**Video on Demand (VoD) Platform Requirements Documentation**

1. **1. Introduction**

**1.1 Project Overview**

The Project is to create a B2B SAAS application that enables content partners to register themselves. Content partners should be able to upload, process and deliver content to various OTT platforms.

**1.2 Scope of the Project**

Current scope of this project work is to design and develop a system to enable creation of Content Partners(CP) , Platforms(OTT platforms) and register CP with OTT platforms.

**2. Functional Requirements**

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| --- | --- | --- | --- |
| **Requirement No** | **Requirement** | **Weightage** | **Priority** |
| **FR001** | **Accept Name of the organization as part of Registration** | **40%** | **P0** |
| **FR002** | **Accept Location as part of registration** | **30%** | **P1** |
| **FR003** | **Accept Contact details as part of registration. Contact details should include person name, corporate email Id and Contact number** | **30%** | **P0** |
| **FR004** | **Content partner**  **Login: Name** | **10%** | **P0** |
| **FR005** | **Content partner**  **Login: Location** | **10%** | **P0** |
| **FR006** | **Content partner**  **Login: Contact details (Person name, Email, and Phone numbers)** | **20%** | **P1** |
| **FR007** | **Delivery Type: Aspera/S3/GCP/SFTP/IBM FASPEX** | **10%** | **P0** |
| **FR008** | **Assets Upload location: Customer location/Our location** | **10%** | **P0** |
| **FR009** | **Metadata format: xls/csv/json/xml/cable labs/mRSS** | **10%** | **P0** |
| **FR0010** | **Master File format (video)** | **5%** | **0** |
| **FR0011** | **Audio File formats** | **5%** | **0** |
| **FR0012** | **Caption file formats** | **5%** | **0** |
| **FR0013** | **Username** | **10%** | **P0** |

**Channels**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID** | **Requirement Name** | **Description** | **Priority** | **Weightage (%)** |
| **CR001** | **Channel Name** | **Each channel must have a unique name to identify it.** | **High** | **10%** |
| **CR002** | **Channel Logo** | **Channels must have an associated logo for branding purposes.** | **Medium** | **5%** |
| **CR003** | **Content Categories** | **Channels must support multiple content categories (e.g., Movies, TV Shows).** | **High** | **15%** |
| **CR004** | **Subscription Requirements** | **Define if the channel is part of free content or requires a subscription.** | **High** | **20%** |
| **CR005** | **Content Providers** | **Link channels to content providers responsible for delivering content.** | **Medium** | **10%** |
| **CR006** | **Regional Availability** | **Specify regions where the channel's content is accessible.** | **Medium** | **10%** |
| **CR007** | **Playback Format** | **Support different playback formats (HD, 4K, etc.) for the channel.** | **High** | **20%** |
| **CR008** | **Advertisements** | **Include details about whether the channel supports advertisements.** | **Low** | **5%** |
| **CR009** | **Language Support** | **Specify supported languages for channel content.** | **High** | **10%** |
| **CR010** | **Analytics and Metrics** | **Collect data on viewership, engagement, and subscription metrics per channel.** | **High** | **15%** |

**Platform**

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| --- | --- | --- | --- |
| **Requirement No** | **Requirement** | **Weightage** | **Priority** |
| **1** | **Register/Login: Name** | **10%** | **P0** |
| **2** | **Register/Login: Location** | **10%** | **P0** |
| **3** | **Register/Login: Contact details (Person name, Email, and Phone numbers)** | **20%** | **P1** |
| **4** | **Delivery Type: Aspera/S3/GCP/SFTP/IBM FASPEX** | **10%** | **P0** |
| **5** | **Assets Upload location: Customer location/Our location** | **10%** | **P0** |
| **6** | **Metadata format: xls/csv/json/xml/cable labs/mRSS** | **10%** | **P0** |
| **7** | **Master File format (video)** | **5%** | **0** |
| **8** | **Audio File formats** | **5%** | **0** |
| **9** | **Caption file formats** | **5%** | **0** |
| **10** | **Username** | **10%** | **P0** |
| **11** |  | **10%** | **P0** |

**Content Providers:**

* Content providers can register and upload video files, audio files, and associated metadata.
* Metadata includes video descriptions, audio descriptions, and captions.
* Support for metadata formats like JSON and XML, etc.

**Input and Processing:**

* Input video files in common formats(e.g., MP4).
* Embed captions(e.g., SRT files).
* Deploy microservices to process and distribute assets.

**2.2 User Management**

**Authentication:**

* Login and registration services with security features.

**2.3 Video Delivery and Playback**

* Adaptive streaming based on user bandwidth.
* Metadata-driven recommendations to enhance content discovery.
* Multi-device playback support.

**2.4 Third-party Integrations**

* Integration with SaaS for content creation and delivery.

**3. Technologies**

|  |  |
| --- | --- |
| **Backend** | Go language |
| **Frontend** | React.js |
| **Database** | NoSQL(MongoDB) |
| **Metadata Processing** | JSON,XML,etc |

**4. Design**

**Microservices:**

* Modular architecture for handling metadata, content uploads, and playback separately.

**Scaling:**

* Horizontal scaling for users.
* Vertical scaling for content and processing needs.