



ALEXANDRIA UNIVERSITY

FACULTY OF SCIENCE

Software Requirement Analysis

NETFLIX SOFTWARE REQUIRMENT SPECIFICATIONS

Prepared by:

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1. Introduction:

1.1 Purpose:

To determine a software requirement definition for NETFLIX, this paper has been created. A social video streaming platform called Netflix allows users to watch, share, like, dislike, and comment on videos. First, the goal and scope of this paper will be discussed, and then the broad description of the NETFLIX system will be used to provide an overview of the report. In addition to this, in-depth descriptions are provided for system features including uploading, watching, sharing, and subscribing to videos. Following the introduction of the websites, the particular requirements will be discussed. Both functional and non-functional needs will be covered in the final section.

1.2 Intended audience:

Typical Users include individuals with internet access and devices, such as students, teachers, and members of social networks, social media networks, semantic networks, etc., who use Netflix to watch online films/shows

1.3 Intended use:

Watching online streams (Social networks, Social Media networks, Semantic networks etc)

1.4 Product scope:

The linear TV experience, where channels show programmes only at specific times on non-portable displays with cumbersome remote controls, is not something that people particularly enjoy. Now, internet TV is taking the place of traditional TV. It is personalised, on-demand, and accessible on any device. Changes of this size are uncommon. Prior to the 1950s and 1960s, when linear TV began to take over, radio dominated the home entertainment market for nearly 50 years. Over the past 60 years, extremely large companies have grown to suit customer demands. Linear TV in the home was a major improvement over radio. Given the flexibility and global ubiquity of the internet, the new era of internet TV, which started a decade ago, is likely to be very huge and lasting as well.

2. Overall Description:

2.1 Product Perspective:

Netflix was created so that everyone could view a huge selection of highly regarded TV series, films, documentaries, and other media on thousands of internet-connected devices. With Netflix, you can watch as much of our content as you want without ever having to see a commercial.

2.2 User Characteristics:

For our system, there will be two levels of users. The first will be the typical user who will search for films or watch television online utilising our programme. They will only be able to see the system's front end. The system developers will be at the second level. They will be able to modify which websites the system searches, depending on whether they believe the site to be secure, compatible with the appropriate software, quick to search, and helpful to users, measured by how many results have been returned from that site.

2.3 Operating environment:

PC or Laptops :

- **Windows 7 - 11**
- **Mac OS X**
- **Linux**

Smart TV's , Cell phones , Tablets (Android or IOS) etc

2.4 System constraints:

How many users can access or are online at once is referred to as server capacity. The more users there are, the more network traffic there will be, which will cause the service to go down

3. System features and requirements:

3.1 Functional requirements:

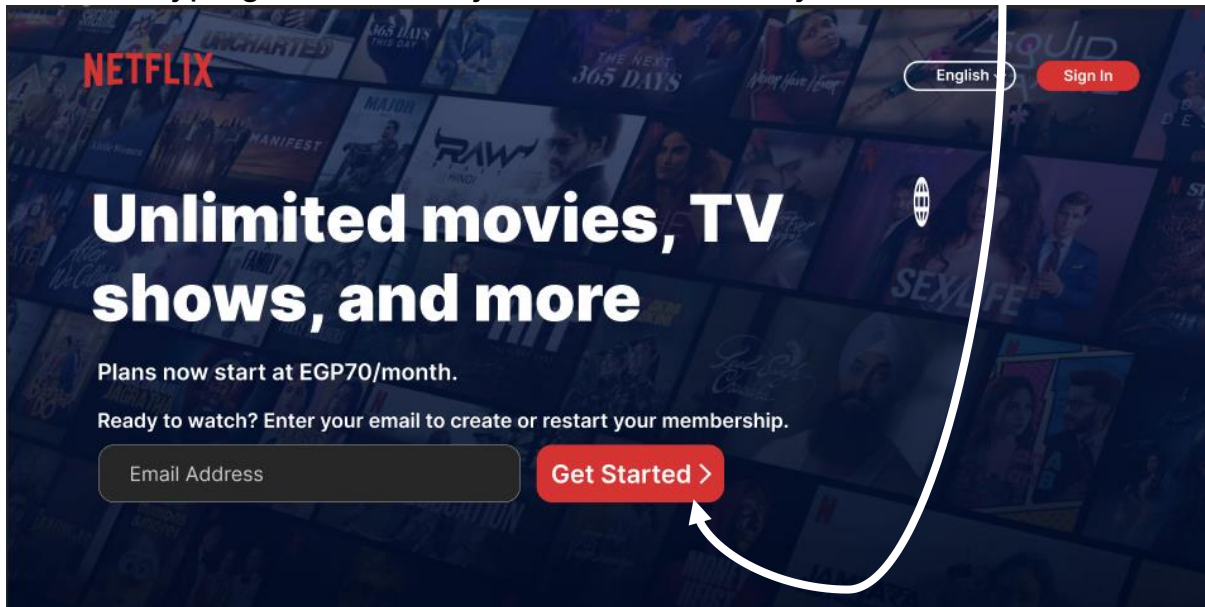
- Create account, log in to account and delete the account.
- Subscription and Payment to join application.
- Choose a subscription plan:
 1. Basic: 70 EGP / month
 2. Standard: 120 EGP / month
 3. Premium: 165 EGP / month
- Navigate between application tabs in this order:
 1. Home tab
 2. Series tab
 3. Films tab
 4. New & Popular tab
 5. My list tab
 6. Browse by language tab
- Watch movies and shows.
- Subscribe or unsubscribe to different plans.
- Search for videos using titles or tags.
- Read description/info of a show or a movie.
- Pick genre to watch from.
- Choose current profile.
- Download video and go watching offline mode.
- Platform will show the trend, most popular videos, and by category which easy for users
- to choose.
- Synchronize for the different device under the same account, which means that users can
- Use a different device to continue watching the same episode without replay.

