

Requirements Phase

-> During the requirements gathering phase, multiple methods were used to identify the needs of stakeholders. Requirements were collected through Google Form surveys distributed to potential users (traders, investors, general users), interviews with industry professionals and students who use trading platforms, and competitive analysis of existing financial/trading platforms to ensure relevance and practicality.

-> The requirements are categorized into functional requirements (defining what the system must do) and non-functional requirements (defining the quality and constraints of the system).

1. Functional Requirements

1. FR-1: The system shall allow users to sign up with email and password.
2. FR-2: The system shall allow registered users to log in securely.
3. FR-3: The system shall allow traders to create and post new signals (company, sector, trend, status, price range).
4. FR-4: The system shall allow traders to edit or delete their signals.
5. FR-5: The system shall allow users to view all signals posted by traders.
6. FR-6: The system shall allow users to like and save signals to a personal watchlist.
7. FR-7: The system shall allow users to subscribe to traders with available subscription plans.
8. FR-8: The system shall allow users to manage their subscriptions (renew, cancel, view status).
9. FR-9: The system shall allow admins to verify signals before they are published.
10. FR-10: The system shall allow admins to manage users (approve/reject accounts, deactivate).
11. FR-11: The system shall allow admins to generate reports (usage, subscriptions, signals).

2. Non-Functional Requirements

12. NFR-1: The system shall provide a responsive UI accessible on desktop and mobile.
13. NFR-2: The system shall encrypt passwords and sensitive data using secure hashing.
14. NFR-3: The system shall load core pages (login, signals list) within 3 seconds.
15. NFR-4: The system shall support at least 1000 concurrent users.
16. NFR-5: The system shall provide 99% uptime during trading hours.
17. NFR-6: The system shall allow scalability for future features (notifications, analytics).

Requirements Table

| ID | Type | Requirement Description | Priority | Source |
|-------|------------|--|----------|------------------------|
| FR-01 | Functional | The system shall allow users to sign up with email and password. | High | Google Form, Interview |
| FR-02 | Functional | The system shall allow registered users to log in securely. | High | Google Form |
| FR-03 | Functional | The system shall allow traders to create and post new signals (company, sector, trend, status, price range). | High | Interview |
| FR-04 | Functional | The system shall allow traders to edit or delete their signals. | Medium | Interview |
| FR-05 | Functional | The system shall allow users to view all signals posted by traders. | High | Survey |
| FR-06 | Functional | The system shall allow users to like and save signals to a personal watchlist. | Medium | Google Form |
| FR-07 | Functional | The system shall allow users to subscribe to traders with available subscription plans. | High | Interview |
| FR-08 | Functional | The system shall allow users to manage their subscriptions (renew, cancel, view status). | Medium | Interview |
| FR-09 | Functional | The system shall allow admins to verify signals before they are published. | High | Interview |

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|-------|------------|--|--------|----------------------|
| FR-10 | Functional | The system shall allow admins to manage users (approve/reject accounts, deactivate). | High | Admin Interview |
| FR-11 | Functional | The system shall allow admins to generate reports (usage, subscriptions, signals). | Medium | Competitive Analysis |

| ID | Type | Requirement Description | Priority | Source |
|--------|----------------|--|----------|-----------|
| NFR-01 | Non-Functional | The system shall provide a responsive UI accessible on desktop and mobile. | High | Survey |
| NFR-02 | Non-Functional | The system shall encrypt passwords and sensitive data using secure hashing. | High | Analysis |
| NFR-03 | Non-Functional | The system shall load core pages (login, signals list) within 3 seconds. | Medium | Survey |
| NFR-04 | Non-Functional | The system shall support at least 1000 concurrent users. | Medium | Analysis |
| NFR-05 | Non-Functional | The system shall provide 99% uptime during trading hours. | High | Interview |
| NFR-06 | Non-Functional | The system shall allow scalability for future features (notifications, analytics). | Medium | Analysis |