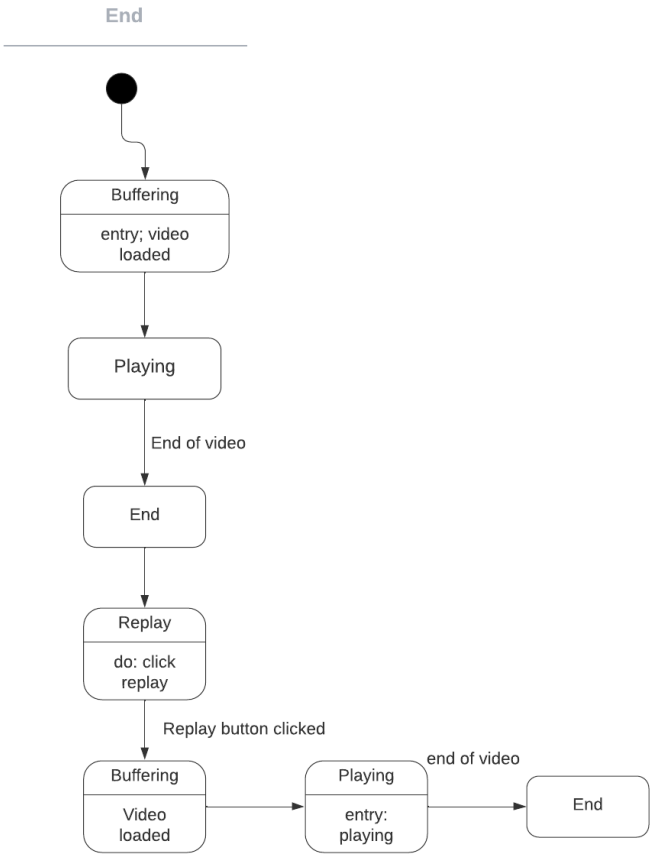
4.3.1 Browsing



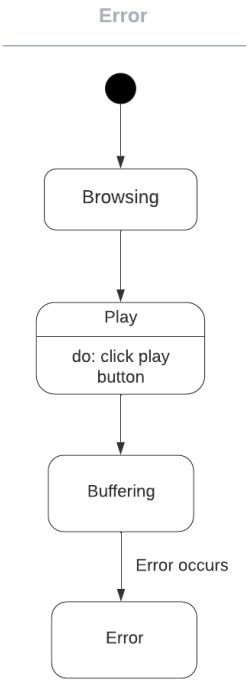
4.3.2 Buffering



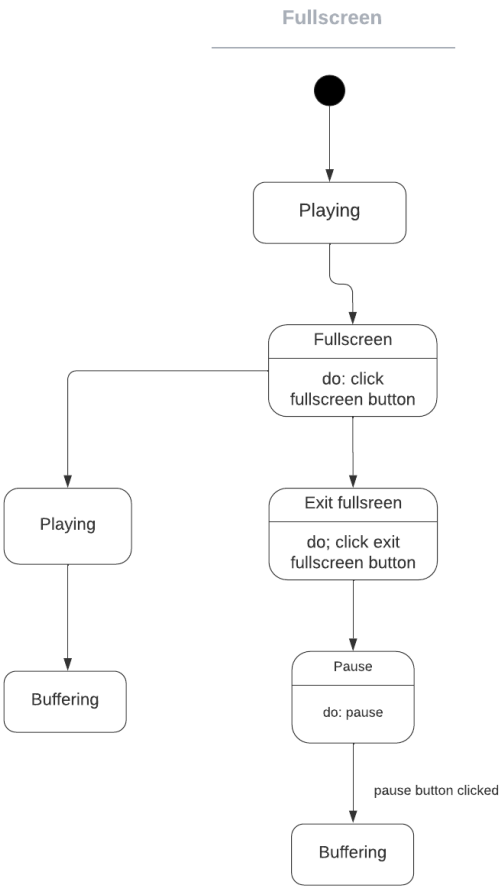
4.3.3 End


End
Buffering
entry; video loaded
Playing
End of video
End
Replay
do: click replay
Replay button clicked
Buffering
Video loaded
Playing
entry: playing
end of video
End

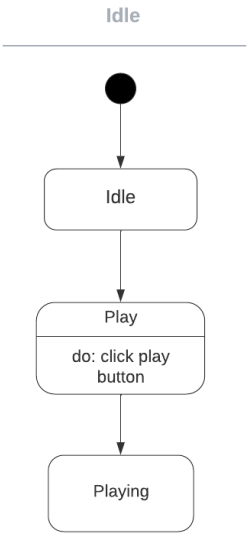
4.3.4 Error



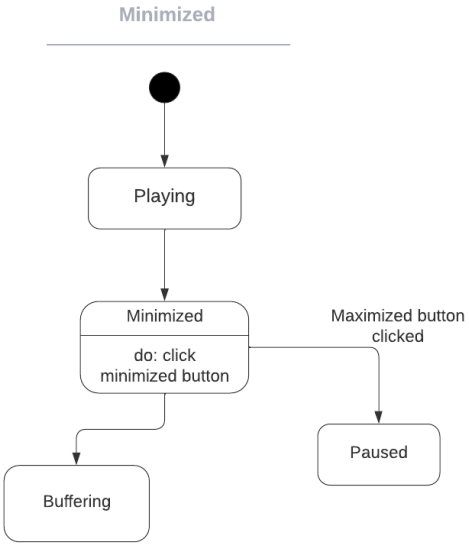
4.3.5 Fullscreen


Fullscreen
Playing
Fullscreen
do: click
fullscreen button
Playing
Exit fullsreen
do; click exit
fullscreen button
Buffering
Pause
do: pause
pause button clicked
Buffering