- Let Netflix developers upload video from the backend and make it available on the
- platform.
- Playback for videos.
- Filter and Sort movies or shows from Browse by language tab:
 1. From “Select your preferences”:
 - i. Original language (default)
 - ii. Dubbed
 - iii. Subtitles
 2. From “Sort by”:
 - i. Suggestions for you (default)
 - ii. Year released
 - iii. A-Z
 - iv. Z-A
- Rate the show or movie:
 1. Thumbs up; If the user likes the content they’re watching.
 2. Thumbs down; if they do not like the plot or characters or any other thing about the series or movie they are watching.
 3. Double thumbs up; helps fine-tune their Netflix recommendations.
- Manage “My List” list:
 1. Add to list by pressing the “plus” icon.
 2. Remove from list by tapping the checkmark.
 3. View the list.
- Language selection for subtitles.
- Audio language selection.
- Report an issue.
- Manage profiles.

- Transfer profile.
- Check notifications.
- Switch to Netflix kids.
- Screen mirroring in case user wants to watch on TV

3.2 External Interface Requirements

- Start your Netflix journey by clicking the button on the right after typing in the email you want to use for your account



And in case of already registered accounts u can click the sign in button on the top right.

- Create a password and choose your plan:

STEP 1 OF 3

Create a password to start your membership

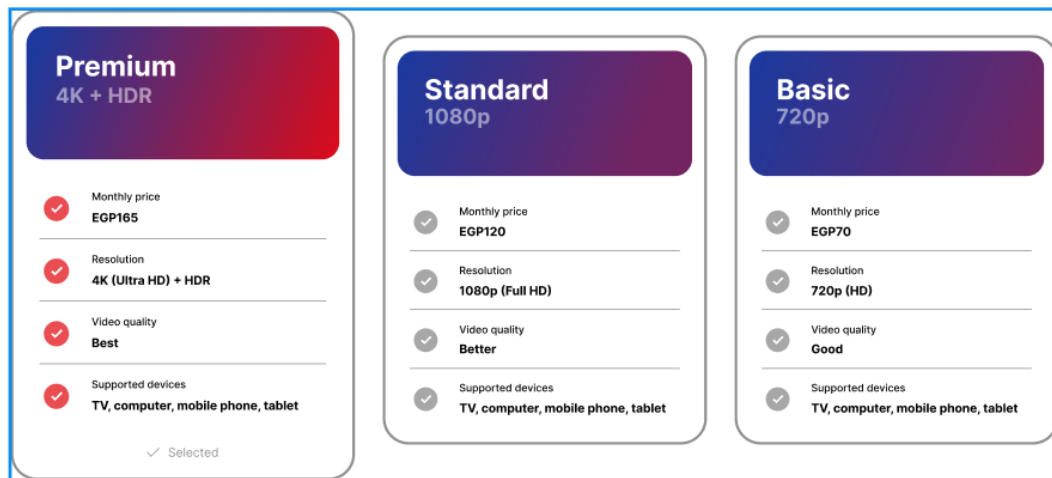
Just a few more steps and you're done!
We hate paperwork, too.

