Team Contribution and percentage breakdown:

Viswanth Tammana (Team lead) 26.67%

- Led project coordination to keep the team on track and ensure timely deliverables.
- Designed and implemented Amadeus API integration, transforming raw flight data into our required formats.
- Unified multiple APIs (Amadeus, Google Maps, OpenWeather) into a cohesive prototype for end-to-end itinerary generation.
- Converted API responses into vector embeddings for use in our RAG-based planning pipeline.
- Developed an interactive chatbot interface to gather user feedback and iteratively refine travel plans.
- Conducted a comparative evaluation of Stable Diffusion vs. DALL·E for generating images and short video previews.
- Built visualizations including RAG attention heatmaps and interactive Folium maps to illustrate recommendations.
- Implemented the DiffCut segmentation workflow to mask and blur backgrounds in AI-generated visuals for enhanced focus.

Dharani Thakkallapally 26.67%

- Generated Travel story, Images and Video based outputs to enhance user experience.
- Tried implementing open-source models like llama, Mistral 7B, as we are frequently running out of credits while using Open AI. However, after trying all of them, I felt that open AI is helping to achieve better results. So finally, we moved further with Open AI itself.
- Tried generating realistic video outputs instead of simple zoom-in/zoom-out effects, but all suitable models were paid.
- Enhanced prompt engineering, improving AI-generated travel story and visuals for better personalization.
- Optimized video generation speed.
- Included purpose of visit factor to make the model generate more user relevant outputs.
- Tried implementing lora, to fine tune GPT-4 model but got to know that GPT-4 model weights are locked and it can't be fine-tuned.
- Deployed entire project on Streamlit.
- Prepared demo video and poster for Research-A-Thon
- Documented entire progress report 2.
- Worked on Reproducibility of LLM check paper, and generated quantifying metrics for the project.
- Documented work related to LLM check in final submissions.

Pavan Sundar Reddy Guthikonda 26.66%

- Developed the entire frontend using Streamlit with interactive and responsive UI components.

- Designed pages to display AI-generated travel stories, itinerary details, and multimedia content.
- Ensured seamless integration between user inputs and backend responses.
- Debugged and resolved deployment issues related to MoviePy that failed on Streamlit Cloud but worked locally.
- Refactored media generation scripts to improve compatibility across different environments.
- Implemented asynchronous API calls to enhance performance and reduce load times.
- Improved frontend response time by optimizing data rendering workflows.
- Worked on Retrieval-Augmented Generation (RAG) by configuring vector embeddings and document indexing.
- Integrated a retrieval mechanism for enhanced factual grounding of AI-generated narratives.
- Compared hallucination risks in RAG vs non-RAG generated content to assess reliability.
- Collaborated on API output formatting for consistent rendering across UI components.

Banu Teja Jampani **20%**

- Developed a Travel Recommendation Agent, integrating APIs to suggest hotels and restaurants based on user budget, preferences, ratings, and availability.
- Implemented a Hotel Locations Agent, enhancing location-based accommodation recommendations.
- Built a Restaurant Recommendation System, providing top-rated dining options with ratings.
- Ensured seamless interaction between hotel, restaurant, and travel planning agents for a unified user experience.