**AIP PROJECT SPECIFICATION**

**Team: A12**

**Project Name: Movie Descriptor**

**Deliverable Schedule and Project Work Schedule**

|  |  |  |
| --- | --- | --- |
| Schedule | Deliverable Name | Deliverable Description |
| Week 3 | Project Deliverable #1 | 1. Research on project description. 2. Create a project board and assign tasks. 3. Set up a git repository according to guidelines.   4. Set up a Slack for communication. |
| Week 4 | Project Deliverable #2 | 1. Started with the real dataset 2. Perform data Extraction and preprocessing to ensure quality. 3. Creating CSV file with text description. |
| Week 5 | Project Deliverable #3 | 1. Develop initial prototypes for audio description generation models. 2. Implement object detection and scene recognition algorithms. 3. Train models using collected datasets. 4. Evaluate models using various metrics. |
| Week 6 | Project Deliverable #4 | 1. Research and implement techniques for activity recognition in videos. 2. Compare different modeling techniques for activity and scene analysis. 3. Integrate various models into a system. |
| Week 7 | Project Deliverable #5 | 1. Implement models for enhanced video analysis. 2. Apply transfer learning techniques to improve model performance. 3. Develop models for scene description. |
| Week 8 | Project Deliverable #6 | 1. Develop models for the description alignment. 2. Developed model (VIT model) to process the video and able to create text and audio description. 3. Working on narration process. 4. Created slides for the progress |
| Week 9 | Mid Term Presentation | 1. Compile and organize project progress and results for the presentation.   Create slides highlighting key milestones, challenges, and achievements. |
| Week 10 | Project Deliverable #7 | 1. Working on Spacetime model and fine tuning on it for better performance. 2. Implementing the deployment process of VIT model. 3. Working on the marketing video of the product. |
| Week 11 | Project Deliverable #8 | 1. Working on a portfolio website. 2. Working on UI and deployment 3. Working on BLEU score for the model and planning to go with better perform one. 4. Working on increasing model accuracy, also trying to speed up the process from analyzing the video, processing, and combining the generated audio caption with the actual video. |
| Week 12 | Project Deliverable #9 | 1. Compared the T5 and Bart model summary 2. Testing the other models for deployment 3. Working on Final Presentation and Final Report 4. Done with Expo booth |