Project Synopsis/Project Concept Document

(Due: 25th January)

Project number	Project 3
Project Title	Generalized Web Dashboard for Image Preprocessing
Document	DASS Project Concept Document
Creation date	16 January 2024
Created By	Karan Nijhawan(2022101122) Sanchit Jalan(2022101070)
	Vaishnavi Manda Reddy(2022111018) Sreeja Palle(2022101081)
Client	Cyrrup Solutions Pvt. Ltd.

Description

The primary objective of our project is to develop a robust model that would help in data preprocessing and splitting the data into training and test dataset. This involves creating a versatile and efficient framework capable of effectively supporting tasks such as data labeling, annotation, and splitting into training and test sets into ratio as provided by user. By focusing on model versatility, accuracy, and ease of integration, we aim to provide a valuable tool that enhances the overall efficiency and effectiveness of deep learning and machine learning workflows, catering to diverse applications and user needs within the AI domain. The data sets thus generated by our application is used for training the deep learning model.

Profile of Users

- 1. Video Annotation Specialists:
- 2. Computer Vision Engineers with Video Processing
- 3. Video Content Developer
- 4. Video Annotation Project

Usage Model and Diagrams (if any)

User Registration and Authentication:

• Secure registration and authentication process for personalized user access.

• Video Upload and Processing:

• Users upload videos, triggering the tool to process and extract frames for annotation.

• Augmentation Interface:

• User-friendly interface for annotating frames, providing tools for drawing bounding boxes, adding labels, and other annotations.

• Annotation Review and Editing:

• Users can review and edit annotations for accuracy and completeness.

• Collaboration and Team Workflow:

• Real-time collaboration features for team members to work on annotations collaboratively.

• Export and Integration:

• Option to export annotated frames and associated metadata. Integration capabilities for seamless data incorporation into machine learning pipelines or analysis tools.