

# Momentum – Track the Grind, Build the Network

## Design Document

### Team Members

- Armaan – Applications Story (Full Stack) · applications collection + full CRUD
  - Sankar – Contacts/Networking Story (Full Stack) · contacts collection + full CRUD
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## 1. Project Description

You applied. You refreshed your inbox. You got ghosted. Again.

Most job search tools treat this like a numbers game: apply more, track more, hope harder. But the truth is messier and way more human.

**Momentum** is a full-stack web application that gives job seekers a clear, structured view of their entire search, applications, pipeline health, and the relationships that actually get you hired.

### What Momentum Shows You

Momentum shows you what's actually happening:

- Which job boards respond, and which ones quietly waste your time
- Which roles ghost you the fastest, and which sources actually convert
- Whether "easy apply" is helping your chances or silently hurting them
- A real-time view of your pipeline: Applied → Screening → Interviewing → Offer

### The Part Nobody Tracks: People

That recruiter you met at a meetup. The engineer who said, "Ping me when you apply." The hiring manager who liked your LinkedIn post.

Momentum lets you log every connection, where you met them, what you talked about, and when to follow up, and link those people directly to the roles you applied for. So when a position opens up again, you know exactly who to reach out to.

**Your job search isn't just a checklist of applications. It's a system of effort, timing, and relationships. Momentum helps you build it.**

## Tech Stack

Layer	Technology
Frontend	HTML · CSS · Vanilla JavaScript (modular, separated files)
Backend	Node.js · Express.js
Database	MongoDB (4 collections: Users, Applications, Network, Activity Logs)
Auth	Session-based authentication (express-session + connect-mongo)

## Collections

- Users
  - Applications
  - Network
  - Activity Logs
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# 2. User Personas

Momentum is designed for three distinct types of job seekers. Each persona shapes the feature set and informs the design decisions throughout the product.

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## Persona 1 – Jason, "The Grinder"

**Type:** High-Volume Applicant

Jason applies to 20+ jobs a week. He treats his job search like a sales pipeline and needs hard data on what's converting and what's a black hole. He doesn't want a list of companies, he wants to know which sources are worth his time and which ones are just inflating his numbers.

### Pain points:

- Can't tell if LinkedIn Easy Apply is actually working or just wasting his morning
- Loses track of which applications are stale and need a follow-up
- Has no visibility into where he's consistently getting ghosted

### **What he needs from Momentum:**

- Source-level response rate data so he can double down on what works
  - Status funnel overview to spot which stage he keeps getting stuck at
  - Streak tracking to stay accountable and maintain daily momentum
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## **Persona 2 – Maya, "The Networker"**

**Type:** Relationship-First Job Seeker

Maya knows that referrals land jobs. She meets tons of people at events and online but forgets who's who three weeks later. She needs a human CRM, not a spreadsheet. The value of her network is already there; she just needs a system to unlock it.

### **Pain points:**

- Meets interesting people at meetups and forgets to follow up in time
- Can't remember the context of past conversations when she reconnects
- Has no way to tie her contacts to specific job applications

### **What she needs from Momentum:**

- Contact logging with full context (where she met them, what they talked about)
  - Follow-up reminders with urgency indicators (overdue, coming up, fine)
  - Ability to link a contact directly to an application so she can leverage relationships at the right time
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## **Persona 3 , Priya, "The Strategist"**

**Type:** Data-Driven Optimizer

Priya wants to see the full picture. How many apps this month? Which stage is the bottleneck? Who do I know at companies I've applied to? She connects the dots between applications and relationships and uses that information to make deliberate strategic decisions.

### **Pain points:**

- No single view combining application pipeline data with her network
- Can't identify which companies she's targeting where she has zero contacts
- Doesn't know how long she typically spends in each interview stage

### **What she needs from Momentum:**

- A unified statistics dashboard for both applications and contacts
  - Stage duration analysis to identify where she's losing momentum
  - A contacts-per-company view so she can identify warm-intro opportunities
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## 3. User Stories

Each story describes a real moment in a user's job search. Acceptance criteria are listed below each story.

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### 3.1 Armaan's Stories – Applications

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#### Story 1: Tracking an Application

**As a user, I want to create, view, edit, and delete job applications so I can keep a complete record of my search.**

**The Story:** Jason has just hit "Submit" on a Software Engineer role at Stripe. He opens Momentum, clicks "Add Application", and fills in the company, role, source (LinkedIn), date applied, and a note, "Referred by Chris, expects 3 rounds." The card appears instantly in his tracker. Next week he gets a screening call and updates the status to "Screening" in one click. Two weeks later the role gets cancelled, he deletes the application and it's gone cleanly.

