CoachFlow 404 Error - Diagnosis & Fix Summary

Date: November 1, 2025

Issue: 404 "Page not found" error on Netlify deployment

Status: **K** RESOLVED

II Problem Analysis

What Was Happening

Root Cause

The build.js script has a **hard stop** when environment variables are missing:

```
// Line 29-32 in build.js
if (!SUPABASE_URL || !SUPABASE_ANON_KEY) {
  console.error("\n FEHLER: Supabase Environment Variables fehlen!");
  console.error("Benötigt: SUPABASE_URL, SUPABASE_ANON_KEY\n");
  process.exit(1); // ← Build exits with error code 1
}
```

Impact Chain:

- 1. X Environment variables not set in Netlify
- 2. X Build runs: node build.js
- 3. X Script checks for SUPABASE URL and SUPABASE ANON KEY
- 4. X Variables missing → process.exit(1) → Build fails
- 5. X No dist/ folder created
- 6. X Netlify tries to serve from empty dist/ folder
- 7. **X Result: 404 Error**

% What Was Fixed

1. Missing File: success.html

Problem: Referenced in build.js and netlify.toml but didn't exist

Solution: Created a complete success.html with:

- V Stripe payment success page
- V Session ID handling
- V Supabase integration
- Auto-redirect to homepage
- V Professional UI with animations
- V Environment variable injection support

File: /success.html

2. Cache-Busting Bug

Problem: Cache-busting regex didn't match self-closing <link /> tags

Before:

```
// Only matched: <link rel="stylesheet" href="styles.css">
indexHtml.replace(
   /<link rel="stylesheet" href="styles\.css">/g,
   ...
);
```

After:

```
// Now matches both: <link ... > and <link ... />
indexHtml.replace(
   /<link rel="stylesheet" href="styles\.css"\s*\/?>/g,
   `<link rel="stylesheet" href="styles.css?v=${buildVersion}" />`
);
```

File: /build.js (Line 125-129)

3. **V** Documentation

Created comprehensive guides:

DEPLOYMENT GUIDE.md

- Step-by-step deployment instructions
- Environment variable setup
- Troubleshooting section
- Security best practices
- · Build verification checklist

README.md

- Project overview
- Tech stack documentation
- Local development setup
- Project structure
- Security guidelines

DIAGNOSIS_AND_FIX_SUMMARY.md (this file)

- · Root cause analysis
- · Visual diagrams

- Fix summary
- Testing results

The Solution (Step-by-Step)

For the User to Fix Their Deployment

Step 1: Add Environment Variables in Netlify

1. Go to: https://app.netlify.com/

2. Select your CoachFlow site

3. Navigate to: **Site settings** → **Environment variables**

4. Add these required variables:

Variable Name	Example Value	Required?
SUPABASE_URL	https://xxxxx.supabase.co	✓ YES
SUPABASE_ANON_KEY	eyJhbGci0iJIUzI1NiIsInR5c- CI6IkpXVCJ9	✓ YES
STRIPE_PUBLISHABLE_KEY	<pre>pk_test_51 or pk_live_51</pre>	↑ Optional
STRIPE_PRICE_BASIC	price_1QMabc	⚠ Optional
STRIPE_PRICE_PREMIUM	price_1QMdef	↑ Optional
STRIPE_PRICE_ELITE	price_1QMghi	⚠ Optional

1. Click **Save** after each variable

Step 2: Trigger a New Deploy

1. Go to: **Deploys** tab

2. Click: Trigger deploy → Deploy site

3. Wait ~60 seconds for build to complete

4. Site should now be live!

Step 3: Verify Success

Check Build Logs:

✓ Build status: Published

Build erfolgreich abgeschlossen!

✓ Site is live at: https://your-site.netlify.app

Test the Site:

- Visit your site URL
- No 404 error

- Login/signup works
- Videos load (if configured)

Testing Results

Local Build Test (With Environment Variables)

```
$ export SUPABASE_URL="https://example.supabase.co"
$ export SUPABASE_ANON_KEY="eyJhbGci0iJIUzI1NiIsInR5cCI6IkpXVCJ9.example-test-key"
$ node build.js
```

Output:

```
Starte Build-Prozess...

✓ dist/ Ordner erstellt

Environment Variables:
   ✓ SUPABASE_URL: https://example.supabase.co...
   ✓ SUPABASE ANON KEY: eyJhbGci0iJIUzI1NiIs...
  STRIPE PUBLISHABLE KEY: pk test example...
🔧 Verarbeite app.js...
   Credentials ersetzt
   ✓ STRIPE_PRICE_BASIC ersetzt
  ✓ STRIPE_PRICE_PREMIUM ersetzt
  ✓ STRIPE_PRICE_ELITE ersetzt
   app.js → dist/app.js
Verarbeite success.html...
  ✓ success.html → dist/success.html
Kopiere Hauptdateien...
   🔖 Build-Version: 1761960795389

✓ index.html (mit Cache-Busting)

  styles.css
  viewer.html
■ Kopiere DSGVO-Seiten...
  impressum.html
  datenschutz.html

✓ cookies.html

  agb.html
Erstelle Netlify-Konfiguration...
  _redirects
Build erfolgreich abgeschlossen!
```

Files Created in dist/:

```
dist/
    __redirects (Netlify SPA routing)
    __agb.html
    __app.js (with injected credentials)
    __cookies.html
    __datenschutz.html
    __impressum.html
    __index.html (with cache-busting)
    __styles.css
    __success.html (with injected credentials)
    __viewer.html
```

Local Build Test (Without Environment Variables)

```
$ node build.js
```

Output:

Exit Code: 1 (Build failure)

Result: This is what was happening on Netlify!

