

The AI Solopreneur

How to Bootstrap a Startup
Using Generative AI

 Kalyan Jampana



About Me



Kalyan Jampana



Software Engineer (The Builder)



Badminton Club Secretary (The Problem Owner)



Solopreneur (The Experimenter)

Setting Expectations

- ✗ My goal **isn't** to convince you to work alone
- ✓ It's to share a **workflow** that unlocked speed
- ✓ It's about **leverage**, not hustle

"Take what's useful. Adapt the rest."

The Modern Solopreneur

 Owns the **Vision**

 Makes the **Decisions**

 Delegates to **Systems**

Architect > Bricklayer

Monday. Tuesday. Friday. Repeat.

This list of groups wasn't my social life.
It was my **Manual Database**.



The Problem:

I was manually routing data
between multiple groups.

I wasn't an Architect.
I was a tired admin.

The screenshot shows a mobile application interface for a community group. At the top, it displays the group's name, "Smashers community", and its type, "Community". Below this, there is a section titled "Announcements" with a green circular icon containing a megaphone. A recent announcement from "08/10/2025" reads: "Hello everyone, here is the safeguarding policy for Smashers...". Underneath this, there is a section titled "Groups you're in" with a list of five groups, each represented by a small profile picture and a title. The groups are: "Smashers Badminton Club" (last updated 15/12/2025, status: "not going to Club Day (Houlton)"), "Smashers Rugby League" (status: "Friday"), "Smashers Visitors" (status: "Friday"), "Smashers Captains" (status: "Thursday"), and "Committee Smashers" (last updated 16/12/2025). At the bottom of the list, there is a group named "Smashers 2" with a blue circular icon containing the number "2".

The Question I Had

Could I build something:

-  Just for **this** problem
-  Without a **team**
-  Without **months** of work?

**The answer wasn't "Better Prompts".
It was a Workflow.**

The AI Solopreneur Workflow

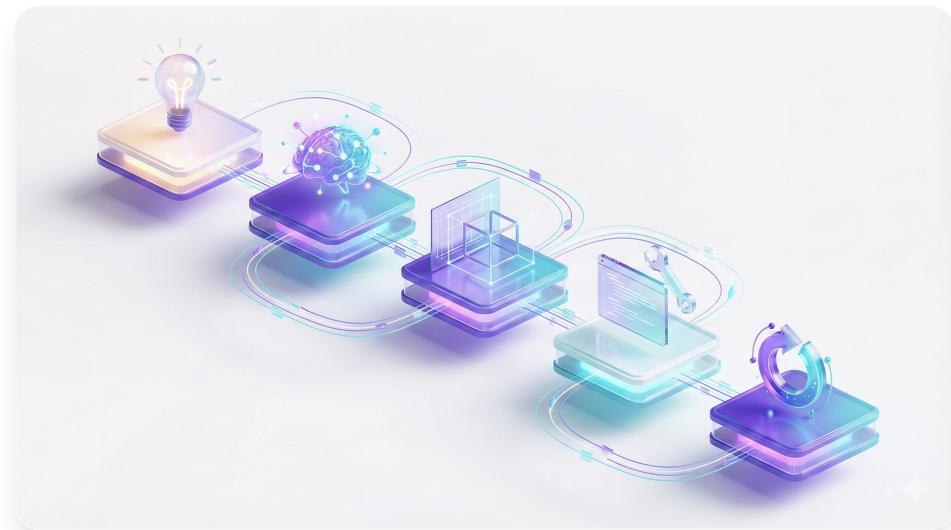
- 1  Capture **Intent**

- 2  Externalize **Thinking**

- 3  Define **Structure**

- 4  Delegate **Execution**

- 5  Tight **Loops**



Step 1 & 2: Clarity (Intent & Thinking)

 AI Role: Product Manager

Intent

Start with the pain.

"Managing sessions across different groups is chaotic."

"Tracking visitors slots availability and payments is a nightmare."

Thinking

Use AI to interrogate you.

- "What happens if a visitor cancels?"
- "Do members get priority?"
- "How do you handle refunds?"