#### Acceptance Criteria:

- User can create an application with: company, role, status, source, date applied, salary range, and notes
- User can view all applications in a sortable, filterable table
- User can edit any field on an existing application at any time
- User can delete an application with a confirmation prompt
- Status options: Applied · Screening · Interviewing · Offer · Rejected · Withdrawn
- Source options: LinkedIn · Indeed · Company Site · Referral · Other

**API:** POST /api/applications · GET /api/applications · PUT /api/applications/:id · DELETE /api/applications/:id

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## Story 2: Filtering the Pipeline

**As a user, I want to search and filter my applications so I can find exactly what I'm looking for without scrolling through everything.**

**The Story:** It's been two months. Jason has 60 applications logged. He needs to find everything he applied for via referral that's still in the interviewing stage. He sets two filters, Source: Referral, Status: Interviewing, and sees 4 results immediately. He spots two that haven't moved in two weeks and makes a note to follow up.

### Acceptance Criteria:

- User can filter applications by: status, company name (text search), role (text search), source, and date range
- Multiple filters can be combined simultaneously (e.g., status=interviewing AND source=referral)
- Filter results update in real time without a page reload
- A clear-filters button resets the view instantly

**API:** `GET /api/applications?status=&company=&source=&fromDate=&toDate=`

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## Story 3: Duplicate Prevention

**As a user, I want the system to prevent duplicate applications so my data stays clean and accurate.**

**The Story:** Maya accidentally tries to log the same Google SWE application she submitted last Tuesday. As soon as she hits Save, Momentum catches it, same company, same role, same date, and shows a clear error: "You already applied to this role on this date." No duplicate is created. Her data stays clean, and she's prompted to find the existing record instead.

### Acceptance Criteria:

- System prevents duplicate applications with the same company + role + date combination
- Returns a 409 Conflict response with a clear, human-readable error message
- Existing application is never overwritten
- User is shown a helpful message directing them to find and edit the existing record

**API:** `POST /api/applications` → 409 if duplicate detected

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## Story 4: Reviewing the Stats Dashboard

**As a user, I want to see statistics on my applications so I can understand what's working and adjust my strategy.**

**The Story:** Priya opens the Statistics tab on a Sunday evening to review her month. She sees 34 total applications, a 41% response rate, a 12% rejection rate, and an average of 6 days from applied to screening. She notices referrals have a 70% response rate versus 18% for LinkedIn Easy Apply, and decides to shift her entire strategy toward warm outreach.

**Acceptance Criteria:**

- Stats panel shows: total applications, response rate, rejection rate, offer rate
- Applications broken down by status with visual percentage bars
- Response rate calculated per source (LinkedIn, referral, job board, etc.)
- Average days to reach each stage displayed clearly
- Applications over time shown as a monthly bar chart (last 8 months)
- Current streak and longest streak shown as motivational counters

**API:** `GET /api/applications/stats` · `GET /api/applications/streak`

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## 3.2 Sankar's Stories , Contacts & Networking

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### Story 5: Logging a New Connection

**As a user, I want to create, view, edit, and delete contacts so I can keep track of every person in my network.**

**The Story:** Maya just came back from the Boston Tech Meetup. She met Sarah Miller, a Technical Recruiter at Google, who told her to reach out in two weeks. Maya opens Momentum's Network tab, clicks "Add Contact", and fills in Sarah's name, email, company, role, meeting source (Meetup), and a note: "Super helpful, interested in my React background." She sets a follow-up date for two Fridays from now. Done in 30 seconds, Sarah won't fall through the cracks.

**Acceptance Criteria:**

- User can create a contact with: name, email, company, role, meeting source, date met, notes, follow-up date, and last contacted date
- User can view all contacts as filterable cards with color-coded follow-up urgency indicators (overdue = red, soon = orange, fine = green)
- User can edit any contact field and update follow-up dates
- User can delete a contact with confirmation

- Meeting source options: LinkedIn · Career Fair · Meetup · Referral · Cold Outreach · Other

**API:** POST /api/network · GET /api/network · PUT /api/network/:id · DELETE /api/network/:id

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## Story 6: Filtering Contacts

**As a user, I want to search and filter my contacts so I can quickly find the right person without scrolling through my entire network.**

**The Story:** Priya applied to five companies last month and now wants to review all the Google contacts she's logged. She types "Google" in the company filter and three cards appear immediately, a recruiter, an engineer, and a hiring manager. She can see at a glance who she's already spoken to, who has an upcoming follow-up, and who is overdue for a check-in.

