I have no idea what I'm doing

Spotify

pbrosset

Home
Search
Your Library

Create Playlist
Liked Songs

Discover Weekly
Decouvertes 2022
Decouvertes 2021
Decouvertes 2020
Decouvertes 2019
Decouvertes 2018
Decouvertes 2017
Decouvertes 2016
Decouvertes 2015
My Shazam Tracks
Daft Punk favourites
Jazz vocal

ALBUM
Black Pumas (Deluxe Edition)
Black Pumas · 2020 · 21 songs, 1 hr 33 min

#	TITLE	PLAYS	
	Disc 1		
1	Black Moon Rising — Black Pumas	23,846,634	3:41
2	Colors — Black Pumas	107,617,083	4:06
	Know You Better		

Colors
Black Pumas
0:43 ———————— 4:06

Listening on Office

Visual Studio Code — zillow.html

File Edit Selection View Go Run … zillow.html - edgeinternal.identity.3p-demo-site - Vis...

EXPLORER
EDGEINTERNAL....
index.html
indexeddb_test.html
jwt-decode.js
ms_auth_js_demo.html
ms_auth_js_signin_demo.h...
ms_auth_js_markup_demo.ht...
settingsModel.js
settingsUI.js
signin.png
zillow.com.jpg
zillow.html   9+
AppCreationScripts
common
node_modules
package-lock.json
package.json
README.md
server.js
microsoft-component-protot...
web-component-test
.gitignore
OUTLINE
TIMELINE
METADATA

edge-id-demo-js › app › zillow.html › html

```
373        <path fill="#81bc06" d="M21 2h17v17H21z"></path>
374        <path fill="#05a6f0" d="M2 21h17v17H2z"></path>
375        <path fill="#ffba08" d="M21 21h17v17H21z"></path>
376      </svg>
377    </div>
378    <span class="sign-in-button-text">Sign in with Microsoft</
379  </button>
380  </li>
381  <li>-->
382    <!-- This div is needed otherwise the sign-in button below d
383    <div id="google-button-holder"></div>
384  </li>
385  <li>
386    <div id="fb-sign-in-button" class="d-none">
387      <div class="fb-login-button" data-width="400" data-size="
388           data-auto-logout-link="false" data-use-continue-as="true
389    </div>
390  </li>
391  </ul>
392  </div>
393
394  <!-- To always use the production EasyAuth service -->
395  <!--<script type="text/javascript" src="http://edge.microsoft.com/
396  <!-- To use one of the EasyAuth service clusters or a local deploy
397  <script type="text/javascript" src="./common/easyAuthLoader.js">
398
399  <!-- importing bootstrap.js and supporting js libraries -->
400  <script src="https://code.jquery.com/jquery-3.4.1.slim.min.js"
```

main   6 44 5   Ln 423, Col 8   Spaces: 2   UTF-8   CRLF   HTML   Prettier

---

Microsoft Word — Document1

AutoSave Off   Document1 - Word   Patrick Brosset

File Home Insert Draw Design Layout References Mailings Review View Help

Read Mode | Print Layout | Web Layout | Focus | Immersive Reader | Vertical | Side to Side | Ruler | Gridlines | Navigation Pane | Zoom | 100% | One Page | Multiple Pages | Page Width | New Window | Arrange All | Split | Switch Windows | Macros | Properties

Views   Immersive   Page Movement   Show   Zoom   Window   Macros   SharePoint

Numbers
Coloring
Book

Page 3 of 10   3 words   English (United States)   Text Predictions: On   Accessibility: Investigate   51%

Adobe Photoshop — New Project.psd

File Edit Image Layer Select Filter View Window More Account
About Report a bug Learn Blog API

Auto-Select: Layer   Transform controls   Distances   PNG   SVG

Character   Paragraph
Edo   Regular
Size: 150 p   Tracking: 0%
Leading: 150.00 px   Auto
100%   100%
Baseline shift: 0 px

History   Swatches
Type Tool
Free Transform
Type Tool
Move
Type Tool
Move

Layers   Channels   Paths
Normal   Opacity: 100%
Lock: Fill: 100%

wow
Layer 1
Background

WOW

👋 Hey, I'm Patrick!

I'm a Product Manager at Microsoft.
I've worked with the **web** and on
browsers for 20 years.