Step 3: Structure (The Architecture)



AI Role: Lead Architect

We mapped the reality:

-  **Entities** (Players)
-  **Flows** (Schedule)
-  **Boundaries**



The Decomposition Strategy



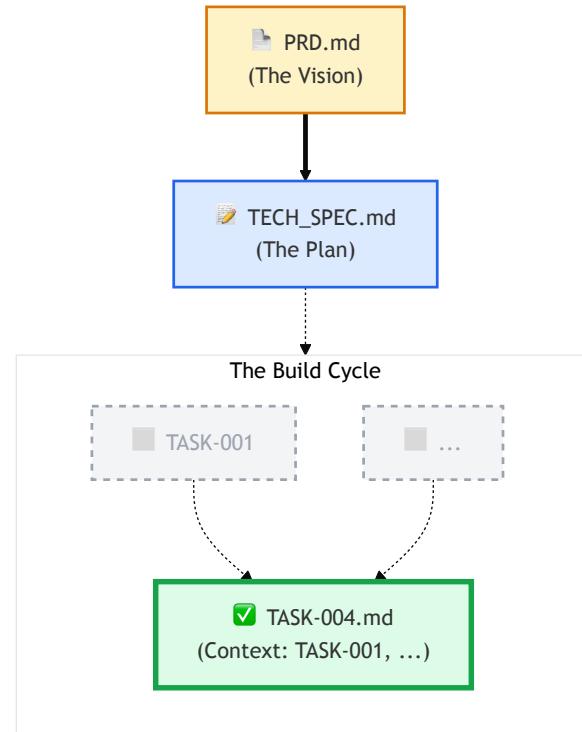
AI Role: Engineering Manager

Atomic Execution.

The Insight

AI might fail with big contexts.
It thrives with **atomic tasks**.

- Traceability: Every line of code links back to a Requirement.



Deep Dive: The Captain's Nightmare

The Pain

- 💬 Captains manage teams on WhatsApp.
- ❓ "Who is available?"
- ❗ "Did I pick 4 or 5 players?"

The Goal

Squad Selection Matrix

Step 3.1: The Flow (Logic)

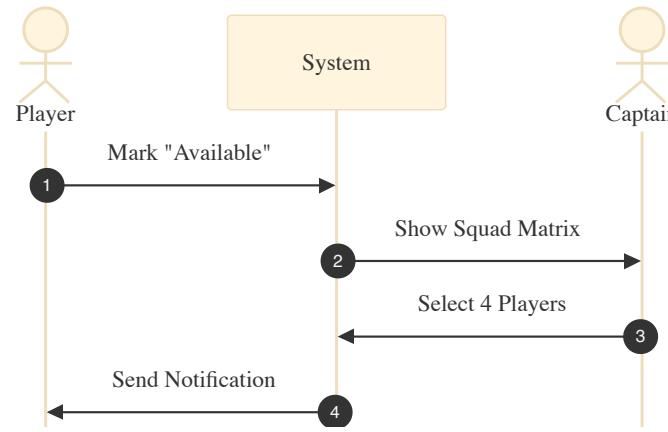
AI Role: Business Analyst

THE PROMPT OUTPUT

```
sequenceDiagram
    autonumber

    actor Player
    participant System
    actor Captain

    Player->>System: Mark "Available"
    System->>Captain: Show Squad Matrix
    Captain->>System: Select 4 Players
    System->>Player: Send Notification
```



Step 3.2: The Blueprint (UX)

AI Role: UX Designer

The Prompt:

**"Generate an ASCII
wireframe for squad
selection by a captain."**

```
+-----+  
| CAPTAIN'S SELECTION          (4 SELECTED) |  
+-----+  
| v AVAILABLE (4)  
| [x] Mike Ross  
| [x] Harvey Specter      (C)  
| [x] Louis Litt  
| [x] Jessica Pearson  
| [ ] Rachel Zane  
|  
| x UNAVAILABLE (1)  
| Donna Paulsen  
+-----+  
| [ Save Draft ]   [ ANNOUNCE TEAM > ] |  
+-----+
```

Step 3.3: The Design System

AI Role: UI Specialist

I didn't open Figma. I wrote a **Design Spec** in `AGENTS.md`.

```
# AGENTS.md > FRONTEND GUIDELINES

1. Technical Implementation (Shadcn/UI & Tailwind):
   - Fonts: `Oswald` (Headers) + `Inter` (Body).
   - Theme Configuration (globals.css):
     - --primary: Volt Green (#39FF14). ← "The Brand"
     - --background: Dark Navy (#0F1115).
     - --radius: 0.5rem.

2. Visual Rules (STRICT):
   - Texture: Radial Gradient Background (32px grid).
   - Dark Mode: Volt Green Text on Dark Navy Cards.

3. Status Colors:
   - Destructive: #FF3333 (Red).
   - Chart: HSL(220 70% 50%) (Blue).
```

