Group Member Names & SAP IDs		Project title
SAP ID	**Student Name**	**STOCK VISION AI**
38602	Abdullah bin Ata	
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This form in intended to finalize the project features for each of groups.

FYP FEATURE DETAILS

Application Type	Feature/Sub-feature listing	Requirements
Web/ Mobile	Provide a list of all the features and its sub features.	1. All user and their portals with CRUD operation (implementation). - At least 3 different users (admin, coordination, client). - Web Admin portal (for both app & web applications) 2. roles/rights assignment on each of the user portals 3. Multi-criteria searching for all user portals (name/item/date/sales-relevant to the project etc.)
`AI/ Research based	1. Provide a list of all the features and its sub features. Alongside that provide the following details. - mention research background - use of all APIs, local library usage - code integration	Features may vary as per the project. It is to be ensured that relevant features aiding the project towards completeness are added.

Sr. No	Feature/Sub-Features	Explanation/additional information

Sr. No	Module	Feature	Sub-Feature	Explanation/additional information
1	User Management	Authentication	Login	Authenticates users securely using JWT or OAuth2.
			Registration	Registers new users and connects them to trading APIs (e.g. Alpaca).
			Logout	Allows users to securely log out
		Password Recovery	Forgot Password	Sends an email with a secure reset link to recover a lost password.
2	User Profile	Profile Management	View Profile	Allows users to view their personal details, preferences, and account information
			Edit Profile	Enables users to update details like name, email, preferences, or account settings.
			Notification Preferences	Users can manage notification settings, such as enabling/disabling alerts for trades.
3	Alerts and Notifications	Notifications	Price Alerts	Notifies users when stock prices cross predefined thresholds.
			Trade Notifications	Updates users about executed trades, cancellations, or errors.
4	Stock Prediction	Prediction	Visualization	Displays stock predictions in graphs or tables for easy analysis.
			Multi-Timeframe Predictions	Offers predictions for short-term (1 day) and long-term

			Multi-Stock Predictions	Provides predictions for multiple stocks simultaneously (e.g. AAPL, TSLA).
5	Trading Automation	Automated Trading	Predefined Trading Strategies	Users can define rules (e.g., "Buy if stock drops by 5%").
			Automated Trade Execution	Executes trades automatically when rules are met or predictions trigger actions.
6	Manual Trading	Trade Execution	Stop Loss and Take Profit	Users can set risk management rules to limit losses or lock in profits.
			Direction Selection	Allows users to manually choose trade direction (Buy/Sell).
7	Order Management	Order Handling	Order Execution	Supports market, limit, and stop-loss orders seamlessly.
			Order Cancellation	Enables users to cancel pending orders before execution.
			Trade Closing	Users can close trades manually, showing real-time profit or loss.
8	Trade Tracking	Trade History	Historical Trades	Displays all past trades, including timestamps, stock symbols, and outcomes.
			Profit/Loss Tracking	Summarizes profits and losses for individual trades or portfolios.
9	Sandbox Environment	Virtual Trading	Simulated Trading	Users can test trades in a risk-free environment.
			Strategy Validation	Allows users to refine their strategies by testing in the sandbox environment.

10	Data Handling and APIs	Data Collection	Historical Data Collection	Uses APIs like yfinance and Finnhub to collect past stock prices and market data.
			Real-Time Data Integration	Integrates real-time data for continuous updates and predictions.
11	Performance Optimization	Optimization	Fast Execution	Enhances order execution and prediction response times.
			Accuracy Improvements	Retrains AI models regularly to improve prediction accuracy.