🐧 @patrickbrosset
🕸 patrickbrosset.com

Let's talk about desktop apps!
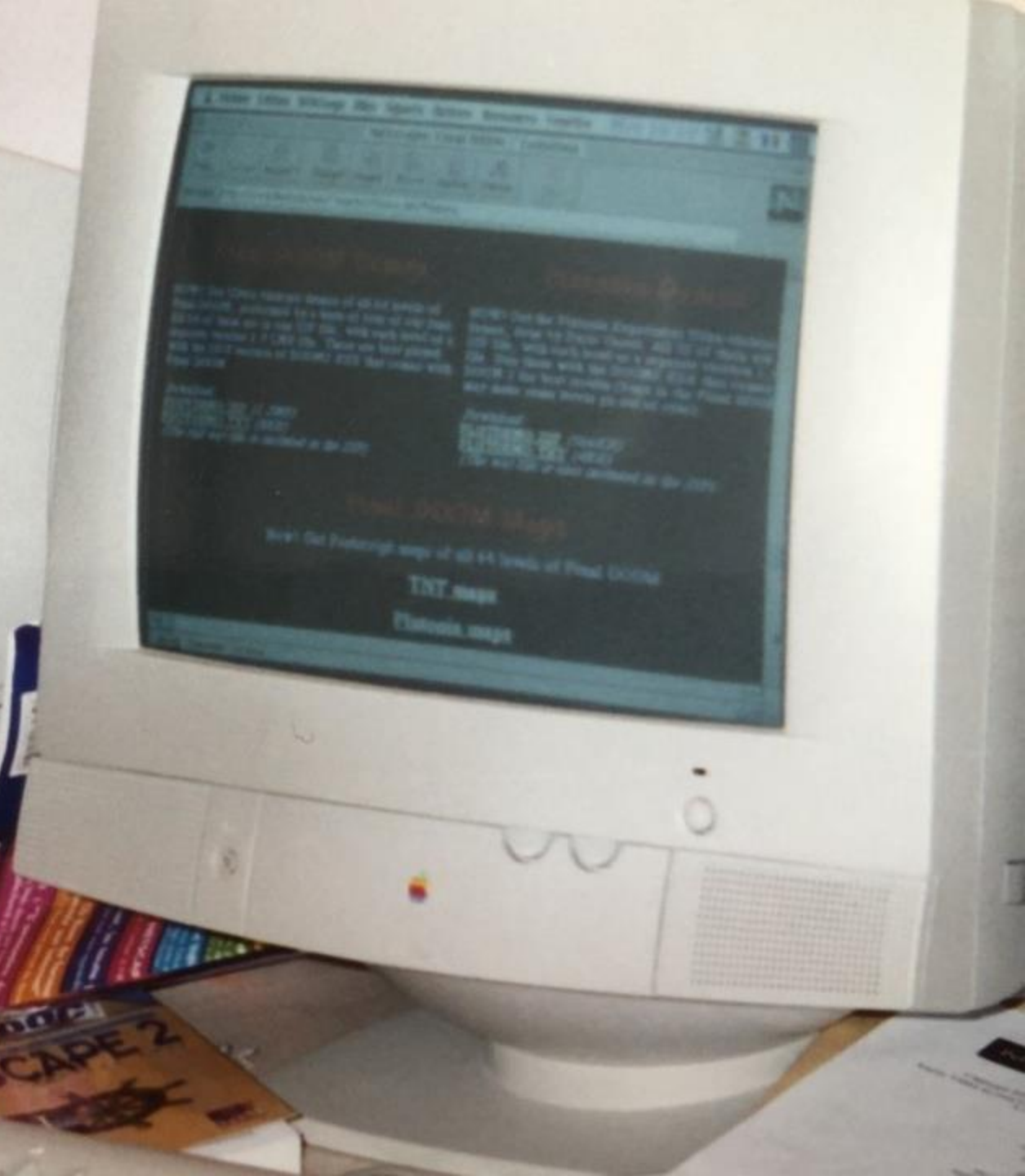
WINAMP

▶ `00:04`

4. Track 3 (5:04)

`192` kbps `44` kHz mono **stereo**

☐ EQ ☐ PL

|◄ ▶ ❙❙ ■ ►| ⏏ ☐ SHUFFLE ☐ ⟲

WINAMP PLAYLIST

100. Marz - Biaiaich	1:14
101. Marz - Slide	4:34
102. Marz - Third Eye	4:34
103. Marz - Steal My Shine	4:03
104. Marz - Step Aside	4:56
105. Marz - Third Eye	4:10
106. Track 09	2:33
107. Marz - InTheMud	4:38
108. Dis- Missile - When Doves Cry	3:07
109. Ghost Machine - Intro	1:06
110. Ghost Machine - Headstone	4:07
111. Ghost Machine - Vegas Moon	3:55
112. Ghost Machine - God Forbid	3:27
113. Ghost Machine - Scarred By Happiness (L.S.D.)	5:19
114. Ghost Machine - Siesta Loca	4:07
115. Ghost Machine - What You Made Me (Ugli)	3:21
116. Ghost Machine - L.S.H.F.	6:06
117. Ghost Machine - Rock In Roll	3:49
118. Ghost Machine - Burning Bridges (Br)	3:47
119. Ghost Machine - Last Stairwell	4:02
120. Ghost Machine - God Forbid (Queit Room Version)	4:01
121. Ghost Machine - Certain Things	4:38

ADD REM SEL MISC `6:00/9:16:47` |◄ ❙ ❙❙ ■ ►| ▲ `00:04` LIST OPTS

WINAMP EQUALIZER

☐ ON ☐ AUTO PRESETS

+12 db

+0 db

-12 db

PREAMP 60 170 310 600 1K 3K 6K 12K 14K 16K

Demo time!
🤞

File   Edit   Selection   View   Go   Run   Terminal   Help

EXPLORER   ...

TODO.md ×   JS recorder.js   JS app.js

JS importer.js ×

∨ DESKTOP APP TALK

JS exporter.js
favicon-96.png
favicon-128.png
favicon-256.png
favicon-512.png
favicon.png
favicon.svg
JS file-launch-handler.js
JS importer.js
<> index.html
JS player.js
JS popup-polyfill.js
JS recorder.js
screenshot.png
JS skin.js
JS song-ui-factory.js
JS store.js
TODO.md
JS utils.js
JS visualizer.js

> OUTLINE
> TIMELINE
> METADATA

musicplayer > TODO.md > # TODO

```
1   # TODO
2
3   * Turn into a nice desktop app!
4
```

musicplayer > JS importer.js > ...

```
1    import { hasRemoteURLSong, addR