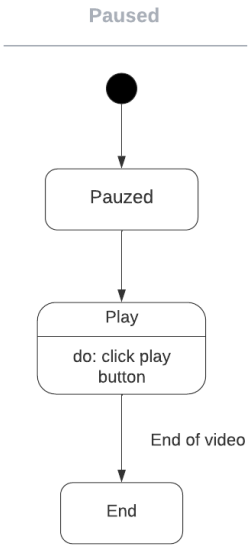
4.3.6 Idle



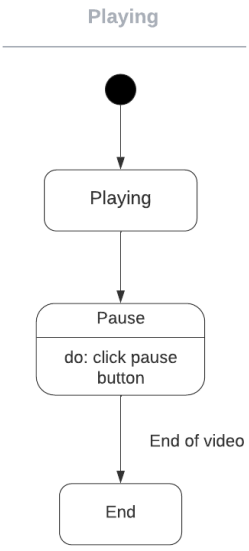
4.3.7 Mnimized



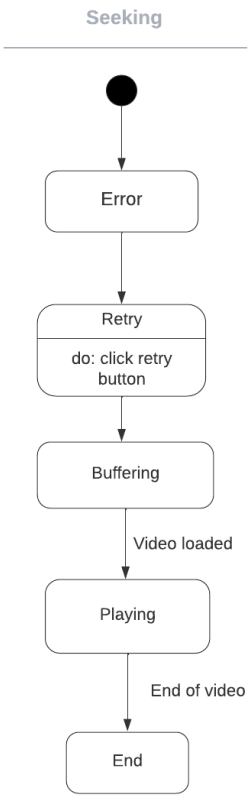
4.3.8 Paused



4.3.9 Playing



4.3.10 Seeking



Provide a summary of the major functions that the product will perform. Organize the functions to be understandable to the customer or a first time reader. Include use cases and business scenarios, or provide a link to a separate document (or documents). A business scenario:

- Describes a significant business need
- Identifies, documents, and ranks the problem that is driving the scenario
- Describes the business and technical environment that will resolve the problem
- States the desired objectives
- Shows the “Actors” and where they fit in the business model
- Is specific, and measurable, and uses clear metrics for success

APPENDIX

The appendixes are not always considered part of the actual Requirements Specification and are not always necessary. They may include

- Sample input/output formats, descriptions of cost analysis studies, or results of user surveys;
- Supporting or background information that can help the readers of the Requirements Specification;
- A description of the problems to be solved by the system;
- Special packaging instructions for the code and the media to meet security, export, initial loading, or other requirements.

When appendixes are included, the Requirements Specification should explicitly state whether or not the appendixes are to be considered part of the requirements.

Appendix B. Definitions, Acronyms, and Abbreviations

Define all terms, acronyms, and abbreviations used in this document.

Appendix C. References

List all the documents and other materials referenced in this document.

Appendix D. Requirements Traceability Matrix

The following trace matrix examples show one possible use of naming standards for deliverables (FunctionalArea-DocType-NN). The number has no other meaning than to keep the documents unique. For example, the Bargaining Unit Assignment Process Flow would be BUA-PF-01.

For example (1):

Business Requirement	Area	Deliverables	Status
BR_LR_01 The system should validate the relationship between Bargaining Unit/Location and Job Class.---Comments: Business Process = "Assigning a Bargaining Unit to an Appointment" (Priority 1)	BUA	BUA-CD-01 Assign BU Conceptual Design	Accepted
		BUA-PF-01 Derive Bargaining Unit-Process Flow Diagram	Accepted
		BUA-PF-01 Derive Bargaining Unit-Process Flow Diagram	Accepted
BR_LR_09 The system should provide the capability for the Labor Relations Office to maintain the job class/union relationship.---Comments: Business Process = "Maintenance" (Priority 1)	BUA	BUA-CD-01 Assign BU Conceptual Design	Accepted
		BUA-PF-02 BU Assignment Rules Maint Process Flow Diagram	ReadyForReview

For example (2):

BizReqID	Pri	Major Area	DevTstItems DelivID	Deliv Name	Status
BR_LR_01	1	BUA	BUA-CD-01	Assign BU Conceptual Design	Accepted
BR_LR_01	1	BUA	BUA-DS-02	Bargaining Unit Assignment DB Modification Description	Accepted
BR_LR_01	1	BUA	BUA-PF-01	Derive Bargaining Unit-Process Flow Diagram	Accepted
BR_LR_01	1	BUA	BUA-UCD-01	BU Assign LR UseCase Diagram	ReadyForReview

