

Competitive Matchmaking System Specification

1. Overview

This document outlines the full competitive matchmaking system for the scalable padel league platform. The system is captain-initiated, automatic, and designed to keep the league active without requiring both teams to opt in simultaneously.

2. Eligibility Rules (Competitive Only)

- A team is considered ELIGIBLE if:
 - - Team has 2 confirmed players
 - - Team has a unique team name (per club)
 - - Team is not currently in an active match
 - - Team is not in 7-day cooldown
 - - Team is not marked Unavailable
 - - Team is not marked Inactive
 - - Team has no active dispute

3. Captain-Initiated Match Flow

Step 1: Captain presses 'Find Game'

Step 2: System verifies eligibility

Step 3: System searches for eligible opponent within same club

Step 4: Best opponent is selected automatically

Step 5: Match record is created instantly

Step 6: Both teams are set to IN_MATCH status

Step 7: Both captains receive in-account notification

Step 8: Email notification is sent (recommended)

4. Opponent Selection Logic

- Filtering (Hard Rules):
 - - Same club_id
 - - Status = ELIGIBLE
 - - Not in cooldown
 - - Not current or last opponent (if possible)
- Ranking (Soft Rules):
 - - Closest league points (primary factor)
 - - Prefer teams also actively searching (optional)

- - Avoid repeat opponents within last 2 matches

5. Match Status Lifecycle

- - ACTIVE (match created)
- - COMPLETED (result confirmed or auto-confirmed)
- - DISPUTED (flagged for admin review)

6. Notifications

- When a match is created:
 - In-account notification for both captains
 - Notification badge visible in dashboard
 - Match appears in My Team Dashboard immediately
 - Optional email notification sent

7. Result Submission & 48-Hour Rule

- - Captain A submits Win or Loss
- - 48-hour timer begins immediately
- - Captain B may confirm or dispute
- - If no response after 48 hours, result stands automatically
- - League table updates

8. 7-Day Cooldown Rule

- - After result is finalized, both teams enter COOLDOWN
- - Cooldown lasts 7 days from match completion
- - During cooldown, teams cannot be matched

9. Unavailable Feature

- - Captain can set team status to Unavailable
- - Unavailable teams cannot be matched
- - Unavailable cannot be activated during active match
- - Optional return date field
- - Optional auto-reminder when return date arrives

10. Safeguards

- - Atomic locking to prevent double-matching
- - Admin override capability
- - Automatic inactive status after extended inactivity (e.g., 30 days)

11. Required Database Fields (Core)

- Team:
 - id
 - club_id
 - team_name

- - captain_id
- - player_two_id
- - status (AVAILABLE / IN_MATCH / COOLDOWN / UNAVAILABLE / INACTIVE)
- - last_match_completed_at
- Match:
 - - id
 - - club_id
 - - team_a_id
 - - team_b_id
 - - status
 - - result
 - - result_submitted_by
 - - confirmation_deadline