

Tamil Sentiment Analysis - Gantt Chart (Mid-Jan to Mid-April)

Timeline	Dataset Collection & Annotation	Preprocessing	Feature Engineering	Model Selection & Training	Hyperparameter Tuning	Model Evaluation & Testing	Deployment
Mid-Jan	Download/create dataset						
	Label sentiment categories						
Feb	Complete annotation	Tokenization & Lemmatization	TF-IDF & Embeddings				
		Stopword Removal	MuRIL, IndicBERT Embeddings				
		Data Cleaning	Feature Extraction				
Mar		Preprocessing Finalized	Feature Engineering Finalized	Choose MuRIL, mBERT, XLM	Grid & Random Search	Precision, Recall, F1-score	
				Train Models	Cross-validation	Adjust Model Performance	
Mid-Apr				Finalize Training	Finalize Best Model	Finalize Evaluation	
							Documentation
							Deployment

Key Highlights:

- Jan-Mid Feb: Focus on dataset collection, annotation, and preprocessing.
- Feb-Mar: Develop features and train models with MuRIL, mBERT, and XLM.
- Mar-Apr: Work on fine-tuning, evaluation, deployment, and documentation.