Step 3.4: The Data Contract

AI Role: Backend Architect

The Database (Drizzle)

```
// db/schema/fixture.ts
export const fixtureAttendance =
  sqliteTable('fixture_attendance', {
    fixtureId: text('fixture_id'),
    userId: text('user_id'),

    // ✅ The Captain's Selection
    isSelected: boolean('is_selected_by_captain')
 });
```

The Interface (tRPC)

```
// api/routers/availability.ts
export const selectTeam = protectedProcedure
  .input(z.object({
    // Which game?
    fixtureId: z.string(),

    // Who is playing? (Just an array of IDs)
    playerIds: z.array(z.string())
  }))
```

Step 4: Execution (The Build)

AI Role: Full Stack Dev

I didn't copy-paste context. I just said: "**Implement Task 4.**"

Coding Agent read the **Spec**, **Schema**, and **Wireframe** directly from the repo.

```
// router.selectTeam
export const selectTeam = protectedProcedure
  .input(z.object({ fixtureId: z.string(), playerIds: z.array(z.string()) }))
  .mutation(async ({ ctx, input }) => {

    // Atomic Transaction: Reset → Select → Notify
    await ctx.db.batch([
      // 1. Reset current selection
      db.update(attendance).set({ selected: false }).where(eq(fixtureId, input.fixtureId)),

      // 2. Set new selection
      db.update(attendance).set({ selected: true }).where(inArray(userId, input.playerIds)),

      // 3. Trigger Webhooks
      notifyTeam(input.playerIds, "You have been selected for the match!")
    ]);
});
```

23:33

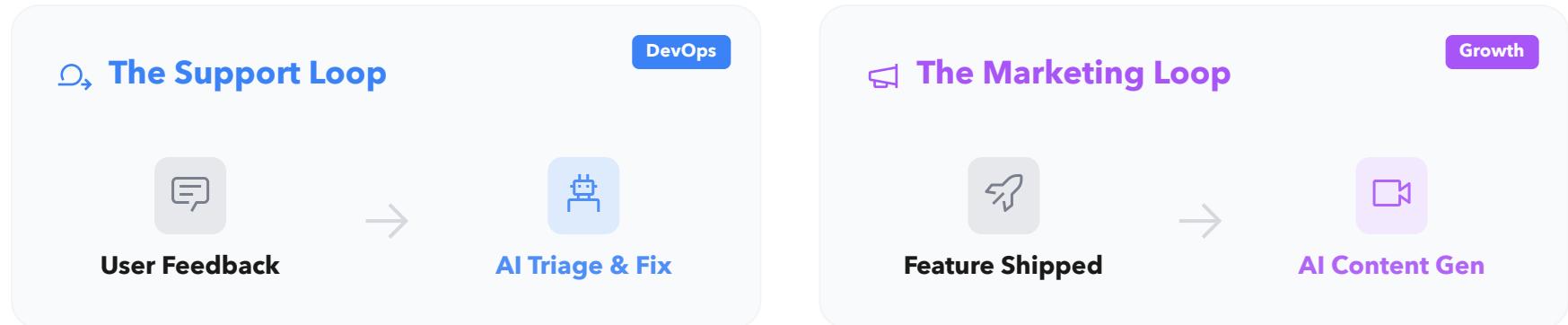
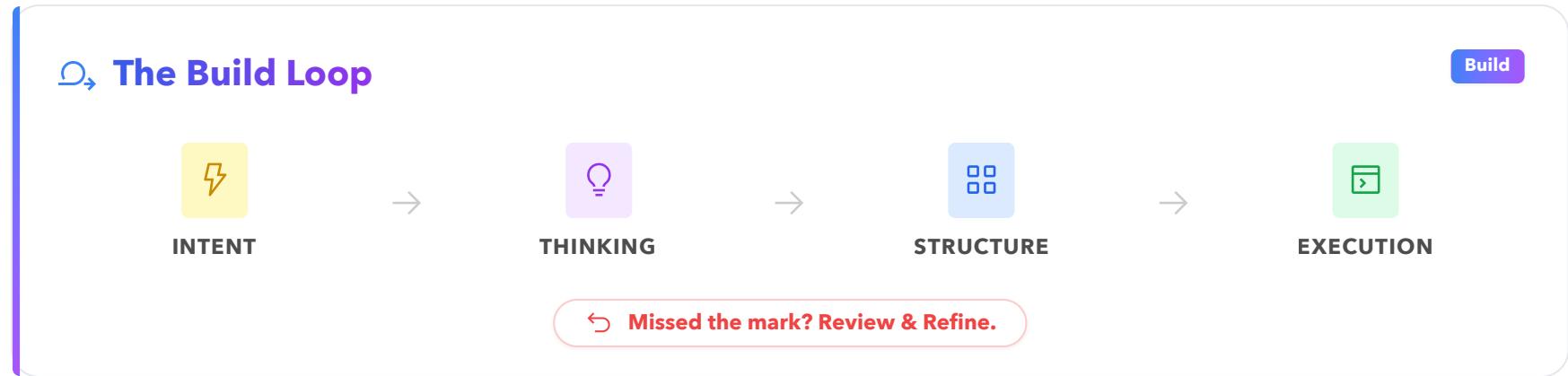


