Software Requirements Specification

for

DUNE(OTT PLATFORM)

Version 1.0

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1. Introduction

1.1 Purpose

This document is prepared in order to determine a software requirement specification for DUNE. DUNE is a social video streaming website on which people can watch the videos, share videos, like/dislike and comment on the videos etc. In order to gain an overview about the report, firstly, the purpose and scope of this document will be given, and the overall description of DUNE system is followed. In addition to these, system feature such as uploading video, watching video, sharing video, subscribe etc. are described deeply. After mentioning about the introduction of the websites, the specific requirements will be addressed for it. In the final part, functional and non-functional requirements will be addressed.

1.2 Document Conventions

This Document was created based on the IEEE template for System Requirement Specification Documents.

1.3 Intended Audience and Reading Suggestions

Employees ,students or anyone who has internet access and device to use DUNE for watching online movies (Social networks, Social Media networks, Semantic networks etc.)

1.4 Product Scope

People love TV content, but they don't love the linear TV experience, where channels present programs only at particular times on non-portable screens with toughf remote controls. Now internet TV - which is on-demand, personalized, and available on any screen - is replacing linear TV. Changes of this magnitude are rare. Radio was the dominant home entertainment media for nearly 50 years until linear TV took over in the 1950's and 1960's.Linear video in the home was a huge advance over radio, and very large firms emerged to meet consumer desires over the last 60 years. The new era of

internet TV, which began a decade ago, is likely to be very big and enduring also, given the flexibility and ubiquity of the internet around the world.

1.5 References

IEEE Software Requirements Specification Template

https://web.cs.dal.ca › ~hawkey › srs_template-ieee

SRS Example – Computer Science and Engineering

 www.cse.msu.edu › ~chengb › Papers › SRSExample-webapp

2. Overall Description

2.1 Product Perspective

DUNE is developed to everyone to allow our customers to watch a wide variety of award-winning TV shows, movies, documentaries, and more on thousands of internetconnected devices. With DUNE you can enjoy unlimited viewing of our content without having to watch a single commercial.

2.2 Product Functions

2.3 User Classes and Characteristics

There will be two levels of user for our system. The first will be the general user that will be using our software to find their movies or stream television. They will only see the front end of the system. The second level will be the system developers. They will be able to edit which sites the system will search, depending on weather they think the site is safe, compatible with respective software, the speed at which the site can be searched, and how useful the site is to users, i.e. how many results have come back from that site.

2.4 Operating Environment

 PC or Laptops :

• Windows 7

• Windows 8

• Windows 8.1

 • Windows 10

• Mac OS X

• Linux

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

2.5 Design and Implementation Constraints

Server capacity is how many users can access or can be online once. More is the number of users more will be the network traffic and hence the serve comes in a down state. Personal firewall and updating is a tough task, it should be such that it should not block the network traffic, making the system slower. Firewall of the server should not collide with the firewall of the user system.

2.6 User Documentation

There are official tutorials, one for visualization:

YET TO UPLOAD

2.7 Assumptions and Dependencies

DUNE Open Connect includes that are installed in third-party data centres to govern how content is exchanged, cached, and streamed.

HTML for document designed to be displayed on web page

CSS for describing and colouring of web page.

JavaScript is used for creating interactive and dynamic applications web application

Nodejs is backend runtime environment.

REACT for interactive user interface and wed application

3. External Interface Requirements

3.1 User Interface

1. Using a Smart TV:

Connect your Smart TV to your home network.

Use some internet app(chrome , safari , google)

log in with your DUNE account. Use the on-screen keyboard to enter the email address and password associated with your DUNE account and then select Sign In and press Enter and Ok.

You'll need to have a DUNE plan that supports streaming video.

Browse using your remote. Use the arrow buttons on the TV remote to navigate the menus and videos on DUNE. Highlight a video you want to watch and then press the "Select" or "Enter" button on your remote to start it.

3.2 Hardware Interfaces

The devices featured in this list feature hardware that is compatible for streaming DUNE:

Smart phone

Smart TV's

Computers

Laptop

Tablet

3.3 Software Interfaces

macOS

Microsoft Windows

Linux

Android

Google Chrome OS

iOS

TV OS: Apple TV

3.4 Communications Interfaces:

 DUNE requires an internet connection.

For new updates, such as new movies, upcoming.

Interface updates

4. System Features:

4.1 System Feature 1:

4.2 System Feature 2:

5. Other Non-functional Requirements:

5.1 Performance Requirements:

- **For any streaming at all, you'll need a minimum of 0.5 megabits per second (Mbps), but DUNE recommends 1.5 Mbps.**

- **For DVD quality, you will need 3.0 Mbps.**

- **For HD quality, you will need 5.0 Mbps.**

- **For Super HD and 3D (really!) quality, you'll need around 7.0-12.0 Mbps.**

5.2 Safety Requirements:

Parenteral controls

5.3 Security Requirements:

We know you care about the security of your DUNE account. So do we

- **Use a password unique to DUNE and change it periodically**

- **Add a phone number to your account for additional security**

- **Sign out of unused devices**

5.4 Software Quality Attributes:

DUNE provides the users with both simple and advanced features. Due to its well designed and easy to use interface it can be used by both experts and typical users. However, users must already have a basic knowledge of streaming before using it.

5.5 Business Rules:

YET TO UPDATE

ER Diagram

cast entity attributes: act_name, director, Strem_ID, actor_name, comedian

Genre entity attributes: Stream_id, Genre_name

Streaming entity attributes: Stream_name, Stream_ID, Stream_year

LOGIN entity attributes: PASSWORD, USER_ID

CREATE_ACCOUNT entity attributes: F_NAME, L_NAME, NAME, Password, PHONE_NUMBER, EMAIL_ID

TAKES relationship — 1:N

DIRECT relationship — 1:1

Directs relationship — 1:1

Payment entity attributes: amount, Date, Time, Trans_ID, mode_of_payment

Subscription entity attributes: Start_date, End_date, plan