Planned Sprint	Actual Sprint	US ID	User Story Description	MoSCoW	Dependency	Assignee	Status
S1	S1	US-001	Environment Setup & Repository Initialization	MUST HAVE	VS Code, Git	Tharun Kumar C	Completed
S1	S1	US-002	Backend Setup using FastAPI and Uvicorn	MUST HAVE	Python 3.8+, Pip	Tharun Kumar C	Completed
S2	S2	US-003	Integration of APIs (GNews, SerpAPI, Reddit, Twitter)	MUST HAVE	API Keys	Tharun Kumar C	Completed
S2	S2	US-004	OpenAI GPT & LLaMA Integration for NLP	SHOULD HAVE	OpenAI API Key	Tharun Kumar C	Completed
S3	S3	US-005	Data Collection Pipeline Initialization	MUST HAVE	Pandas, Requests	Tharun Kumar C	Completed
S3	S3	US-006	Data Cleaning & Sentiment Computation	MUST HAVE	TextBlob, NumPy	Tharun Kumar C	Completed
S4	S4	US-007	Trend Forecasting Model Development	SHOULD HAVE	Prophet, scikit-learn	Tharun Kumar C	Completed
S4	S4	US-008	Alert System Configuration (spikes, sentiment, trends)	MUST HAVE	Slack Webhook	Tharun Kumar C	Completed
S5	S5	US-009	Frontend Development (React + Tailwind)	MUST HAVE	Node.js, npm	Tharun Kumar C	Completed
S5	S5	US-010	Dashboard UI Design & Chart Visualization	MUST HAVE	Recharts, Lucide Icons	Tharun Kumar C	Completed
S6	S6	US-011	Competitor & Domain Selector Modal	COULD HAVE	React Modal, Context API	Tharun Kumar C	Completed
S6	S6	US-012	Customizable Filters (Time Range, Sentiment, Source)	SHOULD HAVE	React State Management	Tharun Kumar C	Completed
S7	S7	US-013	API–Frontend Integration	MUST HAVE	CORS Middleware	Tharun Kumar C	Completed
S7	S7	US-014	Alert Visualization and Notification Center	SHOULD HAVE	Slack API	Tharun Kumar C	Completed
S8	S8	US-015	Testing of Data APIs and Alert Logic	MUST HAVE	Postman, cURL	Tharun Kumar C	Completed
S8	S8	US-016	Dashboard Deployment (Render / Vercel)	MUST HAVE	Render, GitHub CI/CD	Tharun Kumar C	Completed
S9	S9	US-017	Theme Toggle Implementation (Dark/Light Mode)	COULD HAVE	Tailwind Theme	Tharun Kumar C	Completed
S9	S9	US-018	News Feed Page with Filtering Options	MUST HAVE	News API Data	Tharun Kumar C	Completed
S10	S10	US-019	Social Media Sentiment Analytics Page	MUST HAVE	Reddit & Twitter API	Tharun Kumar C	Completed
S10	S10	US-020	Competitor Insights Panel with Metrics	SHOULD HAVE	Chart Components	Tharun Kumar C	Completed
S11	S11	US-021	Export Feature for Reports and Data Charts	COULD HAVE	CSV Export Package	Tharun Kumar C	Completed
S11	S11	US-022	Data Validation and Error Handling System	MUST HAVE	Exception Logging	Tharun Kumar C	Completed
S12	S12	US-023	Real-time Alert Push via Slack Webhook	SHOULD HAVE	Slack API	Tharun Kumar C	Completed
S12	S12	US-024	Automated Data Refresh & Caching Mechanism	COULD HAVE	LocalStorage, Cache	Tharun Kumar C	Completed
S13	S13	US-025	Final Report & Presentation Preparation	MUST HAVE	PowerPoint, Canva	Tharun Kumar C	Completed
S13	S13	US-026	User Onboarding Documentation	SHOULD HAVE	Readme, Docsify	Tharun Kumar C	Completed
S14	S14	US-027	Competitor Benchmark Comparison Table	COULD HAVE	Table Library	Tharun Kumar C	Completed
S14	S14	US-028	Interactive Trend Timelines	SHOULD HAVE	Plotly, Matplotlib	Tharun Kumar C	Completed
S15	S15	US-029	Multi-sector Intelligence Summary View	MUST HAVE	Filter Modules	Tharun Kumar C	Completed
S15	S15	US-030	Insight Export to PDF	COULD HAVE	ReportLab	Tharun Kumar C	Completed