2    import { formatTime } from "./u
3
4    // To add new songs into the st
5    // store functions directly.
6    // The reason is that the impor
7    // get its duration, which the
8    // The importer can also return
9    // can't be imported.
10
11   /**
12    * Attempt to import a new song
13    * and album.
14    * If the song already exists (
15    * valid audio file, then an er
16    */
17   export async function importSon
18     const alreadyExists = await h
19     if (alreadyExists) {
20       return { error: true, messa
21     }
22
23     const duration = await getSon
24     if (duration === -1) {
25       return { error: true, messa
26     }
27
28     await addRemoteURLSong(url, t
```

Ln 4, Col 1   Spaces: 2   UTF-8   CRLF   Markdown   Prettier

What makes a nice desktop app?

🖫 It can be **installed**.

💡 It just **always works**.

📂 It can handle **local files**.

🪟 It controls the content of its **entire window**.

🔗 It integrates with **other apps**.

🔗 It integrates with the **Operating System**.

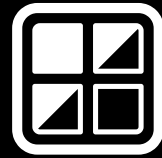# 1. Making it installable

EXPLORER   ...

∨ DESKTOP APP TALK

  ∨ musicplayer

    > skins

    JS app.js

    JS exporter.js

    favicon-96.png

    favicon-128.png

    favicon-256.png

    favicon-512.png

    favicon.png

    favicon.svg

    JS file-launch-handler.js

    JS importer.js

    <> index.html

    JS player.js

    JS popup-polyfill.js

    JS recorder.js

    screenshot.png

    JS skin.js

    JS song-ui-factory.js

    JS store.js

    TODO.md

    JS utils.js

> OUTLINE

> TIMELINE

> METADATA

Show All Commands   Ctrl + Shift + P

Go to File   Ctrl + P

Find in Files   Ctrl + Shift + F

Start Debugging   F5

Toggle Terminal   Ctrl + `

Your PWA's report card.

Check out the the Overview below to see if your P[WA is]
store-ready! If not, tap the section that needs work[to]
begin upgrading your PWA.