Email

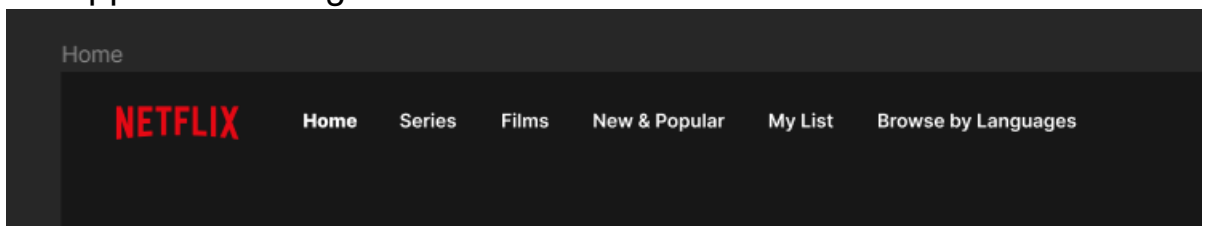
Add a Password

☐ Please do not email me Netflix special offers.

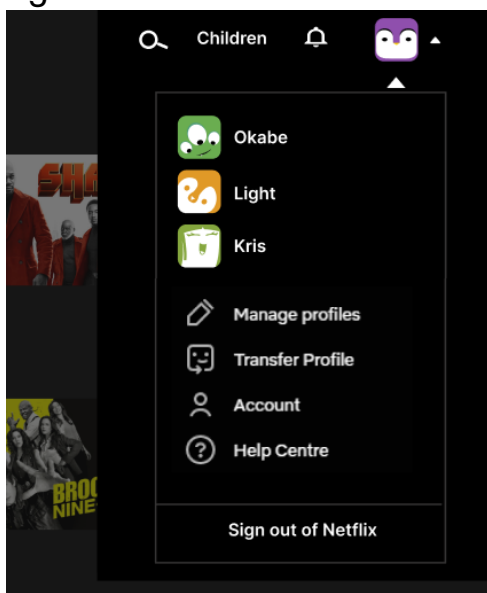
NEXT



- After you've successfully registered, you can start navigating inside the application using these tabs:

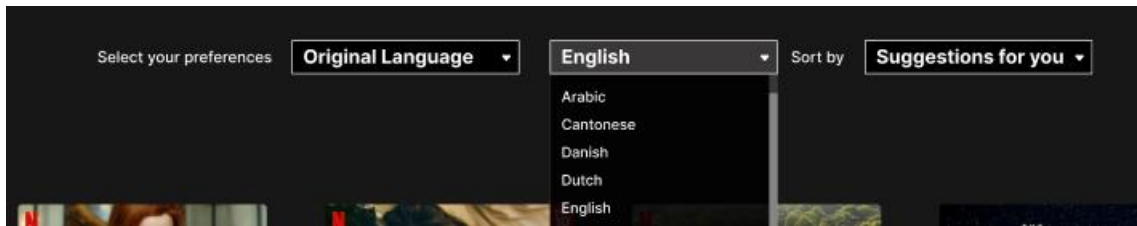


- To Search and switch between profiles you access the icons on the right of the header

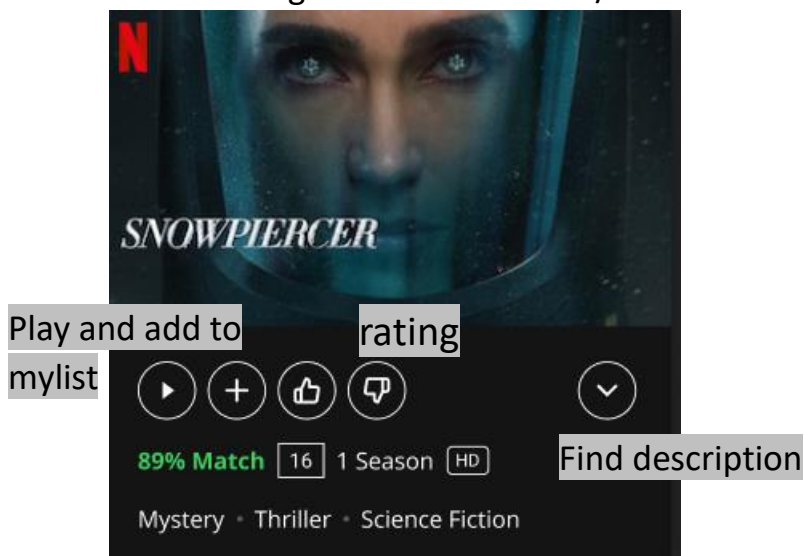


You can find the help centre contact info inside the drop down menu as well as your account settings