### Acceptance Criteria:

- User can filter contacts by: company (text search), name (text search), and meeting source
- Filters can be combined, search by name AND company simultaneously
- Results update in real time as the user types

**API:** GET /api/network?company=&name=&metAt=

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## Story 7: Linking Contacts to Applications

**As a user, I want to link contacts to specific applications so I know who to reach out to when I need a warm intro or an update.**

**The Story:** Jason applied to Netflix two weeks ago and hasn't heard back. He remembers he met a Netflix engineer at a conference last year. He opens the Netflix row in his tracker, clicks "Contacts", picks the engineer from his network dropdown, and hits Link. Now when he views that application, the contact is right there. He sends the engineer a quick message, and gets a referral two days later.

### Acceptance Criteria:

- From the Applications tracker, user can open a Contacts panel for any application row
- Panel shows all currently linked contacts with name, role, and email
- User can pick any existing network contact from a dropdown to link to the application

- User can add a brand-new contact directly from the panel , it gets saved to the network and linked simultaneously
- User can unlink a contact from an application without deleting the contact from their network

**API:** PUT /api/applications/:id (with contacts array) · POST /api/network/from-application

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## Story 8: Viewing Contacts for an Application

**As a user, I want to see all contacts associated with a specific application so I can coordinate my outreach in one place.**

**The Story:** Priya is preparing for her Google final round. She opens the Google SWE application and clicks the "3 contacts" pill. She sees the recruiter who first reached out, the engineer she met at a hackathon, and the hiring manager she cold-emailed. She has all three emails right there and can plan exactly who to contact before the interview.

### Acceptance Criteria:

- Every application row shows a contact count indicator (e.g., "3 contacts" or "+ Link contact")
- Clicking the indicator opens a panel listing all linked contacts with their details
- Each contact shows name, role, and email with a mailto link
- User can unlink any contact directly from this view

**API:** GET /api/applications/:id (contacts embedded in response)

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## Story 9: Reviewing Networking Stats

**As a user, I want to see statistics on my network so I can identify gaps and understand where my connections are coming from.**

**The Story:** Priya opens the Network Statistics tab mid-semester. She sees 22 total contacts across 11 companies. LinkedIn is her biggest source (9 contacts) but Meetup has generated the most follow-up conversations per her notes. She notices she has zero contacts at three companies she's actively targeting , a gap she now has a concrete plan to fill.

### Acceptance Criteria:

- Stats panel shows: total contacts, number of unique companies represented, top meeting source, and count of overdue follow-ups



- Contacts per company shown as a ranked bar chart (top 10)
- Contacts by meeting source with percentage share per source
- Color-coded bars per source for easy visual scanning

API: [GET /api/network/stats](#)

## 4. Design Mockups

### Application Tracker:

Moments

Applications

Network

Add Application

Total Applied  
500

Interviewing  
0

OFFERS  
0





Rejected  
1

Streak  
185

Search company

Status ☐

Source ☐

Company	Role	Status	Source	Date Applied	Contact	Action
1. Google	Software Engineer	Applied	LinkedIn	Feb 19, 2026		 
2. Netflix	SDE Intern	Applied	LinkedIn	Feb 7, 2026		 

Sanjay Singhania  
Job seeker

Sign out

Network Tracker:

Momentum

Application

Network

Network

+ Add contact

Total contacts	Via Linked IN	Referrals	Career Fairs
5	1	0	0

Search name

Search company

All sources

5

SANKAR AVACHITULA

Software Engineer

@ NETFLIX

Email

ayachitula.s@netflix.in

Met ON

Feb 19, 2026

A

Armaan

Job seeker

Sign out

# 5. Data Models

## Applications Collection

Field	Type	Description
_id	ObjectId	Auto-generated
company	String	e.g. "Google"
role	String	e.g. "Software Engineer"
status	String	applied · screening · interviewing · offer · rejected · withdrawn
source	String	linkedin · indeed · company_site · referral · other
dateApplied	Date	e.g. 2024-02-15
lastUpdated	Date	Auto-updated on any change
notes	String	Free text notes
salaryRange	Object	{ min: Number, max: Number }
contacts	Array	Embedded contacts [ { name, email, role } ]
createdAt	Date	Auto-set on creation
updatedAt	Date	Auto-set on update

**Indexes:** { company, role, dateApplied } for duplicate detection · { status } · { source } · { dateApplied: -1 }

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## Network Collection

Field	Type	Description
_id	ObjectId	Auto-generated
name	String	e.g. "Sarah Miller"
email	String	e.g. "sarah@google.com"

company	String	e.g. "Google"
role	String	e.g. "Technical Recruiter"
metAt	String	linkedin · career_fair · meetup · referral · cold_outreach · other
metDate	Date	When you first met them
notes	String	Free text notes
followUpDate	Date	When to reach out next
lastContactedDate	Date	When you last spoke
createdAt	Date	Auto-set on creation
updatedAt	Date	Auto-set on update

**Indexes:** { company } · { name: "text" } for text search · { metAt } · { followUpDate }