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.

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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.

Microsite Empire Phases → App Modules

Phase 0 – Market Selection

1

Module: Lead Finder UI

Discover local markets and verticals

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

Phase 1 – Keyword Mapping

2

Module: Keyword Mapper service

Classifies into Emergency / Service / Problem / Local

Phase 2 – Microsite Planning

3

Module: Microsite Planner

Generates pages matrix: services × locations, content briefs

Phase 3 – Build & Deploy

4

Module: Deliverables exporter

JSON/PDF briefs, content outlines, schema

MVP: brief generation

Phase 4 – Traffic & Capture

5

Module: Dashboard + tracking

Lead potential estimates, saved audits, competitor hotlists

Phase 5 – Scale & Repeat

6

Module: Batch-operations

Generate 50 microsites, integrations (Airtable/Notion/GitHub for pushes)

StepLock Protocol

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

Emergency

Keywords indicating urgent need

Examples: "mobile diesel repair", "24/7 tow truck"

Service

Transactional services

Examples: "AC repair", "window replacement"

Problem

Informational/problem queries

Examples: "AC not cooling"

Local

Geo modifiers and landmark-based queries

Examples: "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.

Product Features & User Flows

Main Flow (MVP)

User pastes competitor URL into Dashboard → presses Analyze

Backend scrapes page (meta, H1, body, links, counts) → saves audit to Firestore

StepLock mapper runs over body to produce keyword buckets

Optional: Notion/Airtable logs created

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)

Tech Stack & Deployment

Next.js 14

App Router + Tailwind

Firebase

Hosting, Cloud Functions (Node 20 + TypeScript)

Firestore

Collections: audits, projects, users (later)

Optional Integrations

- Notion API
- Airtable API
- Claude/OpenAI LLMs

Deployment

Firebase Studio or CLI:

```
firebase deploy --only functions,hosting
```

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
```

The folder structure follows standard Next.js and Firebase conventions, with clear separation between frontend (web) and backend (functions) code.

Cloud Functions: 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 };
}
```

This function implements the core StepLock Protocol, categorizing text into the four priority buckets: Emergency, Service, Problem, and Local.

Cloud Functions: 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 }
    }
  });
}
```

This function handles integration with Notion, creating a new page in a specified database with audit information.

Cloud Functions: 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 } }]);
}
```

This function handles integration with Airtable, creating a new record in the Competitors table with the URL and title information.

Cloud Functions: index.ts (Part 1)

```
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
```

This is the first part of the main Cloud Function that handles URL auditing, importing necessary dependencies and setting up the Firebase environment.

Cloud Functions: index.ts (Part 2)

```
.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:
```

Cloud Functions: index.ts (Part 3)

```
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' });
    }
  });
```

This is the final part of the auditUrl Cloud Function, which processes the scraped data, saves it to Firestore, and integrates with Notion and Airtable. It includes a TODO comment for future LLM integration.

Web App Code: 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(null);
  const [err,setErr]=useState();
  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 (
```

This is the first part of the main page component for the web application, handling state management and the URL analysis function.

{data.title || data.url}

{data.description}

Words: **{data.wordCount}**

Imgs: **{data.speedHints?.imagesCount}**

Scripts: **{data.speedHints?.scriptsCount}**

▼ Links (sample)

> {JSON.stringify(data.links,null,2)}

Web App Code: 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' } });
}
```

Integration Hooks

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

Call after scraping to produce deliverables JSON

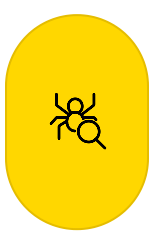
Save as audits/{id}.deliverables

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

UI/UX Maps & Reference HTML

Navigation Structure

Dashboard



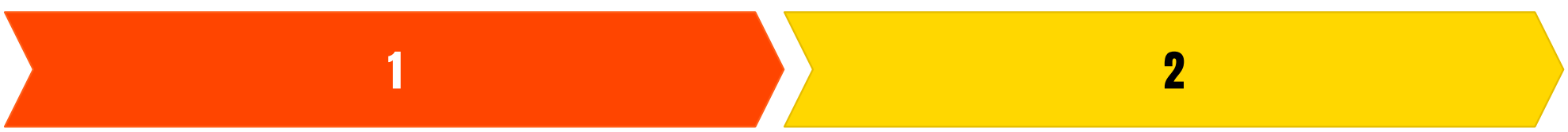
Lead Finder

Competitors

Trends

Settings

Primary CTA Flow



Reference UI: (Dashboard HTML from your design should be included as a code block or as an iframe preview)

Midjourney + Ideogram Prompts

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