

# BoringBiz.ai — AI-Driven Boring Business Lead Generation SaaS

**Tagline:** Find boring, high-intent local niches → auto-generate SEO deliverables → launch microsites → sell leads.

**Purpose of this doc:** a single, Gamma-importable, developer+product playbook combining the *Microsite Empire* operational manual and the *StepLock Protocol* into a concrete Firebase + Next.js implementation. Copy this markdown into a file `boringbiz-gamma-merged.md` or import directly into Gamma.

---

## Table of contents

1. Overview & positioning
  2. Microsite Empire phases mapped to app modules
  3. StepLock Protocol (keyword mapping + prioritization)
  4. Product features & user flows
  5. Tech stack & deployment
  6. Full scaffold (folder tree)
  7. Cloud Functions code (full files)
  8. Web app code (full files)
  9. Integration hooks (Notion, Airtable, Claude/OpenAI)
  10. UI/UX maps & reference HTML
  11. Midjourney + Ideogram prompts (visual assets)
  12. How to import into Gamma
  13. Next steps & checklist
- 

## 1) Overview & positioning

**BoringBiz.ai** helps agencies, freelancers, and small teams find under-served local niches ("boring businesses") and rapidly generate SEO deliverables and microsite briefs to capture high-intent leads. The product combines automated scraping, StepLock keyword mapping, and LLM-driven deliverable generation — delivered via a friendly dashboard.

**Primary users:** solo operators, local agencies, franchise marketers, business owners.

**Business model:** freemium → paid plans for unlimited audits, deliverables generation, Airtable/Notion sync, and agency features.

---

## 2) Microsite Empire phases → App modules

- **Phase 0 — Market selection (Lead Finder)**

- Module: Lead Finder UI — discover local markets and verticals.

- Data: city/state seed; competitors list; high-intent keywords.

- **Phase 1 — Keyword mapping (StepLock)**

- Module: Keyword Mapper service — classifies into Emergency / Service / Problem / Local.

- **Phase 2 — Microsite planning**

- Module: Microsite Planner (generates pages matrix: services × locations, content briefs).

- **Phase 3 — Build & deploy (MVP: brief generation)**

- Module: Deliverables exporter — JSON/PDF briefs, content outlines, schema.

- **Phase 4 — Traffic & capture**

- Module: Dashboard + tracking (lead potential estimates, saved audits, competitor hotlists).

- **Phase 5 — Scale & repeat**

- Module: Batch-operations (generate 50 microsites), integrations (Airtable/Notion/GitHub for pushes).

---

## 3) StepLock Protocol (concise)

StepLock is a deterministic keyword taxonomy that maps raw site content into four priority buckets:

- **Emergency** — keywords indicating urgent need ("mobile diesel repair", "24/7 tow truck")
- **Service** — transactional services ("AC repair", "window replacement")
- **Problem** — informational/problem queries ("AC not cooling")
- **Local** — geo modifiers and landmark-based queries ("near me", "Charlotte I-77 truck stop")

**Scoring & Prioritization:** assign higher weight to Emergency > Service > Local > Problem for lead-capture features. Use StepLock to prioritize microsite pages.

---

## 4) Product features & user flows

### Main flow (MVP)

1. User pastes competitor URL into Dashboard → presses Analyze.
2. Backend scrapes page (meta, H1, body, links, counts) → saves audit to Firestore.
3. StepLock mapper runs over body to produce keyword buckets.
4. Optional: Notion/Airtable logs created.
5. UI displays audit + quick actions: Generate brief, Export JSON.

### Admin flows

- Settings: add Notion DB ID, Airtable base, LLM API key (Claude/OpenAI).
- Batch: upload CSV of competitor URLs → queued audits (future).

