Product Requirements Document

Product Name: SpecifAI -- "Say it. Ship it."

Version: 1.0 -- July 2 2025

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1 - Vision

Enable Business Stakeholders to talk their ideas into production: one tap, speak a requirement, confirm an AI-generated spec, and ship it to GitHub as a fully-formed issue.

Developers (or autonomous agents) reply in the same thread, closing the feedback loop in minutes instead of days.

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2 - Personas

Persona	Goals	Pain Today	Value Delivered
Product Owner	Capture features fast	Must fill Jira templates; much tech jargon	Speak instead of type; GitHu
Developer	Clear acceptance criteria	Unclear specs -> Slack ping-pong	Structured issues + inline Q&A
Project Lead	Transparency & status	Context scattered across tools	Single conversational thread per issue

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3 - Goals & KPIs (MVP)

KPI	Target	Measurement
Time-to-Issue (voice -> GitHub)	<= 60 s	Timestamps
Clarification Rate (>= 1 comment)	-30% vs baseline	Before/after
MoM Retention (business users)	>= 40%	Supabase metrics

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4 - Functional Scope

1. Login / Project Pick -- GitHub OAuth (Supabase Auth), repo list.
2. Voice Capture & STT -- PWA mic, <= 2 min; raw audio -> Supabase Storage; Whisper v4 transcription.
3. AI Clarify Loop -- GPT-4o drafts issue; user confirms/edits.
4. GitHub Sync -- MCP server posts issue/comments; webhooks stream back to chat.
5. History & Search -- pgvector embeddings; 30-day audio retention (DSGVO).

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5 - Non-functional

Category	Requirement
Security	End-to-end TLS; JWT <= 60 min; RLS
Privacy	EU hosting (eu-central-1); configurable retention
Performance	P95 confirm -> issue <= 3 s
Availability	99.5% monthly uptime

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6 - Tech Architecture

```
graph TD
A(PWA - React 18) -->|Audio| T(Whisper API)
T --> C(Clarify-Chat)
C -->|Confirm| M(MCP Server - Node)
M -->|GraphQL| G[GitHub]
G -->|Webhooks| R(Supabase Realtime)
C -.-> D[(Supabase DB / Storage)]
T -.-> D
R --> C
```

Layer	Tech
UI	React 18 PWA (Vite / Next.js 14)
UI-Kit	shadcn/ui + Tailwind
State	React-Query
Auth/Data	Supabase
AI	Whisper v4 + GPT-4o
Integrator	Node 18 (fastify)
Hosting	Supabase + Vercel Edge

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7 - DB Schema (Supabase)

```
create table projects (...);
create table project_members (...);
create table issues (...);
create table messages (...);
create table audio_files (...);
-- RLS policies as shown earlier
```

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8 - Wireframes

Textual sketches omitted for brevity (see full design doc).

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9 - Roadmap

Milestone	Content	ETA
M0 Prototype	Voice flow, dummy issue	Week 1
M1 MVP	OAuth, AI loop, live GitHub	Week 4
M2 Beta	Push, embeddings search	Week 8
GA PWA	Store listing	Week 12

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10 - Risks

```
| Risk | Mitigation |
|------|------------|
| Whisper cost spikes | Clip limit + local trim |
| PWA background limits | <= 2 min recording, native app v2 |
| GitHub rate limits | Queue + back-off |
```

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11 - Name & Claim

SpecifAI -- "Say it. Ship it."

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12 - Open Questions

1. Auto-fix PR generation by MCP?
2. Roles (Reporter / Reviewer / Admin)?
3. On-prem STT for strict compliance?