

Project Proposal

2024-25

Team Details				
S.No	University Roll Number	Name	Email	WhatsAppNumber
1*	2161170	Harshit Waldia	Harshitwaldia112@gmail.com	+91-7060546501
2*	2161311	Shivam Sah	Shivamsah156@gmail.com	+91-7037473282
Project Details				
Title: SynthiVerseAI : Cross-Modal Creative Synthesis System				
Technologies to be used: <ul style="list-style-type: none">• TensorFlow/PyTorch• Transformers, VariationalAutoencoders(VAEs)• GenerativeAdversarialNetworks(GANs)• NaturalLanguageProcessing(NLP)• AudioProcessing• 3DConvolutionalNetworks• DataPreprocessingPipelines				
Brief Description of the Project (Point-wise): <ol style="list-style-type: none">Cross-Modal Content Generation:<ol style="list-style-type: none">1.1. Text-to-Image Generation:<ul style="list-style-type: none">• Develop a custom model to generate images from textual descriptions. Focus on traditional image synthesis techniques that translate text into visual representations.1.2. Text-to-Audio Generation:<ul style="list-style-type: none">• Build a custom model to generate audio tracks from text prompts, concentrating on straightforward sound synthesis methods.1.3. Text-to-Video Generation:<ul style="list-style-type: none">• Implement a custom architecture, such as temporal GANs or 3D convolutional networks, to produce video content from textual inputs using standard techniques.Real-Time Content Adaptation:<ul style="list-style-type: none">• Implement real-time adaptation features that allow users to interact with and modify the generated content dynamically. This includes adjusting styles, themes, and other parameters interactively.• The system will ensure that the generated text, images, audio, and video are harmoniously aligned with the provided prompt or theme.User-Friendly Interface:<ul style="list-style-type: none">• Design an intuitive interface that allows users to input prompts and customize their multimedia content easily. The interface will include features like sliders, previews, and customization options to improve the user experience.				
Whether compared with any existing system: (Give URL /link or citation) : No				
Whether discussed with any Faculty Member (NAME): Dr. Ankur Singh Bist				
Whether proposed work is extension of internship work: No				
Any previous work with proposed technologies: Yes				
Whether crude DFD/ ERD are prepared: No				

Planning Details (Aug-24 to May-25)		
Phase	From	To
Literature Survey	Aug 2024	Sep 2024
Design	Sep 2024	Oct 2024
Implementation-1	Oct 2024	Dec 2024
Implementation-2	Jan 2025	Feb 2025
Implementation-3	Mar 2025	Apr 2025
Testing	Apr 2025	May 2025
Submission	15 April 2025	

WORK DISTRIBUTION PLAN

PROJECT ID: -		TEAM LEADER : - HARSHIT WALDIA		
PROJECT TITLE: - SynthiVerseAI : Cross-ModalCreativeSynthesisSystem				
S.No	MODULE NAME(S)	FUNCTIONALITIES	TECHNOLOGIES USED	TEAM MEMBER
<u>1.</u>	Text-to-Media Generator	Convert textual descriptions into corresponding text,images, audio, and video.	TensorFlow / PyTorch, Transformers, Variational Autoencoders (VAEs), Generative Adversarial Networks (GANs), Natural Language Processing (NLP), Audio Processing, 3D Convolutional Networks, Data Preprocessing Pipelines	Harshit Waldia
<u>2.</u>	Text-to-audio Generator	Convert textual descriptions into corresponding audio description	Natural Language Processing (NLP), Audio Processing, 3D Convolutional Networks,	Shivam Sah

The above-mentioned students shall be working under the supervision of the undersigned on the
“SynthiVerse AI: Cross-Modal Creative Synthesis System”

Signature

Supervisor

Internal Evaluation (By DPRC Committee)

Status of the Project Proposal: Accepted / Rejected

Any Comments:

Name of the Committee Members:

Signature with Date

- 1.
- 2.
- 3.