URL tested:
https://microsoftedge.github.io/Demos/pwamp/

Your PWA Score:

160

10+ added to score

1. Test
2. Review
3. Package
4. Complete

Your PWA Score compared with other developers

160

Overview   Manifest Options   Service Worker [...]

Manifest

Service Worker

Security

Total Score

Congrats!
You have a great PWA!

Microsoft Store

Search apps, games, movies and more

Home

Apps

Gaming

Movies & TV

Library

Help

Screenshots

PWAmp

Patrick Brosset

Get

This app requires the latest version
of Microsoft Edge.

-- ★   0
Average   Ratings

A customizable music player app for your
computer. Drag and drop mp3 or other audio
files in PWAmp to add them to your library an...

Music

PEGI 3
Age Rating: PEGI. PEGI 3

Description

A customizable music player app for your computer. Drag and drop mp3 or other audio files in PWAmp to add them to your library and start playing your music.
PWAmp also has a nice visualizer, allows audio recording, and can share songs with other apps.

Ratings and reviews

There aren't any reviews for this product yet.

Features

music, visualizer, customizable

System Requirements

This product should work on your device. Items with a checkmark meet the developer's system requirements.

2. Making it always work

EXPLORER   ...   {} manifest.json   <> index.html   JS sw.js ✕

```js
self.addEventListener("fetch", () => {});
```

DESKTOP APP TALK

musicplayer
  > skins
  JS app.js
  JS exporter.js
  favicon-96.png
  favicon-128.png
  favicon-256.png
  favicon-512.png
  favicon.png
  favicon.svg
  JS file-launch-handler.js
  JS importer.js
  <> index.html
  {} manifest.json
  JS player.js
  JS popup-polyfill.js
  JS recorder.js
  screenshot.png
  JS skin.js
  JS song-ui-factory.js
  JS store.js
  JS sw.js

OUTLINE
TIMELINE
METADATA

3. Handling local files

desktop app talk - Visual Studio Code

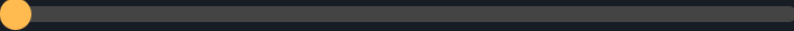EXPLORER

DESKTOP APP TALK

musicplayer

> skins
JS app.js
JS exporter.js
favicon-96.png
favicon-128.png
favicon-256.png
favicon-512.png
favicon.png
favicon.svg
JS importer.js
<> index.html   3
{} manifest.json
JS player.js
JS popup-polyfill.js
JS recorder.js
screenshot.png
JS skin.js
JS song-ui-factory.js
JS store.js
JS sw.js
TODO.md

> OUTLINE
> TIMELINE
> METADATA

Show All Commands   Ctrl + Shift + P

Go to File   Ctrl + P

Find in Files   Ctrl + Shift + F

Start Debugging   F5

Toggle Terminal   Ctrl + `

1   2

4. Using the entire window

EXPLORER   ⋯

JS file-launch-handler.js ✕   JS app.js ✕   # default.css 5 ⋯

∨ EDGE-DEMOS

> email-client
> eyedropper
> network-tutorial
∨ pwamp
  ∨ skins
    # blue.css
    # default.css   5
  JS app.js
  JS exporter.js
  🖼 favicon-96.png
  🖼 favicon-128.png
  🖼 favicon-256.png
  🖼 favicon-512.png
  🖼 favicon.png
  📄 favicon.svg
  JS file-launch-handler.js
  JS importer.js

> OUTLINE
> TIMELINE
> METADATA

pwamp > JS file-launch-handler.js > ...

```
1   import { applyCustomSkin }
2   import { importSongFromFil
3   import { startApp, playlis
    import { getFileNameWitho
5   import { createLoadingSong
6
7   const AUDIO_EXTENSIONS = [
8
9   async function handleFiles
10      // Check if there will
```

pwamp > JS app.js > ...

```
3   > Aa ab  ↑ ↓ ≡ ✕  pen
4   import { importSongFromFi
5   import { Visualizer } fro
6   import { exportSongToFile
7   import { loadCustomOrRese
8   import { startRecordingAud
9   import { createSongUI, re
10
11  // All of the UI DOM eleme
```

