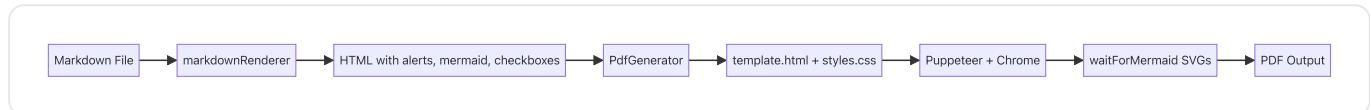


# Walkthrough — Antigravity Docs to PDF

## What Was Built

A lightweight VS Code extension (~908 KB packaged) that exports Antigravity AI agent artifacts to high-fidelity PDFs using the user's existing Chrome/Edge installation.

## Architecture



## Files Created

File	Purpose
<code>{} package.json</code>	Extension manifest with commands, settings, dependencies
<code>{} tsconfig.json</code>	TypeScript config (ES2020, Node16)
<code>JS esbuild.js</code>	Bundler that produces <code>dist/extension.js</code> + copies assets
<code>TS extension.ts</code>	Command registration, brain scanning, progress UI
<code>TS browserFinder.ts</code>	Chrome/Edge detection via chrome-launcher + manual fallback
<code>TS markdownRenderer.ts</code>	markdown-it with alert, mermaid, carousel, checkbox plugins
<code>TS PdfGenerator.ts</code>	Puppeteer lifecycle with <code>waitForFunction</code> for Mermaid SVGs
<code>{} styles.css</code>	GitHub-Light aesthetic with alerts, tables, code blocks
<code>- template.html</code>	HTML5 shell with injection points

## Key Design Decisions

- `puppeteer-core` (not `puppeteer`): avoids bundling Chromium (~280MB), uses existing browser
- Mermaid wait: `page.waitForFunction` polls every 200ms for SVGs inside `.mermaid` divs, 15s timeout
- GitHub alerts: custom markdown-it core rule that transforms `> [!NOTE]` blockquotes into styled `<div>` elements with inline SVG icons
- Task checkboxes: supports `[x]`, `[/]` (in-progress), and `[ ]` with visual indicators
- esbuild: single-file bundle keeps VSIX under 1MB

## Verification Results

Check	Result
<code>npx tsc --noEmit</code>	<input checked="" type="checkbox"/> Clean — zero errors
<code>node esbuild.js</code>	<input checked="" type="checkbox"/> Produces <code>dist/extension.js</code> + assets
<code>vsce package</code>	<input checked="" type="checkbox"/> <b>907.71 KB VSIX (10 files)</b>

## Usage

```
# Install  
cd /Users/clarencenguyen/projects/ag-docs-to-pdf  
code --install-extension ag-docs-to-pdf-0.1.0.vsix  
  
# Or develop  
npm run watch # then press F5 in VS Code
```

### Commands (Cmd+Shift+P):

- `Antigravity: Export All` — scans brain directory for artifacts
- `Antigravity: Export Current File` — exports the active markdown file