- Inside the browse by language tab u can find the select and sort menu

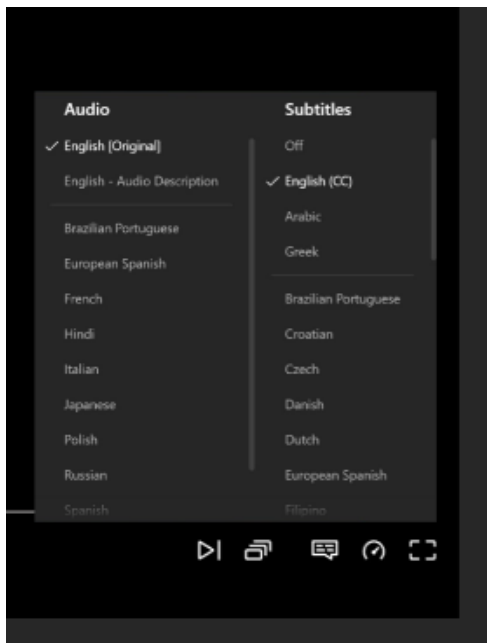
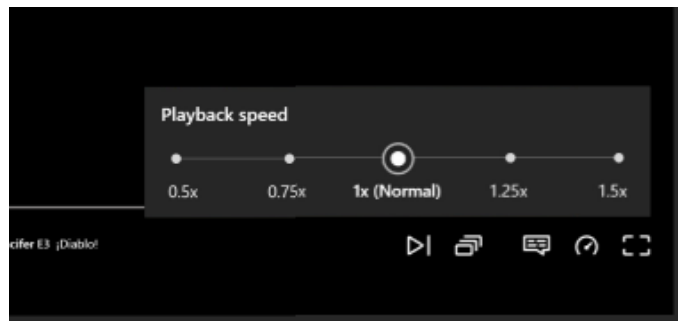


- After clicking on the chosen film/show u will find different icons



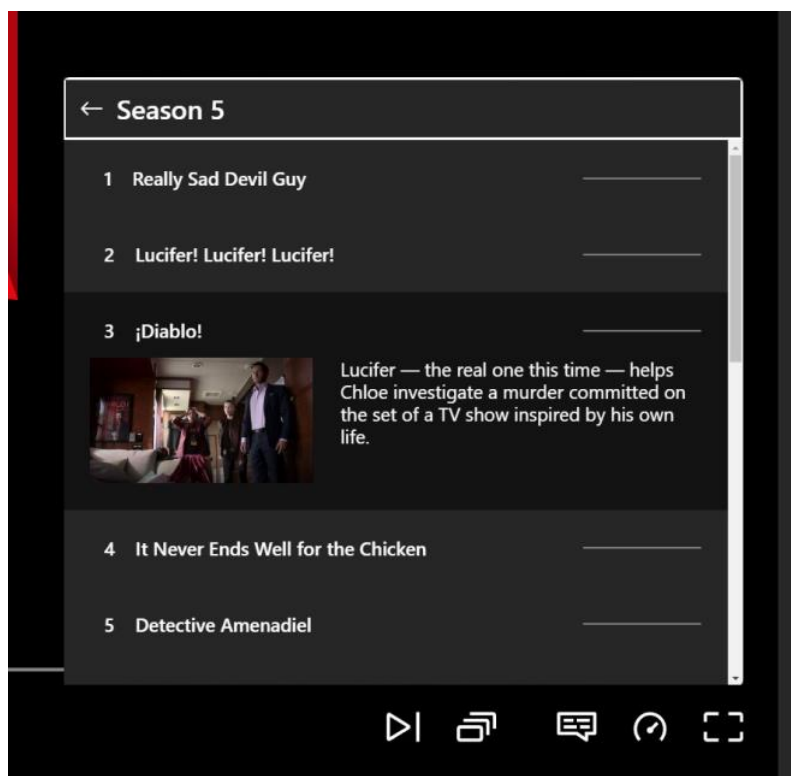
- Once you open the player you find the following controls



