

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

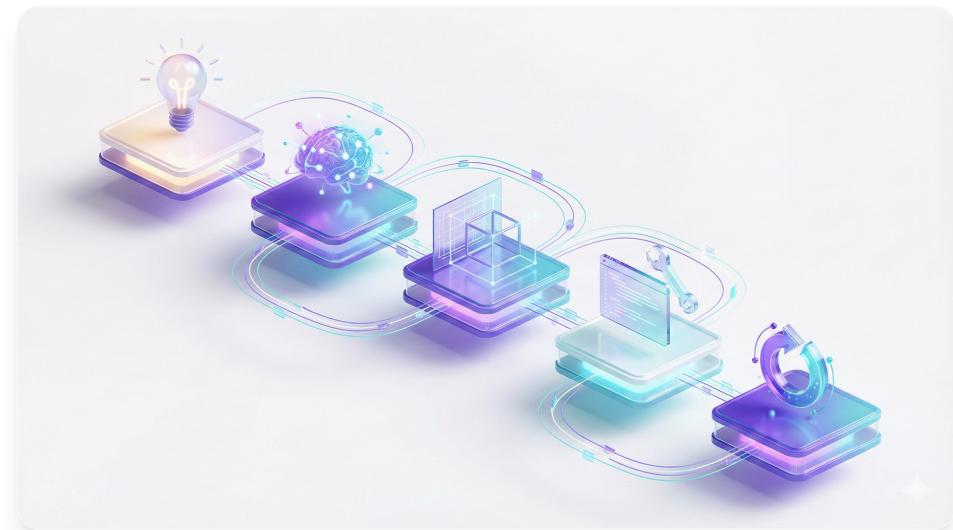
- 1  Capture **Intent**

- 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



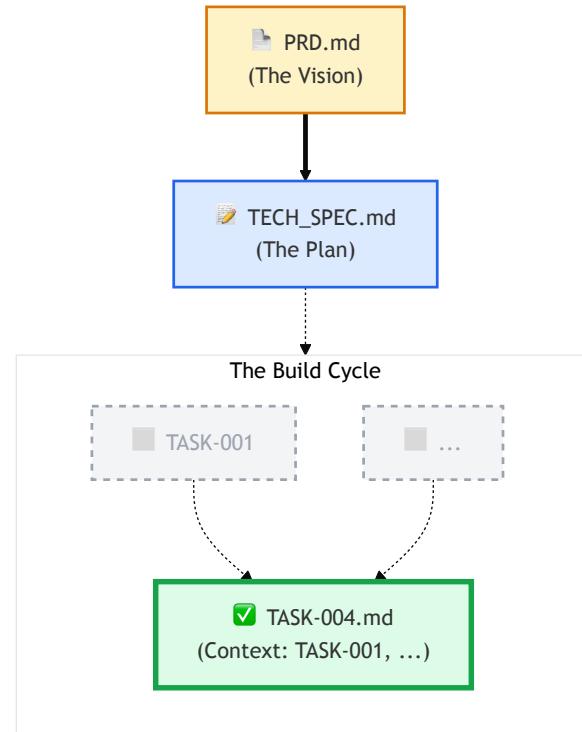
AI Role: Engineering Manager

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)