PROBLEMS 34   OUTPUT   TERMINAL   ⋯   > powershell + ∨   ⊡ 🗑 ∧ ✕

0.0.0 Safari/537.36 Edg/105.0.1341.0"
[2022-08-08T14:55:33.233Z] "GET /pwamp/favicon.svg" "Mozilla/5.0 (
Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
 Chrome/105.0.0.0 Safari/537.36 Edg/105.0.1341.0"
[2022-08-08T14:55:48.315Z] "GET /pwamp/sw.js" "Mozilla/5.0 (Window
s NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrom
e/105.0.0.0 Safari/537.36 Edg/105.0.1341.0"
http-server stopped.
PS C:\Users\pabrosse\dev\edge-demos> ^C
PS C:\Users\pabrosse\dev\edge-demos>

main   ⊗ 4 ⚠ 1 ⓘ 29   Ln 5, Col 1   Spaces: 2   UTF-8   CRLF   {} JavaScript   ✓ Prettier
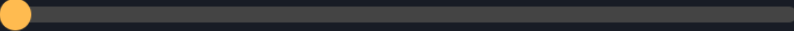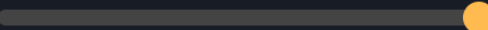
PWAmp music player - pwamp

00:00 ──────────●────────────────────────── 00:00

▶ **Part 2 Judy Garland**
Michel Portal   Unknown album   06:54   ...

▶ **Part 2 Solitudes**
Michel Portal   Unknown album   08:30   ...

▶ **Part 1 Domimonk**
Michel Portal   Unknown album   01:23   ...

▶ **Part 1 M.P. on the run**
Michel Portal   Unknown album   03:47   ...

▶ **Part 1 Sky tinted water**
Michel Portal   Unknown album   04:23   ...

▶ **Part 1 Matourmatourmatourmalet** Unknown album   04:55   ...

EXPLORER   ...   {} manifest.json ✕

∨ DESKTOP APP TALK   musicplayer > {} manifest.json > ...
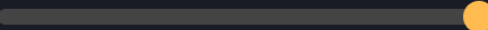
  ∨ musicplayer   ●   1   {
    > skins   2   "name": "pwamp",
    JS app.js   3   "description": "A web audio player app",
    JS exporter.js   4   "lang": "en-US",
    ▣ favicon-96.png   5   "start_url": "./",
    ▣ favicon-128.png   6   "scope": "./"
    ▣ favicon-256.png   7   "theme_color": "#181c25",
    ▣ favicon-512.png   8   "background_color": "#181c25",
    ▣ favicon.png   9   "display": "standalone",
    ▣ favicon.svg   10   "icons": [
    JS file-launch-handler.js   11   {
    JS importer.js   12   "src": "./favicon-96.png",
    <> index.html   2   13   "sizes": "96x96"
    {} manifest.json   14   },
    JS player.js   15   {
    JS popup-polyfill.js   16   "src": "./favicon-128.png",
    JS recorder.js   17   "sizes": "128x128"
    ▣ screenshot.png   18   },
    JS skin.js   19   {
    JS song-ui-factory.js   20   "src": "./favicon-256.png",
    JS store.js   21   "sizes": "256x256"
    JS sw.js   22   },
                                             23   {
> OUTLINE   24   "src": "./favicon-512.png",
> TIMELINE   25   "sizes": "512x512"
> METADATA   26   }
                                             27   ],
                                             28   "file_handlers": [
                                             29   {

⊗ 1 ⚠ 1 ⓘ 5   Ln 7, Col 28   Spaces: 2   UTF-8   CRLF   {} JSON   ✓ Prettier   🔔

Part 2 Judy Garland
Michel Portal
Unknown album
06:54
...

Part 2 Solitudes
Michel Portal
Unknown album
08:30
...

Part 1 Domimonk
Michel Portal
Unknown album
01:23
...

Part 1 M.P. on the run
Michel Portal
Unknown album
03:47
...

Part 1 Sky tinted water
Michel Portal
Unknown album
04:23
...

Part 1 Matourmatourmatourmalet
Unknown album
04:55
...

00:00   00:00

00:12　　　　　　　　　　　　　　　　　　　　　　　　06:54

Part 2 Judy Garland
Michel Portal

Unknown album

EXPLORER   ...

