

Weather Farmer

Capstone 12 · AgriTech · Talodabi Academy

1 · Project overview

You are designing **farmer weather + planting windows** for one crop and location. Icons and calendar beat long text forecasts.

Deliverable	Full mobile MVP in Figma (not code)
Platform	Mobile app · Android-first · portrait
Screens	11 screens + 1 unhappy path (12 frames)
Features	3 core features
Bottom navigation	Bottom navigation with 4 items: Weather · Calendar · Alerts · Tips
Prototype	4 linked flows

Build order: Auth (screens 1–4) → nav tabs (5–8) → core flow (9–11) → unhappy path → link prototypes.

2 · Problem & primary user

Most Nigerian smallholder farmers still plant by tradition and guesswork rather than weather data. Climate change has made old planting calendars unreliable. Unexpected floods and dry spells wipe out entire harvests every year. Farmers have no accessible tool for agriculture-specific weather forecasts.

Primary user

"Ibrahim, a 52-year-old sorghum farmer in Kaduna who plants at the same time every year by tradition and loses crops when rains arrive late or floods arrive early."

Geographic scope: National-level

3 · Goals

User goal: See a simple weather forecast and planting advice tailored to his crop and location.

Business goal: Partner with NIMET (Nigeria Meteorological Agency) and agrochemical companies to provide data-driven recommendations.

Success: In a quick test, a farmer reads **7-day forecast**, sees **planting window**, and understands **LGA fallback** copy when data is missing.

4 • Market context

QUESTION	ANSWER
Who pays	Ibrahim expects free weather. Input companies, cooperatives, or state ag programs fund access (assumption).
Why not WhatsApp	Farmers use radio and memory. WhatsApp forwards of weather memes are unreliable. Need planting window on a calendar tied to crop.
Design focus	Icon-led 7-day forecast + planting calendar for one crop. LGA fallback copy (in brief) builds trust when data is missing.

Competitors to check:

- **Cropple** (farm weather + advisory + calendar in one ag app)
 - **Hello Tractor** (mechanization; some agronomic guidance)
 - **Radio / NIMET bulletins** (general)
 - **Google Weather / generic apps** (city forecast, not planting windows)
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5 • Validate before you design

Interview 3–5 people who match your primary user. Update this brief if interviews contradict it. Do not start hi-fi until you complete the confirmation below.

FIELD	YOUR ANSWER
Validated user (name, age, city)	
Problem in one sentence	
One interview quote	
Success metric for your test	
Primary colour and tone	
One competitor you checked	

Interview prompts

- "Walk me through the last time this happened."
- "What did you use instead? WhatsApp, paper, or nothing?"
- "What would make you trust this on a cheap Android phone?"
- "What would stop you from using this every week?"

6 · Features & scope

v1 · three features

1. 7-day weather forecast displayed in a simple, icon-led format for farming LGAs
2. Crop-specific planting calendar with ideal dates based on current weather patterns
3. Rain and flood alerts with simple preparation advice

Out of scope

- Crop insurance or input shop
- Satellite imagery or drone data
- Every crop in Nigeria in v1

7 · Screens

Design every row in wireframe, high-fidelity UI, and prototype (where the flow applies).

#	LAYER	SCREEN	WHAT TO SHOW
1	Auth	Splash Screen	App name with a sun/cloud illustration. Clean agricultural feel.
2	Auth	Onboarding (1 screen)	One screen: 'Get weather made for farmers in your area.' Ask user to pick their state and main crop.
3	Auth	Sign Up Screen	Farmer name, phone number, state, LGA, and primary crop. PIN for login.
4	Auth	Sign In Screen	Phone number and PIN.
5	App shell	Weather (tab)	Today's weather at the top (temperature, rain chance, condition icon). 7-day forecast as a horizontal scroll of day cards below.
6	App shell	Calendar (tab)	A monthly calendar view showing optimal planting windows for the user's crop highlighted in green, and risky periods in red.
7	App shell	Alerts (tab)	Toggle on/off for: Rain Alert, Flood Warning, Dry Spell Warning. User sets their crop stage (Planting / Growing / Harvest) to receive relevant alerts.
8	App shell	Tips (tab)	Short tips for the user's selected crop: best planting time, watering advice, and what to do in the current weather condition. 3 to 4 tips maximum.
9	Core flow	7-day forecast detail	Expanded day card with rain chance. Show bottom nav on post-sign-in screens.

10	Core flow	Planting window	Green/red windows on calendar for crop. Show bottom nav on post-sign-in screens.
11	Core flow	Alert armed	Rain or flood alert toggle confirmed. Show bottom nav on post-sign-in screens.

Layers: Auth = 1–4 · App shell = 5–8 · Core flow = 9–11

8 · Prototype flows

Link these in Figma. Examiners should click through without your voice-over.

Flow 1 · App entry

Splash → Onboarding → Sign Up or Sign In → first main tab

Flow 2 · Core task (all three features)

Sign In → Weather tab → Forecast → Calendar tab → Alerts tab

Core flow screens: 7-day forecast detail · Planting window · Alert armed

Flow 3 · Navigation

Link every nav tab so examiners can tap each bottom nav item. Tabs: Bottom navigation with 4 items: Weather · Calendar · Alerts · Tips

Flow 4 · Unhappy path

Trigger the unhappy path edge case and link to that screen.

9 · Unhappy path

Design this as its own screen state (frame 12):

Forecast data is unavailable for the user's specific LGA. Show: 'We don't have data for your exact area yet. Showing the forecast for [nearest major city]. Conditions will be similar.'

Link in **Flow 4**.

10 · Design system

RULE	DETAIL
Colour	You choose. Keep it simple and readable.

Type	You choose. Keep body text easy to read on a phone.
Tone	Design for your user, not for a tech audience.

Reuse on every screen:

- Primary button (active and disabled states)
- Input field (empty, filled, and error states)
- Card or list item used across the app
- Navigation bar with correct labels and icons
- Empty state: what the screen looks like with no data

11 · Submit & defense

Deliverables

#	DELIVERABLE	WHAT GOOD LOOKS LIKE
1	Wireframes	Every screen in this brief, plus the unhappy path. Layout and labels clear.
2	High-fidelity UI	Same frames polished. You choose colour and type. Bottom nav on every post-sign-in screen.
3	Prototype	Four linked flows (entry, core task, navigation, unhappy path). Examiners can use the app without your voice-over.
4	AI prototype	Figma Make: at least 2 screens. Share link.
5	Case study (1 page)	Problem · User · Who pays · Competitors · Solution · One design decision
6	Presentation (6–8 slides)	Name · Problem · User · Solution · Key screens · Flow demo · One decision

Before you present

- ☐ Every screen designed in wireframe and hi-fi
- ☐ Unhappy path screen designed and linked in the prototype
- ☐ Four prototype flows linked end to end
- ☐ At least one empty state on a list tab
- ☐ Shared components reused: button, input, card or row, bottom nav
- ☐ Case study names who pays and one competitor you checked
- ☐ You can explain one design decision in critique (why, not what)
- ☐ Completed 5 user interviews or 1 usability test
- ☐ Checked at least one competitor listed under Market context

