**Git Push Failure Summary — “Large File / Node Modules Issue”**

**🧠 Root Cause**

GitHub rejected pushes because the repository contained **massive binary files** from node\_modules and build folders (especially next-swc.win32-x64-msvc.node, ~130 MB).  
Git has a **hard 100 MB per-file limit**, so even if those files were later deleted, their **history** remained inside previous commits.  
As a result:

* Pushes failed with GH001: Large files detected
* Push sizes exceeded 100 MB even after cleanup
* Errors like error: RPC failed; HTTP 408 and pre-receive hook declined appeared

**⚙️ What We Did to Fix It**

**1️⃣ Updated .gitignore**

Added all standard ignore rules for Node + Next.js:

node\_modules/

.next/

dist/

out/

.turbo/

.vercel/

\*.log

.env\*

\*.docx

\*.xlsx

\*.node

\*.dll

\*.exe

\*.bin

➡ Prevents heavy, build, and local files from ever being committed again.

**2️⃣ Removed Tracked Garbage**

Removed previously tracked ignored files:

git rm -r --cached .

git add .

git commit -m "Clean repo cache (untrack ignored files)"

**3️⃣ Cleaned History of Large Files**

Used git-filter-repo to **completely erase** the 129 MB binary file from all commits:

git filter-repo --path node\_modules/@next/swc-win32-x64-msvc/next-swc.win32-x64-msvc.node --invert-paths

**4️⃣ Re-added Remote (since filter-repo removes it)**

git remote add origin https://github.com/Ofranc1208/ScrubbingSheet.git

**5️⃣ Force-Pushed the Clean Repository**

git push origin main --force

✅ Push succeeded — repository size dropped from **118 MB → 79 MB**.  
No more errors.

**6️⃣ (Optional) Added .gitattributes**

Added auto-normalization and binary handling:

\* text=auto

\*.png binary

\*.jpg binary

\*.jpeg binary

\*.gif binary

\*.pdf binary

\*.docx binary

\*.xlsx binary

\*.zip binary

\*.exe binary

\*.dll binary

\*.node binary

**🔒 Permanent Prevention**

| **Issue** | **Prevention** |
| --- | --- |
| Accidental commit of node\_modules | Keep .gitignore up-to-date |
| Oversized native binaries | Add \*.node, \*.dll, \*.exe to .gitignore |
| Windows newline inconsistencies | Use .gitattributes (\* text=auto) |
| Repo bloat over time | Run git gc --prune=now --aggressive occasionally |
| Large assets (media, PDFs) | Use [Git LFS](https://git-lfs.github.com) if you truly must version them |

**✅ Final State**

* Repo now within GitHub’s 100 MB limit.
* No node\_modules or heavy binaries tracked.
* Pushes and clones are fast and clean.
* Future commits safe from bloat.