**Title – HeyGen: AI Video Translation and Customization**

**Concept - AI-Powered Video Translation and Editing**

**Theory applied to experiment-** HeyGen uses AI technology to translate and modify videos in various languages. By analyzing the audio and visual content of uploaded videos, the AI enables real-time translation, lip-syncing, and other creative edits. Through this activity, students will explore how AI can be applied to multimedia projects, including translating videos, enhancing audio, and experimenting with various voice styles or languages.

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| **Materials required** | **Hardware Requirements:**   |  |  | | --- | --- | | **Components** | **Quantity** | | Computer or laptop with internet access | 1 |   **Software Requirements:**   |  |  | | --- | --- | | **Components** | **Quantity** | | Link- [HeyGen](https://app.heygen.com/home) | 1 | | Web browser (Google Chrome recommended) | 1 | |
| **Procedure** | **Refer this YouTube link**  [**https://youtu.be/E3K2KZF8fEg**](https://youtu.be/E3K2KZF8fEg) |
| **Procedure to be performed by student** | **1. Open HeyGen** • Navigate to [HeyGen](https://app.heygen.com/home). • Ensure you have access to a video file to upload for translation and editing.    **2. Create an Account** • If you don’t have an account, sign up using an email ID. • Log in to access the tool.    **3. Upload Your Video** • Click the “Upload Video” button and select a video from your computer. • The AI will process the video to prepare it for editing or translation.    **Use Case 1: Translate a Video into a Different Language** • After uploading your video, select the “Translate” option. • Choose a target language from the dropdown menu (e.g., Chinese, Hindi, Spanish). • The AI will automatically translate the audio of the video into the selected language while syncing the audio to the speaker's lips. • Preview the translated video to ensure the translation and lip-sync are correct. • Save or download the translated version of the video for sharing or future use.    **Use Case 2: Create a Video with an AI Avatar** • Select the “Avatar” feature from the [HeyGen Avatars](https://app.heygen.com/avatars) section. • Choose an avatar to represent the speaker in your video. The avatars range from realistic human figures to animated characters. • Upload a script or use text input for what the avatar will say. • Customize the language, style, and tone of the avatar’s voice to match your project needs. • Preview how the avatar speaks and moves in sync with the text or script you’ve provided. • Once satisfied, save the video and share it with the class.    **Use Case 3: Customize the AI Voice for Your Avatar** • Select an avatar for your video or text-based project. • Choose the “AI Voice” option to modify how the avatar speaks. • Pick from various languages (e.g., English, Japanese, French) and voice tones (e.g., formal, casual, animated) to give your avatar a unique personality. • Preview how the AI voice sounds with the avatar’s movements and lip-sync. • Experiment with different voice styles and accents to see how they change the video’s tone. • Save your project once satisfied with the avatar and voice customization    **4. Experiment with Additional Features** • Explore HeyGen’s other features such as editing video timing, enhancing audio, or adding effects. • Test the lip-sync feature in different languages to see how AI handles translation while maintaining realistic video output.  **5. Save and Export** • Once satisfied with the translation or voiceover, click “Save” to download your edited video. • Share your translated video with the class or save it for future multimedia projects. |
| **Observation /analysis** | Students will observe how HeyGen’s AI translates audio and synchronizes lips across different languages. They will also explore how changing the language or adding a voiceover affects the video's overall tone and message. |
| **Conclusion** | Students will conclude how HeyGen AI allows for efficient video translation and customization, enabling easy communication of multimedia content in multiple languages. |
| **Experiment takeaways** | • Students learn how AI can be used to translate video content into different languages. • They understand the interaction between audio, visual, and language components in video editing. • Students explore how AI-powered voiceovers and subtitles can create multilingual projects for diverse audiences. |
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