# API Documentation

## Base URL:

http://127.0.0.1:8001/api

## Authentication:

- Header: x-api-key: <your-api-key>  
- Example: (Gemini api key)

## Endpoint:

GET /analyze

## Query Parameters:

- keyword (string, required): Sector or keyword to analyze (e.g., "technology", "green energy")

## Request Example:

curl -X GET "http://127.0.0.1:8001/api/analyze?keyword=technology" -H "x-api-key: test123"

## Response Format:

{  
 "keyword": "technology",  
 "report": "# Trade Report: Technology\n\n## Overview\n..."  
}

## Returned Report:

- Markdown format  
- Includes: Overview, Market Data, AI Insights, Opportunities, Challenges, Confidence Score, Date

## Error Codes:

- 400: Invalid input  
- 401: Invalid API Key  
- 429: Rate limit exceeded  
- 500: Market data fetch failed

## Rate Limiting:

- 5 requests per IP per 60 seconds

## Try Online:

- Swagger UI: http://127.0.0.1:8001/docs  
- Redoc: http://127.0.0.1:8001/redoc

## Security Features:

- API Key authentication  
- IP-based rate limiting  
- Regex input validation

## Structure:

- Modular code (routes, services, security, limiter)  
- Markdown report builder