Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	20 october 2023
Team ID	01F86DB9712F996A81A488BFBE9AA874
Project Name	Subscribers Galore: Exploring the World's Top YouTube
	Channels
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection	As a Data Analyst, I need a data collection system that allows me to input the URLs of top YouTube channels and gather key information, including subscriber counts, video views, engagement metrics, and content categories. This system should retrieve and update data regularly to ensure the dataset is upto-date.
FR-2	Content Analysis	As a Content Analyst, I require a content analysis tool that can process video metadata and transcripts, identify keywords, and extract insights about content trends and engagement strategies used by top YouTube channels. The tool should provide data visualizations and allow for detailed content examination.
FR-3	Audience Survey	As an Audience Researcher, I need an online survey platform that enables the creation and distribution of surveys to viewers of top YouTube channels. The platform should collect and store responses securely and allow for real-time tracking of survey completion rates.
FR-4	Reporting	As a Project Manager, I want a reporting system that compiles the findings from data collection, content analysis, and audience surveys. The system should generate clear and visually appealing reports, including charts, graphs, and actionable insights, which can be easily shared with the team and stakeholders.
FR-5	Automated Data Updates	The data collection system should have an automated update feature, refreshing data from YouTube channels at regular intervals (e.g., weekly or monthly) to maintain the dataset's accuracy and relevance
FR-6	User Collaboration	Team members should be able to collaborate within the project, with features such as the ability to share and annotate content analysis reports, conduct joint surveys, and provide feedback within the system.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution. $\label{eq:following} % \[\frac{1}{2} \left(\frac{1}{2} \right) + \frac{$

FR No.	Non-Functional Requirement	Description
NFR-1	Data Security	To ensure the safety of collected data, we must implement strong data encryption and access control measures, preventing unauthorized access or data breaches, and ensuring the privacy of YouTube channel data and survey responses.
NFR-2	Performance	The system should be designed to handle a large amount of data efficiently and should be responsive, ensuring that data analysis, content examination, and survey distribution do not significantly impact the project's timeline. It should be able to handle concurrent user requests without significant performance degradation.
NFR-3	Scalability	The system should be designed to scale with project needs. It must accommodate an increasing number of users, channels, and data while maintaining performance, regardless of the growth in data volume and users.
NFR-4	Compliance	The project must adhere to relevant data privacy regulations, such as GDPR or CCPA, ensuring that data collection and storage practices are compliant with legal requirements.
NFR-5	Availability	The system should comply with privacy and security regulations to protect patient data. It should implement appropriate security measures, such as encryption, access controls, and audit logs, to safeguard sensitive healthcare information
NFR-6	Accessibility	The platforms must be accessible to users with disabilities. This includes providing alternative text for images, keyboard navigation, and other features to ensure the system's usability for all team members.