∨ DESKTOP APP TALK

  ∨ musicplayer   ●

    ∨ skins   ●

      # blue.css

      # default.css   2

    JS app.js

    JS exporter.js

    🖼 favicon-96.png

    🖼 favicon-128.png

    🖼 favicon-256.png

    🖼 favicon-512.png

    🖼 favicon.png

    🔒 favicon.svg

    JS file-launch-handler.js

    JS importer.js

    <> index.html   1

    {} manifest.json

    JS player.js

    JS popup-polyfill.js

    JS recorder.js

    🖼 screenshot.png

    JS skin.js

    JS song-ui-factory.js

  > OUTLINE

  > TIMELINE

  > METADATA

Show All Commands   Ctrl + Shift + P

Go to File   Ctrl + P

Find in Files   Ctrl + Shift + F

Start Debugging   F5

Toggle Terminal   Ctrl + `

🔗

5. Integrating with other apps

protocol://

web+??://

EXPLORER

∨ DESKTOP APP TALK

∨ musicplayer
  > skins
  JS app.js
  JS exporter.js
  favicon-96.png
  favicon-128.png
  favicon-256.png
  favicon-512.png
  favicon.png
  favicon.svg
  JS file-launch-handler.js
  JS importer.js
  <> index.html   2
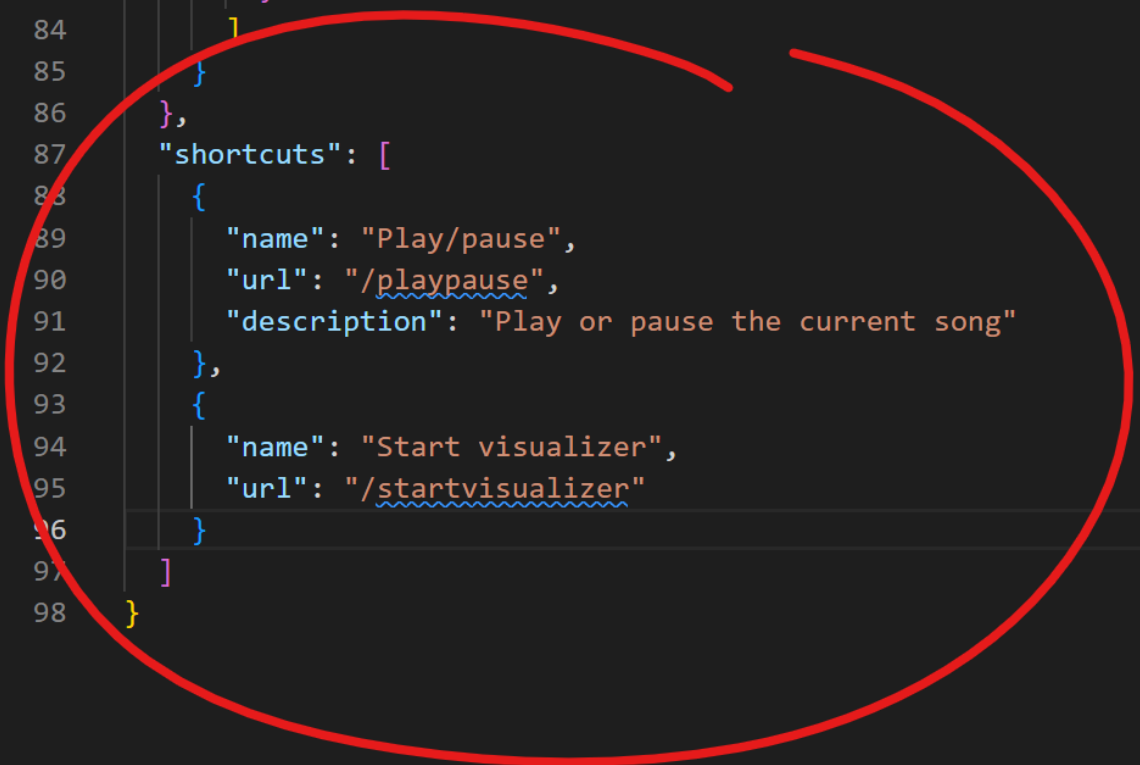 {} manifest.json
  JS player.js
  JS popup-polyfill.js
  JS recorder.js
  screenshot.png
  JS skin.js
  JS song-ui-factory.js
  JS store.js
  JS sw.js

> OUTLINE
> TIMELINE
> METADATA

Show All Commands   Ctrl + Shift + P

Go to File   Ctrl + P

Find in Files   Ctrl + Shift + F

Start Debugging   F5

Toggle Terminal   Ctrl + `

sharing

1 Photo Selected

Épagny   Options >

AirDrop   Messages   Mail   Google Maps

Share 1 item

Nearby sharing   Off ⌄

Sharing off

Email a contact   Find more people

M

Me

Share with app   Find more apps

Mail   Feedback Hub   Mail GO   Outlook
                                                      Desktop...