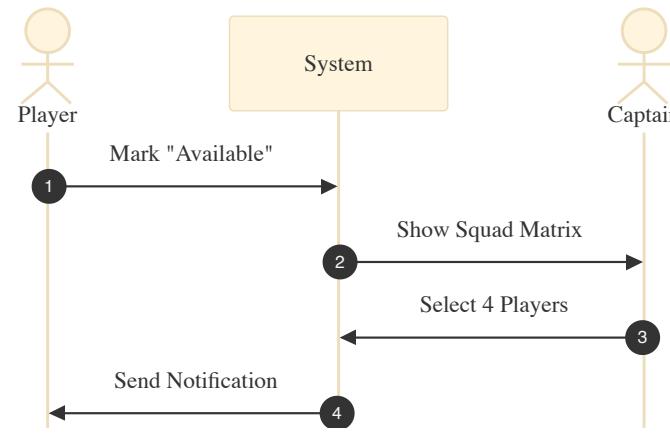
AI Role: Business Analyst

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

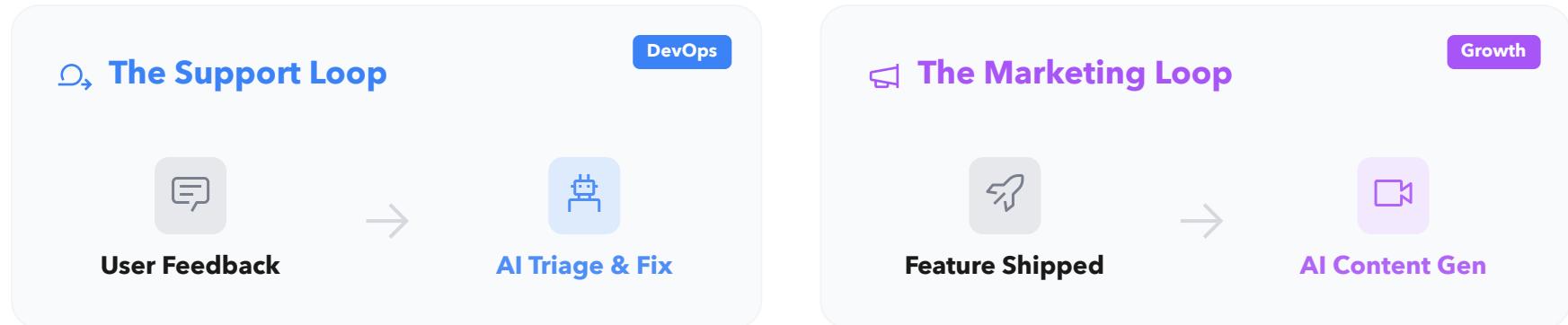
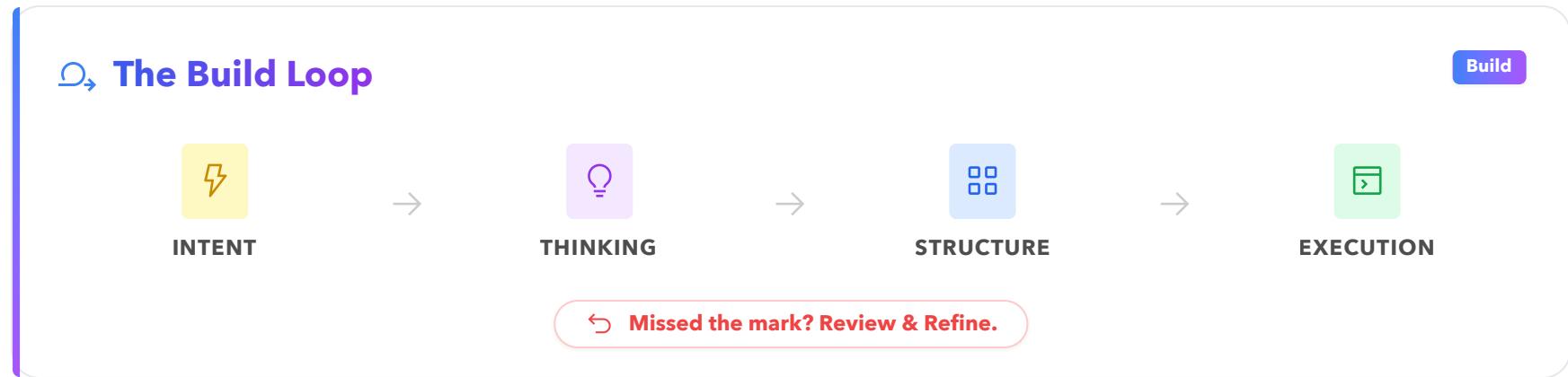


Safari



Smashers

Step 5: Tight Loops

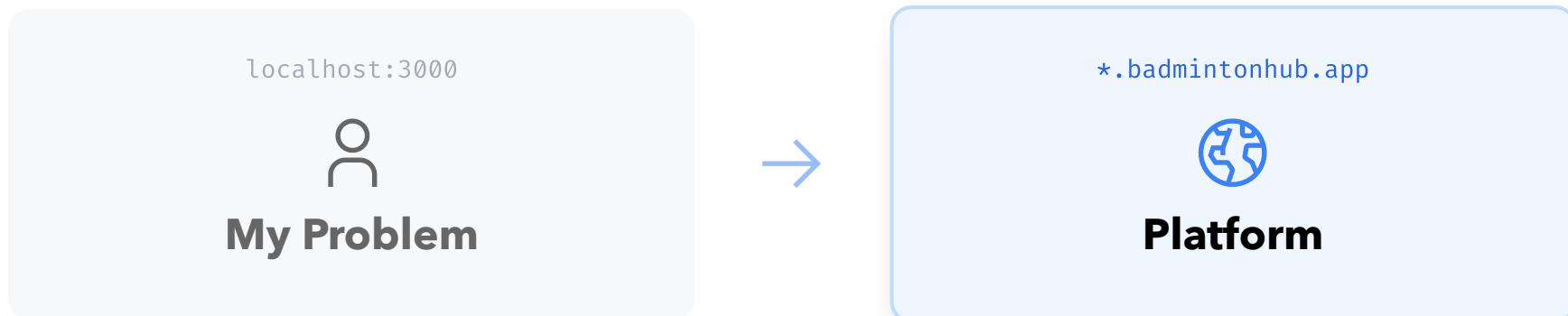


The Pivot: Accidental SaaS



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)



Scan to get to this slide

(Stack)



Connect

Kalyan Jampana

Siva Kovvuru

DoAI.dev

Thank You!