**Log Summary**

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| **Date** | **Team Member** | **Task Completed** | **Notes/Challenges** | **Solutions** |
| 2024-10-24 | Abdul | Created initial project plan and folder structure. | Difficulty agreeing on folder hierarchy with team | Finalized structure after team discussion. |
| 2024-10-28 | Kabir | Researched and selected the model for SAM | Difficulty in choosing the most efficient model | Chose models based on performance metrics. |
| 2024-10-30 | Anthony | Drafted initial image processing script. | Script inefficiency in processing large images | Optimized script for better performance. |
| 2024-10-31 | Ayush | Integrated PyTorch and OpenCV libraries | Installation conflicts among libraries | Managed dependencies through virtual env. |
| 2024-11-02 | Ayush | Developed and tested segmentation algorithm. | High false positive rate in segmentation | Adjusted algorithm parameters to reduce errors. |
| 2024-11-07 | Anthony | Refined the image segmentation logic | Poor segmentation on edge cases | Added additional checks for edge handling |
| 2024-11-10 | Ayush | Implemented captioning feature using Transformers. | Integration issues with NLP models | Solved by debugging tokenization errors. |
| 2024-11-12 | Anthony | Debugged image format compatibility issues. | Unsupported image formats in input | Implemented a converter for image formats. |
| 2024-11-13 | Abdul | Integrated NLP model for caption generation. | Low accuracy in generated captions | Fine-tuned model parameters to improve accuracy. |
| 2024-11-15 | Kabir | Reviewed and optimized existing code. | Codebase was becoming unwieldy | Refactored code |
| 2024-11-22 | Anthony | Compiled final project folder and prepared `README.md`. | Issues with documentation consistency | Standardized documentation format. |