US ID	Task ID	Task Description	Task Start Date	Task Completion Date	Team Member	Activity	Status	Original Estimate Effort (In Hours)	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
US-001	1	Project Repository & Environment Setup	25-Aug-25	27-Aug-25	Tharun Kumar C	Setup	3 - Completed	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0
US-001	2	FastAPI and Uvicorn Configuration	28-Aug-25	30-Aug-25	Tharun Kumar C	Backend Setup	3 - Completed	6	2	1	1	1	1	0	0	0	0	0	0	0	0	0
US-002	3	API Integration (GNews, SerpAPI, Reddit, Twitter)	31-Aug-25	03-Sep-25	Tharun Kumar C	Integration	3 - Completed	8	2	2	2	2	0	0	0	0	0	0	0	0	0	0
US-003	4	Data Cleaning & Sentiment Pipeline (TextBlob)	04-Sep-25	06-Sep-25	Tharun Kumar C	Data Processing	3 - Completed	10	3	2	2	2	1	0	0	0	0	0	0	0	0	0
US-004	5	NLP Integration using OpenAI GPT	07-Sep-25	10-Sep-25	Tharun Kumar C	NLP Setup	3 - Completed	9	2	2	2	2	1	0	0	0	0	0	0	0	0	0
US-005	6	Prophet Forecasting Model Development	11-Sep-25	13-Sep-25	Tharun Kumar C	AI Forecasting	3 - Completed	8	2	2	2	2	0	0	0	0	0	0	0	0	0	0
US-006	7	Slack Alert System Configuration	14-Sep-25	16-Sep-25	Tharun Kumar C	Alerts	3 - Completed	6	2	1	1	1	1	0	0	0	0	0	0	0	0	0
US-007	8	React Frontend Setup with Tailwind	17-Sep-25	19-Sep-25	Tharun Kumar C	Frontend	3 - Completed	6	2	2	2	0	0	0	0	0	0	0	0	0	0	0
US-008	9	Chart Components with Recharts	20-Sep-25	22-Sep-25	Tharun Kumar C	Visualization	3 - Completed	5	2	1	1	1	0	0	0	0	0	0	0	0	0	0
US-009	10	Dashboard & Domain Selector Modal	23-Sep-25	26-Sep-25	Tharun Kumar C	UI Enhancement	3 - Completed	8	2	2	2	2	0	0	0	0	0	0	0	0	0	0
US-010	11	API–Frontend Integration	27-Sep-25	29-Sep-25	Tharun Kumar C	Integration	3 - Completed	7	2	2	2	1	0	0	0	0	0	0	0	0	0	0
US-011	12	Alert Visualization & Notification Center	30-Sep-25	02-Oct-25	Tharun Kumar C	Alerts	3 - Completed	9	3	2	2	2	0	0	0	0	0	0	0	0	0	0
US-012	13	Testing of Data APIs & Forecast Logic	03-Oct-25	05-Oct-25	Tharun Kumar C	Testing	3 - Completed	8	2	2	2	2	0	0	0	0	0	0	0	0	0	0
US-013	14	Dashboard Deployment (Render / Vercel)	06-Oct-25	08-Oct-25	Tharun Kumar C	Deployment	3 - Completed	6	1	2	2	1	0	0	0	0	0	0	0	0	0	0
US-014	15	Final Report & Presentation	09-Oct-25	11-Oct-25	Tharun Kumar C	Documentation	3 - Completed	5	2	1	1	1	0	0	0	0	0	0	0	0	0	0

Sprint	Day	Impediments	Action Taken
Sprint 1	Day 2	FastAPI server failed to start due to port conflicts	Updated server configuration and applied new CORS rules
Sprint 1	Day 4	API rate limits exceeded while testing SerpAPI	Implemented caching and retry delay mechanism
Sprint 2	Day 6	CSV header mismatch between GNews and Reddit data	Standardized schema using Pandas and column renaming
Sprint 2	Day 8	TextBlob misclassifying neutral posts as positive	Added regex-based text preprocessing and stopword filtering
Sprint 3	Day 10	Prophet model taking too long to train on large datasets	Reduced data window to 30-day rolling and increased step size
Sprint 3	Day 12	Slack webhook returned 403 error during alert tests	Regenerated Slack webhook and reauthorized workspace
Sprint 4	Day 14	Charts not rendering when CSV data empty	Added default placeholder dataset to prevent graph errors
Sprint 4	Day 16	Alert system triggered too many low-severity events	Refined thresholds and applied weighted averaging
Sprint 5	Day 18	Dashboard slow on first render	Implemented React Suspense and lazy loading for heavy components
Sprint 5	Day 20	Deployment build failed on Render platform	Fixed Python buildpack version and adjusted environment variables
Sprint 6	Day 22	Alert timestamps not matching server timezone	Configured timezone handling in FastAPI and Slack
Sprint 6	Day 23	CSV files overwriting old data unintentionally	Added timestamped filenames for each data refresh
Sprint 7	Day 25	Prophet prediction output missing confidence intervals	Enabled uncertainty intervals in model settings
Sprint 7	Day 27	API response delay when multiple requests triggered	Cached results using FastAPI background tasks
Sprint 8	Day 29	Final report taking long to export	Optimized chart export using async calls

Sprint No	Sprint Start Date	Sprint End Date	Team Member Name	Start Doing	Stop Doing	Continue Doing	Action Taken
Sprint 1	25-Aug-2025	30-Aug-2025	Tharun Kumar C	Maintaining environment setup logs	Skipping dependency checks	Properly documenting environment configurations	Created setup script and shared via README
Sprint 2	31-Aug-2025	06-Sep-2025	Tharun Kumar C	Verifying API responses before integration	Trusting unvalidated CSV inputs	Keeping schema consistency across APIs	Added API response validator using Pandas
Sprint 3	07-Sep-2025	13-Sep-2025	Tharun Kumar C	Automating sentiment computation	Manually cleaning data	Running preprocessing scripts daily	Integrated automated cleaning pipeline
Sprint 4	14-Sep-2025	20-Sep-2025	Tharun Kumar C	Monitoring Prophet performance logs	Training model without tuning	Analyzing forecast metrics weekly	Improved accuracy by 8%
Sprint 5	21-Sep-2025	26-Sep-2025	Tharun Kumar C	Modularizing React components	Hardcoding data in charts	Using reusable chart components	Reduced UI errors and increased scalability
Sprint 6	27-Sep-2025	02-Oct-2025	Tharun Kumar C	Automating alert tests	Triggering manual tests	Testing alert thresholds automatically	Optimized alert detection logic
Sprint 7	03-Oct-2025	08-Oct-2025	Tharun Kumar C	Performing load testing before deployment	Deploying without runtime checks	Testing APIs under high load	Improved API response speed by 25%
Sprint 8	09-Oct-2025	11-Oct-2025	Tharun Kumar C	Preparing concise presentation slides	Adding too much technical detail	Maintaining clarity and structure in documentation	Delivered clear and investor-ready presentation