

3. Requirements Gathering – MatchMind Project

Stakeholder Analysis:

Stakeholder	Role	Needs & Expectations
Football Fans (Users)	Primary users of the platform	<ul style="list-style-type: none">- Access real-time or post-match updates.- Engage in the prediction game.- View league tables and match results.- Create and manage user accounts.
Admin & Content Managers	Manage website content and updates	<ul style="list-style-type: none">- Ability to update match scores manually.- Manage user-generated content.- Moderate discussions and user interactions.
Developers	Build and maintain the platform	<ul style="list-style-type: none">- Clear functional requirements and scope.- Scalable backend and database.- Secure authentication and API integrations.
Project Sponsor / Investors	Fund the project	<ul style="list-style-type: none">- High user engagement and traffic.- Monetization opportunities(ads, premium features).

User Stories & Use Cases:

User Stories:

As a football fan, I want to:

- View live or post-match scores so I can stay updated on my favorite teams.
- Participate in match predictions to earn points and compete with other fans.
- Create an account and track my prediction history.
- Browse league standings to see my team's ranking.
- Receive notifications or alerts for upcoming matches.

As an admin, I want to:

- Manually update match scores after games end.
- Approve or moderate user-generated content (e.g., comments, discussions).
- View website analytics to track user engagement.

Use Cases:

Use Case 1: User Registers an Account

Use Case	User Registers an Account
<u>Actor</u>	Football Fan (New User)
<u>Precondition</u>	User does not have an existing account.
<u>Steps</u>	1. User clicks on "Sign Up". 2. User enters name, email, and password. 3. System validates input and stores user data securely. 4. System sends a confirmation email. 5. User clicks the confirmation link to activate the account.
<u>Postcondition</u>	The user can now log in and access their account.

Use Case	User Registers an Account
<u>Exceptions</u>	If the email is already registered, the system shows an error message.

Use Case 2: User Logs In

Use Case	User Logs In
<u>Actor</u>	Registered User
<u>Precondition</u>	User has an active account.
<u>Steps</u>	<ol style="list-style-type: none"> 1. User enters email and password. 2. System verifies credentials. 3. If correct, user is redirected to the dashboard.
<u>Postcondition</u>	User gains access to personalized features.
<u>Exceptions</u>	If login fails, the system displays an error message.

Use Case 3: User Predicts a Match Score

Use Case	User Predicts a Match Score
<u>Actor</u>	Registered User (Football Fan)
<u>Precondition</u>	User is logged in and the match is open for predictions.
<u>Steps</u>	<ol style="list-style-type: none"> 1. User selects an upcoming match. 2. User enters a score prediction. 3. System saves the prediction. 4. After the match, system compares actual score and awards points if correct.
<u>Postcondition</u>	Points are updated in the user's account.

Use Case	User Predicts a Match Score
<u>Exceptions</u>	If the user tries to predict after match start, the system denies the action.

Use Case 4: User Views Match Scores & League Standings

Use Case	User Views Match Scores & Standings
<u>Actor</u>	Any visitor (Guest or Registered User)
<u>Precondition</u>	Match data is available in the system.
<u>Steps</u>	<ol style="list-style-type: none"> 1. User navigates to the "Scores" or "Standings" page. 2. System retrieves the latest match results and league table. 3. User sees updated match scores and team rankings.
<u>Postcondition</u>	User stays informed about football results.
<u>Exceptions</u>	If match data is unavailable, system shows a "Coming Soon" message.

Use Case 5: Admin Updates Match Scores Manually

Use Case	Admin Updates Match Scores Manually
<u>Actor</u>	Admin
<u>Precondition</u>	The match has ended, and the final score is available.
<u>Steps</u>	<ol style="list-style-type: none"> 1. Admin logs into the dashboard. 2. Admin selects the match that needs updating. 3. Admin enters the final score. 4. System saves the updated score and refreshes the standings.
<u>Postcondition</u>	Match results are updated on the website.

Use Case	Admin Updates Match Scores Manually
<u>Exceptions</u>	If the score is entered incorrectly, the admin can edit it later.

Use Case 6: User Views Leaderboard & Prediction Rankings

Use Case	User Views Leaderboard
<u>Actor</u>	Registered User
<u>Precondition</u>	Prediction game has been running with recorded user scores.
<u>Steps</u>	<ol style="list-style-type: none"> 1. User navigates to the "Leaderboard" page. 2. System retrieves the top users based on prediction accuracy. 3. User sees rankings, including their own position.
<u>Postcondition</u>	Users can compare scores and compete with others.
<u>Exceptions</u>	If no predictions have been made yet, system displays "No data available".

Use Case 7: User Receives Match Alerts & Notifications

Use Case	User Receives Match Alerts
<u>Actor</u>	Registered User
<u>Precondition</u>	User has enabled notifications.
<u>Steps</u>	<ol style="list-style-type: none"> 1. System detects an upcoming match. 2. System sends a notification (email, SMS, or in-app alert). 3. User receives the alert about the match.
<u>Postcondition</u>	Users stay informed about their favorite teams.

Use Case	User Receives Match Alerts
<u>Exceptions</u>	If notifications are disabled, no alerts are sent.

Use Case 8: Admin Manages User Accounts

Use Case	Admin Manages User Accounts
<u>Actor</u>	Admin
<u>Precondition</u>	There are active users on the platform.
<u>Steps</u>	<ol style="list-style-type: none"> 1. Admin logs into the dashboard. 2. Admin searches for a user. 3. Admin can edit, suspend, or delete the user account.
<u>Postcondition</u>	User data is updated accordingly.
<u>Exceptions</u>	If the admin tries to delete an already deleted user, an error message is shown.

Functional Requirements:

User Management

- Users can create, update, and delete their accounts.
- Authentication via email or third-party logins.

Football Match Data

- Users can view match schedules, results, and league standings.
- Admins can manually update scores if live data is unavailable.

Prediction Game

- Users can predict match scores before kickoff.
- The system calculates points based on correct predictions.
- Leaderboards display top users with the highest scores.

Notifications & Alerts

- Users can opt-in for notifications about match results, upcoming games, and leaderboard updates.

Admin Dashboard

- Admins can update scores, manage user accounts, and moderate content.

Non-Functional Requirements:

Performance

- The system should load match data in under 2 seconds.
- The database must handle at least 10,000 users simultaneously.

Security

- Users' personal data must be encrypted.
- Secure authentication via OAuth or JWT tokens.

Usability

- The website must be mobile-friendly and responsive.
- The prediction system should be intuitive for new users.

Reliability & Availability

- The system should have 99.9% uptime for smooth access.
- In case of API failures, the system should fallback to manual score updates.