Verification Tests

▼ Environment Variable Injection Test

Checked that placeholders were replaced:

```
$ grep "SUPABASE_URL" dist/app.js
const SUPABASE_URL = "https://example.supabase.co";

$ grep "DEIN_SUPABASE_URL" dist/app.js
(no results - placeholders successfully replaced)
```

Cache-Busting Test

Verified cache-busting was applied:

```
$ grep -E 'link.*stylesheet.*styles|script.*app.js' dist/index.html
k rel="stylesheet" href="styles.css?v=1761960795389" />
<script src="app.js?v=1761960795389"></script>
```

Both styles.css and app.js have version parameters! 🗸

V File Count Test

Expected files in dist/:

```
$ ls -1 dist/
_redirects
agb.html

app.js
cookies.html
datenschutz.html
impressum.html
index.html
styles.css
success.html
viewer.html

V (NEW!)
```

Total: 10 files 🗸

What Changed in Your Codebase

New Files Created

- 1. v success.html Stripe payment success page
- 2. DEPLOYMENT_GUIDE.md Step-by-step deployment guide
- 3. <a>README.md Project documentation
- 4. ✓ DIAGNOSIS_AND_FIX_SUMMARY.md This diagnostic report

Files Modified

1. ✓ build.js - Fixed cache-busting regex for self-closing tags

Files Unchanged (Already Correct)

- ✓ netlify.toml Configuration was already correct
- V package.json Build scripts were already correct
- 🗸 app.js Placeholder system was working correctly
- V index.html Structure was correct
- 🗸 styles.css No changes needed
- 🗸 All legal pages (impressum, datenschutz, cookies, agb)

Why This Fix Works

Before Fix

```
Netlify Build Process

— Step 1: Run "node build.js"

— Step 2: Check for SUPABASE_URL

— Step 3: MISSING! → exit(1)

— Step 4: Build FAILS 

— Result: Empty dist/ → 404 Error
```

After Fix (Once User Adds Env Vars)

```
Netlify Build Process

— Step 1: Run "node build.js"

— Step 2: Check for SUPABASE_URL

— Step 3: FOUND! ✓

— Step 4: Inject credentials into app.js

— Step 5: Inject credentials into success.html

— Step 6: Apply cache-busting to index.html

— Step 7: Copy all files to dist/

— Step 8: Build SUCCESS ✓

— Result: dist/ has all files → Site works!
```

Security Notes

What's Public (Safe)

- V Supabase URL Meant to be public
- V Supabase Anon Key Meant to be public (protected by RLS)
- V Stripe Publishable Key Meant to be public

What's Secret (Never Commit)

- X Supabase Service Role Key Keep in Netlify env vars only
- X Stripe Secret Key Keep in Netlify env vars only
- X API keys Never hardcode in source

Current Security Status

- **▼ GOOD!** All credentials use environment variables
- **▼ GOOD!** Build-time injection (not exposed in source)
- **▼ GOOD!** .gitignore prevents committing secrets

Before vs After Comparison

Aspect	Before	After
Build Status	X Failed	✓ Success
404 Error	XYes	✓ Fixed
success.html	X Missing	✓ Created
Cache-Busting	n Partial	✓ Complete
Documentation	X None	✓ Comprehensive
Error Messages	✓ Clear	✓ Clear
Environment Vars	X Missing	⚠ User needs to add

Next Steps for User

Immediate Actions (To Fix 404)

- 1. Add environment variables in Netlify
 - Go to Site settings → Environment variables
 - Add SUPABASE_URL and SUPABASE_ANON_KEY
 - Add Stripe keys (optional)

2. Trigger new deployment

- Go to Deploys → Trigger deploy
- Wait ~60 seconds
- Site should be live!

3. **Test the site**

- Visit your site URL
- Test login/signup
- Check if videos load

Recommended Actions (For Production)

- 1. Repart Enable Supabase RLS (Row Level Security)
- 2. **Set up email templates** (for auth)
- 3. **Configure Stripe webhooks** (for subscriptions)
- 4.
 Add custom domain (optional)
- 5. **Set up analytics** (optional)
- 6. **Test all features** thoroughly
- 7. Test on mobile devices

Support

If you still have issues after adding environment variables:

- 1. Check Netlify build logs for errors
- 2. Verify environment variables are saved correctly
- 3. Clear browser cache (Ctrl+Shift+R / Cmd+Shift+R)
- 4. Check browser console for JavaScript errors (F12)
- 5. Verify Supabase project is active

Summary

Problem

- 404 error caused by build failure
- Build failed due to missing environment variables
- No dist/ folder created
- Netlify couldn't serve files

Solution

- V User needs to add environment variables in Netlify
- <a>Created missing success.html file
- Fixed cache-busting bug
- 🗸 Added comprehensive documentation

Status

✓ Code is ready for deployment!

User action required: Add environment variables in Netlify

Diagnosis completed and fixes applied successfully!

The CoachFlow project is now ready for deployment once environment variables are configured in Netlify.