---

## 5) Tech stack & deployment

- Next.js 14 (App Router) + Tailwind
- Firebase Hosting, Cloud Functions (Node 20 + TypeScript)
- Firestore (collections: `audits`, `projects`, `users` later)
- Optional: Notion API, Airtable API, Claude/OpenAI LLMs

**Deployment:** Firebase Studio or CLI (`firebase deploy --only functions,hosting`).

---

## 6) Full scaffold (folder tree)

```
boringbiz-firebase-starter/  
├─ firebase.json  
├─ .firebaserc  
├─ firestore.rules  
├─ storage.rules  
├─ README.md  
├─ functions/  
│   ├─ package.json  
│   ├─ tsconfig.json  
│   └─ src/  
│       ├─ index.ts  
│       ├─ stepLockMapper.ts  
│       ├─ notionClient.ts  
│       └─ airtableClient.ts  
└─ web/  
    ├─ package.json  
    └─ next.config.mjs
```

```

├─ postcss.config.js
├─ tailwind.config.js
├─ .env.local.example
├─ app/
│   ├── globals.css
│   ├── layout.tsx
│   ├── page.tsx
│   └─ api/
│       └─ audit/route.ts

```

## 7) Cloud Functions (full files)

functions/src/stepLockMapper.ts

```

export function stepLockMapText(text: string){
  const t = text.toLowerCase();
  const emergency = [];
  const service = [];
  const problem = [];
  const local = [];

  const emergencyTerms = ['24/7', '24 hour', 'emergency', 'mobile'];
  const serviceTerms = ['repair', 'install', 'service', 'replace', 'maintenance'];
  const problemTerms = ['not working', 'won\'t', 'broken', 'leak', 'won\'t start'];
  const localTerms = ['near me', '\bin\s', '\bcharlotte\b', '\bnew york\b'];

  emergencyTerms.forEach(w => { if(t.includes(w)) emergency.push(w); });
  serviceTerms.forEach(w => { if(t.includes(w)) service.push(w); });
  problemTerms.forEach(w => { if(t.includes(w)) problem.push(w); });
  localTerms.forEach(w => { if(t.includes(w)) local.push(w); });

  return { emergency, service, problem, local };
}

```

functions/src/notionClient.ts

```

export async function logAuditToNotion({ notionDbId, notionToken, title, url,
projectId, wordCount }:{ notionDbId?:string, notionToken?:string,
title?:string, url:string, projectId?:string, wordCount?:number }){
  if (!notionDbId || !notionToken) return;
  const { Client } = await import('@notionhq/client');
  const notion = new Client({ auth: notionToken });
  await notion.pages.create({

```

```

    parent: { database_id: notionDbId },
    properties: {
      Name: { title: [{ text: { content: title || url } }] },
      URL: { url },
      Project: { rich_text: [{ text: { content: projectId || 'default' } }] },
      WordCount: { number: wordCount || 0 }
    }
  });
}

```

functions/src/airtableClient.ts

```

import Airtable from 'airtable';
export async function upsertCompetitorToAirtable({ baseId, token, url, title }:
{ baseId?:string, token?:string, url:string, title?:string }){
  if (!baseId || !token) return;
  const base = new Airtable({ apiKey: token }).base(baseId);
  await base('Competitors').create([{ fields: { URL: url, Title: title ||
url } }]);
}

```

functions/src/index.ts (audit endpoint)

```

import * as functions from 'firebase-functions';
import * as admin from 'firebase-admin';
import axios from 'axios';
import * as cheerio from 'cheerio';
import metascraper from 'metascraper';
import metascraperTitle from 'metascraper-title';
import metascraperDescription from 'metascraper-description';
import metascraperUrl from 'metascraper-url';
import { logAuditToNotion } from './notionClient.js';
import { upsertCompetitorToAirtable } from './airtableClient.js';
import { stepLockMapText } from './stepLockMapper.js';

const scraper = metascraper([metascraperTitle(), metascraperDescription(),
metascraperUrl()]);

admin.initializeApp();
const db = admin.firestore();

function validUrl(u: string): boolean { try { new URL(u); return true; } catch
{ return false; } }

export const auditUrl = functions

