

DAVID'S TECH FEED

Technical Documentation

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1. Project Overview

David's Tech Feed is a personal AI-powered link curation blog. The user saves links from any device, Claude AI automatically generates a summary and keywords, and the post is published to the public blog. The entire pipeline — from saving a link to seeing it live — is automated.

1.1 Live URL

<https://tech-blog-sandy-six.vercel.app>

1.2 Key Features

- Paste any URL in the admin panel → AI generates title, summary, and keywords
- Share Sheet automation on Mac, iPhone, and iPad via Apple Shortcuts
- Public blog with bold editorial design, dark/light mode toggle
- Filter by keyword tags and full-text search
- Hebrew translation button (via Google Translate) on featured post
- Reading time estimate on each post
- Edit and delete posts from the admin panel

2. Technology Stack

Layer	Technology	Notes
Frontend	Next.js 16 (App Router)	TypeScript, Tailwind CSS
Styling	Inline styles + Tailwind	Playfair Display + DM Mono fonts
AI Summarization	Claude Sonnet (Anthropic API)	Generates summary + 5–7 keywords
Web Scraping	Jina Reader API	Free, no key required. Falls back to raw HTML
Database	Supabase (PostgreSQL)	Free tier, RLS disabled for admin operations
Deployment	Vercel	Auto-deploys on git push to main
Version Control	GitHub	github.com/dcastiel007/tech-blog
Automation	Apple Shortcuts	Share Sheet on Mac, iPhone, iPad

3. Project Architecture

3.1 File Structure

```
app/
  page.tsx          # Public blog homepage (client component)
  layout.tsx        # Root layout with metadata
  globals.css       # Tailwind imports
  admin/
    page.tsx        # Password-protected admin panel
  api/
    scrape/route.ts  # POST: scrape URL → summarize → save to DB
    posts/route.ts   # GET: fetch all posts
    posts/[id]/route.ts # PATCH: edit post | DELETE: delete post
lib/
  supabase.ts       # Supabase clients (public + admin) + Post type
  scraper.ts        # Jina Reader integration with HTML fallback
  summarize.ts      # Claude API wrapper returning JSON
```

3.2 Data Flow

- User saves a URL (via admin panel or Apple Shortcut)
- POST /api/scrape receives the URL
- scraper.ts fetches article content via Jina Reader (<https://r.jina.ai/{url}>)
- summarize.ts sends content to Claude Sonnet, receives JSON with summary + keywords
- Post is saved to Supabase posts table
- Public homepage fetches posts from /api/posts and renders them

3.3 Database Schema

Table: posts

Column	Type	Notes
id	uuid	Primary key, auto-generated
url	text	Original article URL
title	text	AI-generated or manually edited
summary	text	2–3 sentence AI summary
keywords	text[]	5–7 AI-generated keyword tags
favicon_url	text	Fetched via Google favicon service
domain	text	Extracted from URL
created_at	timestampz	Auto-set on insert

4. Environment Variables

Set in .env.local for local development, and in Vercel dashboard for production.

ANTHROPIC_API_KEY	sk-ant-api03-... (from console.anthropic.com)
NEXT_PUBLIC_SUPABASE_URL	https://gkcbbtnchgvosulmrjyf.supabase.co
NEXT_PUBLIC_SUPABASE_ANON_KEY	sb_publishable_... (public/anon key)
SUPABASE_SERVICE_ROLE_KEY	sb_secret_... (service role key – keep secret)
ADMIN_PASSWORD	GreenGreen1234! (change this for security)

5. API Reference

POST /api/scrape

Creates a new post. Requires admin password header.

Header	x-admin-password: <ADMIN_PASSWORD>
Body	{ "url": "https://example.com/article" }
Returns	{ "id": "uuid", "title": "...", "summary": "...", ... }

GET /api/posts

Returns all posts ordered by created_at descending. Public — no auth required.

PATCH /api/posts/[id]

Updates a post's title, summary, and/or keywords. Requires admin password.

Header	x-admin-password: <ADMIN_PASSWORD>
Body	{ "title": "New title", "summary": "...", "keywords": ["tag1", "tag2"] }

DELETE /api/posts/[id]

Deletes a post permanently. Requires admin password.

6. Admin Panel

Available at /admin. Password-protected — the UI is locked behind a password screen.

6.1 Features

- Create Post: paste a URL, click Create Post. Claude scrapes and summarizes automatically.
- Edit Post: click Edit on any post to update title, summary, or keywords.
- Delete Post: click Delete to permanently remove a post.

6.2 Known Limitations

- Some sites (Medium, Twitter, LinkedIn, paywalled news) block scraping. Posts from these will have generic summaries.
- If a bad post is created, use Edit to fix the title/summary, or Delete to remove it.

7. Apple Shortcuts Integration

7.1 Mac Safari Shortcut

Runs from the Shortcuts menu bar. Steps:

- Get current web page from Safari
- Get URLs from Web Page
- Get contents of `https://tech-blog-sandy-six.vercel.app/api/scrape` (POST, JSON body: { "url": Web Page }, headers: Content-Type + x-admin-password)
- Show Notification: Posted to Tech Feed!

7.2 iPhone / iPad Share Sheet Shortcut

Triggered from the Safari Share button. Steps:

- Receive input from Share Sheet (URLs)
- Get contents of `https://tech-blog-sandy-six.vercel.app/api/scrape` (POST, JSON body: { "url": Shortcut Input }, headers: Content-Type + x-admin-password)
- Show Notification: Posted to Tech Feed!

8. Deployment

8.1 Local Development

```
cd ~/Documents/VS-Code-Projects/tech-blog  
npm run dev
```

Open <http://localhost:3000> in the browser. If the server hangs, run:

```
rm -rf .next && npm run dev
```

8.2 Deploy to Production

```
git add .  
git commit -m "Your commit message"  
git push
```

Vercel auto-deploys from the main branch within ~1 minute.

8.3 Vercel Configuration

- Project: tech-blog
- Domain: tech-blog-sandy-six.vercel.app
- GitHub repo: github.com/dcastiel007/tech-blog
- All 5 environment variables must be set in Vercel dashboard

9. Known Issues & Solutions

Issue	Solution
Dev server won't start / hangs	Run: <code>rm -rf .next && npm run dev</code>
Turbopack crash / corrupted DB	Run: <code>rm -rf .next && npm run dev</code>
Edit not saving (returns 200 but no change)	RLS was blocking updates — fixed by disabling RLS on posts table
Medium / paywalled sites scrape fails	Title shows 'Just a moment...' — edit or delete the post manually
'Get Current Web Page' not supported on iPhone	Use the separate iPhone shortcut with Share Sheet input instead

10. Future Roadmap (v1.1+)

- Email-to-post automation (forward an email with a link → auto-post)
- iOS widget showing latest posts
- Custom domain
- Better handling of paywalled / bot-protected sites
- Post scheduling (save now, publish later)
- RSS feed
- Analytics dashboard