

## Weekly Progress Report - 2

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<b>Project Title</b>	Combating Digital Misinformation: Deepfake Detection Using Deep Neural Networks
<b>Name of the Supervisor (Mentor) at PDEU</b>	Dr. Samir Patel
<b>Week Number</b>	Week 2

### Progress made in Week:

This week, we continued building upon the foundation by focusing on dataset preparation and management for the deepfake detection project:

- **Expanded Dataset Variety:** Added **Celeb-DF v2 dataset** alongside FaceForensics++ to ensure higher diversity and robustness in training data.
- **Dataset Organization:** Combined all dataset subfolders into a **CSV file** containing the **video path and label (real/fake)** for structured usage during model training.
- **Version Control for Dataset:**
  - Initialized **Git** and integrated **DVC (Data Version Control)** to efficiently handle large datasets (~26 GB).
  - Configured **Google Drive as a DVC remote storage**, enabling seamless access and collaboration.
- **Cloud Setup for Training:** Set up Google Colab with GPU integration for dataset processing and future model training.
- **Frame Extraction:** Wrote and executed a **Python script** to extract **30 frames per video** from the datasets, creating a standardized input format for training deep learning models.

Hetanshi Bhatt	Kunal Solanki	Samir Patel
		
<b>Name and Signature of Student 1</b>	<b>Name and Signature of Student 2</b>	<b>Name and Signature of Supervisor (Mentor)</b>