BizReqID	Pri	Major Area	DevTstItems DelivID	Deliv Name	Status
BR_LR_01	1	BUA	BUA-UCT-001	BU Assignment by PC UseCase - Add Appointment and Derive UBU	Reviewed
BR_LR_01	1	BUA	BUA-UCT-002	BU Assignment by PC UseCase - Add Appointment (UBU Not Found)	Reviewed
BR_LR_01	1	BUA	BUA-UCT-006	BU Assignment by PC UseCase - Modify Appointment (Removed UBU)	Reviewed
BR_LR_09	1	BUA	BUA-CD-01	Assign BU Conceptual Design	Accepted
BR_LR_09	1	BUA	BUA-DS-02	Bargaining Unit Assignment DB Modification Description	Accepted
BR_LR_09	1	BUA	BUA-PF-02	BU Assignment Rules Maint Process Flow Diagram	Accepted
BR_LR_09	1	BUA	BUA-UCD-03	BU Assign Rules Maint UseCase Diagram	Reviewed
BR_LR_09	1	BUA	BUA-UCT-045	BU Assignment Rules Maint: Successfully Add New Assignment Rule	Reviewed
BR_LR_09	1	BUA	BUA-UCT-051	BU Assignment Rules MaintUseCase: Modify Rule	Reviewed
BR_LR_09	1	BUA	BUA-UCT-053	BU Assignment Rules MaintUseCase - Review Assignment Rules	Reviewed
BR_LR_09	1	BUA	BUA-UCT-057	BU Assignment Rules MaintUseCase: Inactivate Last Rule for a BU	Reviewed
BR_LR_09	1	BUA	BUA-UI-02	BU AssignRules Maint UI Mockups	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-021	BU Assignment Rules Maint TestCase: Add New Rule (Associated Job Class Does Not Exist) - Success	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-027	BU Assignment Rules Maint TestCase: Modify Rule - Success	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-035	BU Assignment Rules Maint TestCase: Add New Rule (Associated Job Class Does Not Exist) - Error Condition	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-049	BU Assignment Rules Maint TestCase: Modify Rule - Error Condition	ReadyForReview

For example (3):

BizReqID	CD01	CD02	CD03	CD04	UI01	UI02	UCT01	UCT02	UCT03	TC01	TC02	TC03	TC04
BR_LR_01			X		X		X			X		X	
BR_LR_09	X			X		X			X		X		X
BR_LR_10	X			X					X		X		
BR_LR_11		X											

Appendix E. Organizing the Requirements

This section is for information only as an aid in preparing the requirements document.

Detailed requirements tend to be extensive. Give careful consideration to your organization scheme. Some examples of organization schemes are described below:

By System Mode
Some systems behave quite differently depending on the mode of operation. For example, a control system may have different sets of functions depending on its mode: training, normal, or emergency.

By User Class
Some systems provide different sets of functions to different classes of users. For example, an elevator control system presents different capabilities to passengers, maintenance workers, and fire fighters.

By Objects
Objects are real-world entities that have a counterpart within the system. For example, in a patient monitoring system, objects include patients, sensors, nurses, rooms, physicians, medicines, etc. Associated with each object is a set of attributes (of that object) and functions (performed by that object). These functions are also called services, methods, or processes. Note that sets of objects may share attributes and services. These are grouped together as classes.

By Feature
A feature is an externally desired service by the system that may require a sequence of inputs to affect the desired result. For example, in a telephone system, features include local call, call forwarding, and conference call. Each feature is generally described in a sequence of stimulus-response pairs, and may include validity checks on inputs, exact sequencing of operations, responses to abnormal situations, including error handling and recovery, effects of parameters, relationships of inputs to outputs, including input/output sequences and formulas for input to output.

By Stimulus
Some systems can be best organized by describing their functions in terms of stimuli. For example, the functions of an automatic aircraft landing system may be organized into sections for loss of power, wind shear, sudden change in roll, vertical velocity excessive, etc.

By Response
Some systems can be best organized by describing all the functions in support of the generation of a response. For example, the functions of a personnel system may be organized into sections corresponding to all functions associated with generating paychecks, all functions associated with generating a current list of employees, etc.

By Functional Hierarchy
When none of the above organizational schemes prove helpful, the overall functionality can be organized into a hierarchy of functions organized by common inputs, common outputs, or common internal data access. Data flow diagrams and data dictionaries can be used to show the relationships between and among the functions and data.

Additional Comments
Whenever a new Requirements Specification is contemplated, more than one of the organizational techniques given above may be appropriate. In such cases, organize the specific requirements for multiple hierarchies tailored to the specific needs of the system under specification.

There are many notations, methods, and automated support tools available to aid in the documentation of requirements. For the most part, their usefulness is a function of organization. For example, when organizing by mode, finite state machines or state charts may prove helpful; when organizing by object, object-oriented analysis may prove helpful; when organizing by feature, stimulus-response sequences may prove helpful; and when organizing by functional hierarchy, data flow diagrams and data dictionaries may prove helpful.