More ⌄

Nearby sharing turned off | ⚙ Nearby sharing settings

EXPLORER

DESKTOP APP TALK

musicplayer
skins
JS app.js
JS exporter.js
favicon-96.png
favicon-128.png
favicon-256.png
favicon-512.png
favicon.png
favicon.svg
JS file-launch-handler.js
JS importer.js
<> index.html   2
{} manifest.json
JS player.js
JS popup-polyfill.js
JS protocol-launch-handler.js
JS recorder.js
screenshot.png
JS skin.js
JS song-ui-factory.js
JS store.js

OUTLINE
TIMELINE
METADATA

Show All Commands   Ctrl + Shift + P

Go to File   Ctrl + P

Find in Files   Ctrl + Shift + F

Start Debugging   F5

Toggle Terminal   Ctrl + `

2   2

6. Integrating with the operating system

Top Sites

Sign-in with Microsoft Demo

patrick

Photopea | Online Photo Editor

DevTools Tips

pwamp

Recently closed

pwamp

pwamp

pwamp

Tasks

New window

New InPrivate window

Microsoft Edge Canary

Unpin from taskbar

Close all windows

EXPLORER

DESKTOP APP TALK

musicplayer
> skins
JS app.js
JS exporter.js
favicon-96.png
favicon-128.png
favicon-256.png
favicon-512.png
favicon.png
favicon.svg
JS file-launch-handler.js
JS importer.js
<> index.html   2
{} manifest.json
JS player.js
JS popup-polyfill.js
JS protocol-launch-handler.js
JS recorder.js
screenshot.png
JS skin.js
JS song-ui-factory.js
JS store.js

> OUTLINE
> TIMELINE
> METADATA

{} manifest.json ✕

musicplayer > {} manifest.json > [ ] shortcuts > {} 1

```json
 80              "audio/webm",
 81              "audio/flac"
 82            ]
 83          }
 84        ]
 85      }
 86    },
 87    "shortcuts": [
 88      {
 89        "name": "Play/pause",
 90        "url": "/playpause",
 91        "description": "Play or pause the current song"
 92      },
 93      {
 94        "name": "Start visualizer",
 95        "url": "/startvisualizer"
 96      }
 97    ]
 98  }
```

Ln 96, Col 6   Spaces: 2   UTF-8   CRLF   {} JSON   ✓ Prettier

```json
              "audio/webm",
              "audio/flac"
          ]
        }
      ]
    }
  },
  "widgets": [
    {
      "name": "Current song",
      "description": "The currently playing song",
      "tag": "song",
      "ms_ac_template": "/widgets/template/current_song.ac.json",
      "data": "/widgets/data/currentsong",
      "type": "application/json",
      "auth": true,
      "update": 900
    }
  ]
}
```

Let's sum up!

💾 **Installation**
➡ manifest/service worker/HTTPS
➡ publish to stores with PWABuilder

💡 **Always works**
➡ Caching resources on install of SW

📂 **Local files**
➡ Register as a PWA file_handler

🔲 **Draw in the entire window**
➡ Use the Window Controls Overlay

🔗 **Integrate with other apps**
➡ Register as a protocol_handler
➡ Register as a share_target
➡ Share out with navigator.share()

🔗 **Integrate with the OS**
➡ Display shortcuts
➡ Insert widgets

PWA MYTH BUSTING

Myth #1
PWA is old news...

"Service workers will soon control 20% of web traffic, and sites continue adding more capabilities each year"

Web Almanac 2021 edition
https://almanac.httparchive.org/en/2021/pwa

"~ 100% growth in PWA density between March and Sept 2021"

PWAs... What's going on?
https://mobsted.com/world_state_of_pwa_2021

Myth #2
It's a google thing only

Myth #3
It's only on mobile ▦

Myth #4
But it doesn't work on iOS 🍎

Myth #5
But the web can't do native

"today we are extending Photoshop to the web as a beta"

Photoshop updates

Myth #6
APIs are not cross-browser