



Product Requirements Prompt (PRP)

1. Product Name

SynapLink (*working title — conveys innovation + connectivity*)

2. One-Sentence Idea Description

A **dual-mode event and hackathon hosting platform** that combines **professional event management for organizations** with a **social, gamified ecosystem for students and professionals** — enabling transparent competitions, dynamic team formation, global leaderboards, and long-term career recognition.

3. Target Audience

- **Universities & Colleges** → to host hackathons, fests, cultural and academic events.
 - **Student Communities** → to collaborate, form teams, and showcase achievements.
 - **Companies & Organizations** → to host professional hackathons, challenges, and branded competitions.
 - **General Event Organizers** → for conferences, meetups, and competitions beyond hackathons.
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4. Core User Journeys

♦ Organizer Flow

1. Sign up / log in → redirected to Organizer Dashboard.

2. **Create Event** (single-page dynamic form):

- Common fields → event type expands to show relevant fields.
- Hackathon: rounds, submission formats, rubrics.
- Conference: sessions, speakers, ticketing.
- Meetup: agenda, host, RSVP limit.
- Fest: competitions, venues, registration rules.

3. **Manage event** via modular dashboard tabs:

- Event Info → edit details, sponsors.
- Teams & Registrations → view/approve participants.
- Submissions (per round) → dynamic built-in form builder OR external links (Google Forms, Discord).
- Round Management → mark teams advanced, unlock next round.
- Announcements & Q&A → event wall posts + threaded Q&A.
- Leaderboard & Results → preliminary rounds = points + advance/eliminate, final = weighted rubric → auto-ranking.
- Certificates → auto-generate & distribute.
- Analytics → track registrations, engagement, sponsor visibility.

◆ **Participant Flow**

1. Sign up / log in → redirected to Participant Dashboard.
2. Explore events:
 - Hackathon feed & general events feed displayed separately (like Unstop/Devpost).
 - Filter by category, mode, tags, timeline.
3. Apply/Register:

- If team-based → create team + invite platform friends OR join existing team.
- Event-specific team identity created.

4. Inside Event Sub-Dashboard (tabs):

- Event Info → rules, sponsors, timeline.
- Team → members list, invite, join requests.
- Submissions → round-based forms (active/locked).
- Announcements & Q&A → community wall.
- Leaderboard → round progression + final ranks.
- Certificates → download/share post-event.

5. Long-term:

- Build portfolio of events, teams, wins, certificates, badges.
- Appear on **global leaderboard** and university/state rankings.

◆ Organization Flow

1. Org signup → verified org profile (banner, logo, description).

2. Org profile shows:

- Events hosted (past & upcoming).
- Followers.
- Participants engaged.
- Sponsors showcased.

3. Private dashboard:

- Create/manage events.
- Announcements/posts to followers.

- Analytics (registrations, engagement).
4. Public org profile → followable, searchable, acts like LinkedIn page.
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◆ **Social/Networking Flow**

- **Profiles (User):** Banner, photo, bio, skills, badges, wins, team history, certificates.
 - **Connections:**
 - Connect (mutual) = friends/peers.
 - Follow (one-way) = updates only.
 - **Teams:** Persistent list of all past teams, acts as credibility portfolio.
 - **Discover/Search:** Search users/orgs alphabetically by handle; suggested connections by university, events, friends-of-friends.
 - **Global Leaderboard:** Rank all users (filters: university, state, global, friends).
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5. Core Features

Mandatory (from problem statement)

- Event creation & management (dynamic form).
- Registration & team formation (invite friends / join teams).
- Multi-round project submission (built-in forms or external).
- Evaluation & progression (advance/eliminate, rubric-based final scoring).
- Real-time announcements & Q&A (event wall + threaded replies).
- Role-based dashboards (Organizer, Participant, Org).
- Deployment on **Azure Web App** with **Azure SQL + MongoDB**.

Extended (our enhancements → hackathon-winning angle)

- **Profiles** with achievements, badges, followers, certificates.
 - **Social graph**: friends, follows, suggested peers.
 - **Global Leaderboard** with classification by university/state/friends.
 - **Certificates**: auto-generated, downloadable, LinkedIn integration.
 - **Badges & Trophies**: gamified recognition.
 - **Sponsor showcase** integrated in events & org profiles.
 - **Analytics dashboards** for organizers.
 - **Optional Web3 (POAP/NFT badges)**.
 - **AI-based similarity detection** for plagiarism check.
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6. Tech Stack & Architecture

Frontend

- **Next.js / React** hosted on Azure Web App.
- **Framer Motion** → animations & transitions.
- **Lucide Icons, Heroicons, Lottie** → icons, animated badges, trophies.
- **TailwindCSS** → styling with dual-mode (light professional + dark energetic).

Backend

- **Node.js (NestJS/Express) or FastAPI** for API.
- **Azure Functions** for scheduled jobs (round open/close, cert generation, similarity).
- **Azure API Management** + JWT-based auth.

Databases

- **Azure SQL Database** → structured (users, orgs, events, rounds, teams, scores, leaderboard, certificates).
- **MongoDB on Azure** → unstructured (submission payloads, forms schema, announcements, Q&A, analytics events).
- **Azure Blob Storage** → file uploads (PDFs, ZIPs, images).

Real-Time & Notifications

- **Azure Web PubSub** → real-time announcements, Q&A, live leaderboard updates.
 - **Azure Communication Services** → email/SMS notifications.
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7. UI/UX Vibe

- **Dual Mode:**
 - Light = professional, LinkedIn-style.
 - Dark = energetic, Discord/Instagram-style.
 - **Gamified UI Elements:**
 - Badges, trophies, podium animations, progress streaks.
 - **Transitions:**
 - Page/tab animations with Framer Motion.
 - Leaderboard reveal animations.
 - Round unlock glow effect.
 - **Consistency:**
 - Modular dashboards → clean navigation.
 - Event sub-tabs → keep global dashboard uncluttered.
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8. Future Feature Ideas

- Skill-based matchmaking for teams.
 - Paid ticketing + monetization for conferences/fests.
 - In-platform content posting (like LinkedIn updates).
 - Mentor dashboard (for guidance during hackathons).
 - Integration with GitHub/Devpost for project sync.
 - AI project summarizer → auto-generate project briefs.
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Why This Wins Hackathon Judging

- **Innovation** → Not just an event tool, but a **social + competitive ecosystem**.
- **Functionality** → Complete workflows from event creation → leaderboard → certificates.
- **Scalability** → Designed for multiple events & thousands of users.
- **Tech Fit** → Azure SQL + MongoDB + Azure Web App/Functions (exact hackathon requirements).
- **UI/UX** → Dual-mode, gamified, full of animations → polished and engaging.
- **Transparency** → Fair evaluation, timestamped submissions, public leaderboards.