Safari



Smashers

Step 5: Tight Loops

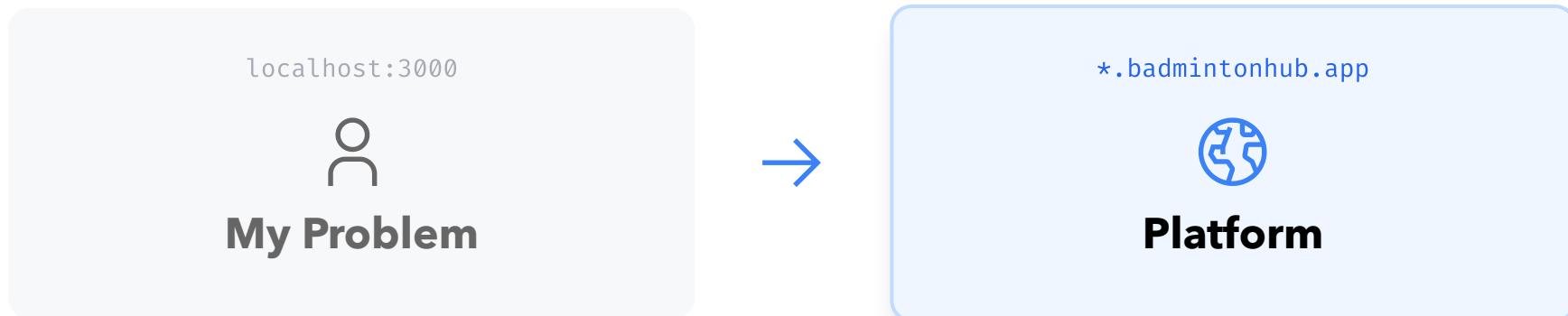


The Pivot: Accidental SaaS



AI Role: Platform Lead

- ② **The Request:** "Can we use your app for our club?"
- ❗ **The Fear:** "I can't maintain two codebases."
- </> **The Solution:** "Don't copy the app. Multi-tenant the db."





BADMINTONHUB

DESIGN YOUR CLUB

Customize the look and feel of your workspace.

Club Name
Notts

Your URL: notts.badmintonhub.app

Available! Lets build it.

Where are you located?
Nottingham

Choose a Theme
Selected: **Neon Night**

CLAIM THIS CLUB

LIVE PREVIEW

9:41

NOTTS
Nottingham

NEXT SESSION **CONFIRMED**

SOCIAL SESSION
TOMORROW • 2 HOURS

STARTING IN
23 Hours

Wednesday, 7:00 PM
Sports Hall A

JOIN NOW

The Investment

AI Role: CFO

THE SETUP COST



TIME INVESTED

4 Weeks

Part-time (Nights & Weekends)



MONEY INVESTED

\$0*

To launch the MVP

"I built a production SaaS for the cost of a domain name."

The Key Insight

AI didn't just write the code.

It unlocked Founder Mode.

The Shift



Input → **Intent**

Action → **Orchestrate**

Output → **Scale**

*"You provide the **clarity**.
The AI provides the **capacity**."*

The New Rules

Success Metric

Not "Headcount" or "Lines of Code" → **"Time to Value"**

-  **Trust, but Verify** (Refactor often, Review always)
-  **Limit Scope, Prevent Drift** (Small prompts yielding better code)
-  **Ship to Learn** (Real usage > Perfect code)

Final Thought

~~“The One-Person Billion Dollar Company”~~

One Person. Infinite Leverage.

The limit is no longer your capacity.
It is your clarity.

(Resources)



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DoAI.dev

Thank You!