```

```

.region('us-central1')
.runWith({ memory: '512MB', timeoutSeconds: 120 })
.https.onRequest(async (req, res) => {
  res.set('Access-Control-Allow-Origin', '*');
  res.set('Access-Control-Allow-Headers', 'Content-Type');
  if (req.method === 'OPTIONS') return res.status(204).send('');

  try {
    const { url, projectId = 'default', notionDbId, notionToken,
airtableBaseId, airtableToken } = req.body || {};
    if (!url || !validUrl(url)) return res.status(400).json({ error: "Provide
a valid 'url'." });

    const resp = await axios.get(url, { timeout: 20000, headers: { 'User-
Agent': 'Mozilla/5.0' } });
    const html = resp.data as string;
    const $ = cheerio.load(html);
    const meta = await scraper({ html, url });

    const h1 = $('h1').first().text().trim();
    const title = meta.title || $('title').text().trim();
    const description = meta.description || $
('meta[name="description"]').attr('content') || '';
    const bodyText = $('body').text().replace(/\s+/g, ' ').trim();
    const wordCount = bodyText.split(' ').filter(Boolean).length;
    const imagesCount = $('img').length;
    const scriptsCount = $('script').length;
    const hasWebp = $("img[src$='.webp']").length > 0;
    const links = Array.from(new Set($('a[href]').map((_, a) => String($
(a).attr('href')))).get()).slice(0, 100);

    const stepLock = stepLockMapText(bodyText);

    const doc = {
      url, projectId,
      fetchedAt: admin.firestore.FieldValue.serverTimestamp(),
      title, description, h1,
      wordCount,
      speedHints: { imagesCount, scriptsCount, hasWebp },
      links,
      stepLock
    };

    const ref = await db.collection('audits').add(doc);

    await logAuditToNotion({ notionDbId, notionToken, title, url, projectId,
wordCount });
    await upsertCompetitorToAirtable({ baseId: airtableBaseId, token:

```

```

airtableToken, url, title });

    // TODO: Call Claude/OpenAI with the scraped content to produce
    `deliverables` JSON
    // Example: deliverables = await callLLM({ url, bodyText, stepLock,
links })
    // await db.collection('audits').doc(ref.id).update({ deliverables });

    return res.json({ id: ref.id, ...doc });
  } catch (e:any) {
    console.error(e);
    return res.status(500).json({ error: e.message || 'Failed to audit
URL' });
  }
});

```

## 8) Web app code (full files)

web/app/page.tsx

```

'use client';
import { useState } from 'react';


export default function Page(){
  const [url,setUrl]=useState('');
  const [loading,setLoading]=useState(false);
  const [data,setData]=useState<any>(null);
  const [err,setErr]=useState<string|undefined>();

  async function run(){
    try{
      setLoading(true); setErr(undefined); setData(null);
      const r = await fetch('/api/audit',{method:'POST',headers:{'Content-
Type':'application/json'},body:JSON.stringify({url,projectId:'default'})});
      const j = await r.json();
      if(!r.ok) throw new Error(j.error||'Failed');
      setData(j);
    }catch(e:any){ setErr(e.message) }finally{ setLoading(false) }
  }

  return (
    <main className="max-w-4xl mx-auto p-6 space-y-6">
      <header className="flex items-center justify-between">
        <div>