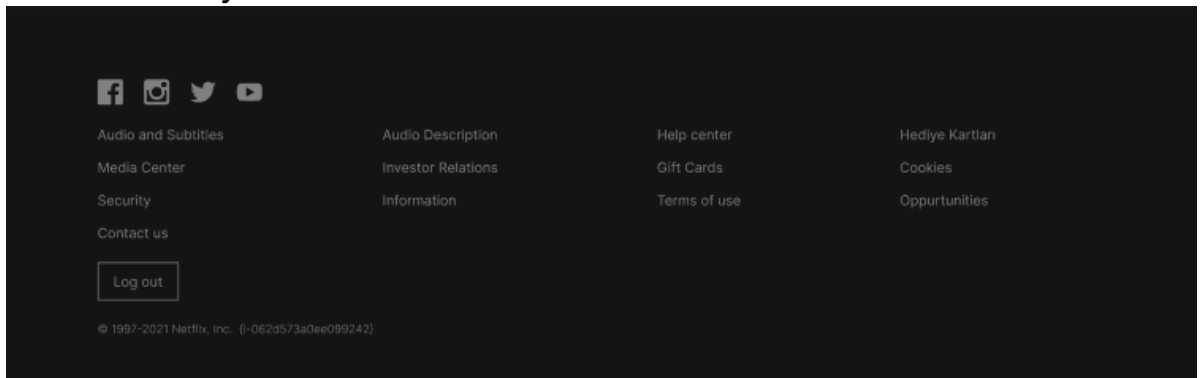


Inside the player you can

- Adjust volume
- Control the playback speed
- Watch, Listen and read in your preferred language
- View episodes list



- At the footer you will find contact information and more



3.3 Non-functional requirements :

- Availability: Available 24hrs in 190 countries.
- Compatibility: any Internet-connected device that offers the Netflix app. Netflix-ready
- devices include streaming media players, smart TVs, game consoles, set-top boxes, Blu ray players, smartphones, tablets, PCs, and laptops.
- Reliability:
 1. Consistently prioritize requests across device types (Mobile, Browser, and TV).
 2. Progressively throttle requests based on priority.
 3. Validate assumptions by using Chaos Testing (deliberate fault injection) for requests of specific priorities.
 4. No uploads should be lost.
- Security:
 1. maximum number of attempts to enter Password is three.
 2. Users' accessibility is censured in all the ways
 3. Parental controls
 4. Read charge event api for payment.

5. An account can be used to watch and download according to plan type:

- i. Basic: Watch and download on 1 supported device at a time.
- ii. Standard: Watch and download on 2 supported devices at a time.
- iii. Premium: Watch on 4 supported devices at a time. Download on 6 supported devices at a time.

- Learnability:

1. Its interface is clear, simple and can easily be learned.

Whether mobile, tablet or

TV device, Netflix is easy to navigate through so you can find what it is you're

looking for (or simply browse because you're not even not sure you're looking

for).

2. When hovering over links, whether it be the option of user profiles in your

account, or browsing movie options, the buttons are highlighted, providing

feedback for its users.

3. Netflix suggests a bunch of shows in clearly separated groups: 'Top 10 Today',

'Trending Now', 'Binge-worthy TV Shows', and many more. Such grouping eases

user's browsing experience by allowing them to choose a show in an organized

manner. The users can first determine which group they'd like to focus on and

then browse through a shorter list of shows.

4. Netflix provides instructional texts for some buttons that maybe confusing for its

first-time users. The plus button may be confusing for the first-time users,

because Netflix is not an e-commerce website with a shopping cart. To eliminate

such confusion, an instructional text “Add to My List” appears when a user

hovers over the button.

- Efficiency:

1. Auto-play feature: an auto-play feature where when an episode of a TV show is

completed, it automatically proceeds to the next one. This makes manual

selection unnecessary.

2. A feature that would further contribute to efficiency of use, would be a filter to

categorize TV shows and movies by time duration, allowing viewers to have a

further efficient browsing experience.

3. When a user hover over a show, Netflix automatically plays its preview. This

allows users to quickly and easily get a sense of what the show would be about

instead of having to take multiple steps.

4. Resume video playback from the point user left off.

5. To access streaming content on Netflix and other applications, all users need is a

high-speed broadband connection and a device, either a tv, mobile phone, or a

PC.

- Memorability:

1. The fixed category titles make it easy for the user to browse through the different

options, preventing them from forgetting which section they were in.

2. Upon entering your profile, the top most section is “Continue watching for...”

specified to what you were last watching, pausing where you are up to, avoiding

any frustration in trying to recall where you stopped.

3. Users can create lists to save shows or movies that they would like to watch at a later time

- Performance:

1. For any streaming, the user needs a minimum of 0.5 megabits per second

(Mbps), but Netflix recommends 1.5 Mbps.

2. For DVD quality, you will need 3.0 Mbps.

3. For HD quality, you will need 5.0 Mbps.

4. For Super HD and 3D quality, you’ll need around 7.0-12.0 Mbps.

5. Users can stream videos in real-time without any lag or latency issue.

6. Seamless connectivity.

7. Video data is durable and easy to be acce

3.4 Out of Scope:

- The mechanism to recommend personalized videos to different users.
- The billing and subscription model for watching the videos.
- Grouping of videos (TV series, drama series, movie series and treat each video as an independent)