```

```

        <h1 className="text-2xl font-semibold">BoringBiz.ai</h1>
        <p className="text-sm text-gray-500">Paste a competitor URL  get
instant audit signals.</p>
    </div>
    <button className="btn btn-accent" onClick={()=>alert('Upgrade flow
TBD')}>Upgrade</button>
</header>

<section className="card p-4 space-y-3">
    <div className="flex gap-2">
        <input className="flex-1 border rounded-lg px-3 py-2"
placeholder="https://competitor.com" value={url}
onChange={e=>setUrl(e.target.value)}/>
        <button className="btn btn-primary" onClick={run} disabled={loading}
>{loading?'Analyzing...':'Analyze URL'}</button>
    </div>
    {err && <p className="text-red-600 text-sm">{err}</p>}
</section>

{data && (
    <section className="card p-4 space-y-2">
        <div className="font-semibold">{data.title || data.url}</div>
        <div className="text-sm text-gray-600">{data.description}</div>
        <div className="grid grid-cols-3 gap-3 mt-2 text-sm">
            <div className="p-3 bg-green-50 rounded">Words: <b>{data.wordCount}
</b></div>
            <div className="p-3 bg-yellow-50 rounded">Imgs:
<b>{data.speedHints?.imagesCount}</b></div>
            <div className="p-3 bg-orange-50 rounded">Scripts:
<b>{data.speedHints?.scriptsCount}</b></div>
        </div>
        <details className="mt-3">
            <summary className="cursor-pointer">Links (sample)</summary>
            <pre className="text-xs bg-gray-50 p-3 rounded overflow-auto max-
h-64">{JSON.stringify(data.links,null,2)}</pre>
        </details>
    </section>
)}
</main>
);
}

```

```
web/app/api/audit/route.ts
```

```
import { NextRequest, NextResponse } from 'next/server';
```



```
export async function POST(req: NextRequest){
  const payload = await req.json();
  const url = `https://us-central1-YOUR_PROJECT_ID.cloudfunctions.net/auditUrl`;
  const r = await fetch(url, { method: 'POST', headers: {'Content-Type': 'application/json'}, body: JSON.stringify(payload)});
  const data = await r.json();
  return new NextResponse(JSON.stringify(data), { status: r.status, headers: { 'Content-Type': 'application/json' } });
}
```

## 9) Integration hooks (how & where)

- **Notion:** pass `notionDbId` + `notionToken` in POST body to `auditUrl` — `notionClient.ts` writes a page.
- **Airtable:** pass `airtableBaseId` + `airtableToken` — `airtableClient.ts` creates Competitor record.
- **Claude/OpenAI:** TODO — add LLM keys to functions environment and call after scraping to produce `deliverables` JSON. Save as `audits/{id}.deliverables`.

Inline TODO in `functions/src/index.ts` included for where to call the LLM.

## 10) UI/UX maps & Reference HTML

- Navigation: Dashboard, Lead Finder, Competitors, Trends, Settings
- Primary CTA: Analyze URL -> Generate Brief
- Reference UI: (Embed your dashboard HTML in a slide or attach as code block)

(Use the Dashboard HTML from your design as a reference — include in Gamma as a code block or as an iframe preview.)

## 11) Midjourney + Ideogram prompts (copy/paste ready)

**Midjourney — dashboard doodle (16:9)**

friendly line-art doodle of a sprouting plant growing from a map pin, minimal outlines, slight texture, playful, flat colors, brand palette #32C682 #FF785A #F5C542 on white, vector feel --ar 16:9 --v 6

**Midjourney — icon set (1:1)**

set of 8 simple vector icons, rounded shapes, consistent stroke, topics: wrench, map pin, truck, phone, star reviews, speedometer, sitemap, link, brand palette #32C682 #FF785A #F5C542 on white --ar 1:1 --v 6

### Ideogram — Logo Prompt

Wordmark logo: "BoringBiz.ai" with a small sprouting leaf over the dot on the "i", rounded friendly sans, subtle stroke, primary #32C682, secondary accent #FF785A, flat vector style, minimal and modern

---

## 12) How to import into Gamma

1. Save this file as `boringbiz-gamma-merged.md` locally.
2. Open <https://gamma.app> → New doc → Import → Upload Markdown.
3. Gamma will split headings into slides/pages. Check code blocks and expand as needed.

---

## 13) Next steps & checklist (short)

-

---

### Ready to go

This merged markdown is designed to be **imported into Gamma** for a living, editable playbook. Open the canvas to review, edit, and export as slides or handoffs.

*End of document*