Bug UFC-XXX: Updating PWA Fails

The following document will go over the design of the fix needed for XXX, as outlined in Bug ticket UFC-XXX.

Bug

Sometimes, when choosing to "Update" the app after a production deploy, it just goes blank white. It does nothing. If I have it as a PWA, I have to re-install and re-login. If it's not a PWA, then I have to kill the site and clear cache to be able to re-login.

I was finally able to catch this bug in action. Hooking up remote dev tools brought me this error:

Refused to execute script from

'https://app.ufincs.com/static/js/main.c09cfb41.chunk.js' because its MIME type ('text/html') is not executable, and strict MIME type checking is enabled.

Opening up that file in the sources gave me the index.html code:

```
<!doctype html>
<html lang="en">
    <head>
        <meta charset="utf-8"/>
        <link rel="icon" type="image/png" sizes="16x16"</pre>
href="/favicon-16x16.png"/>
        <link rel="icon" type="image/png" sizes="32x32"</pre>
href="/favicon-32x32.png"/>
        <link rel="icon" href="/favicon.ico"/>
        <link rel="apple-touch-icon" sizes="180x180" href="/apple-</pre>
touch-icon.png"/>
        <link rel="mask-icon" href="/safari-pinned-tab.svg"</pre>
color="#393F74"/>
        <title>uFincs</title>
        <meta name="description" content="uFincs is the easiest,</pre>
privacy-friendly way of taking control of your finances. Control your
money. Keep your data."/>
        <meta name="viewport" content="width=device-width,initial-</pre>
scale=1,viewport-fit=cover"/>
        <meta name="mobile-web-app-capable" content="yes"/>
        <meta name="apple-mobile-web-app-capable" content="yes"/>
        <link rel="manifest" href="/manifest.json"/>
        <meta name="msapplication-TileColor" content="#393F74"/>
        <meta name="theme-color" content="#5C80F6"/>
        <meta name="og:type" property="og:type" content="website"/>
        <meta name="og:title" property="og:title" content="uFincs"/>
```

```
<meta name="og:description" property="og:description"</pre>
content="uFincs is the easiest, privacy-friendly way of taking control
of your finances. Control your money. Keep your data."/>
        <meta name="og:site name" property="og:site name"</pre>
content="uFincs"/>
        <meta name="og:image" property="og:image" content="/og-</pre>
image.png"/>
        <meta name="twitter:card" property="twitter:card"</pre>
content="summary large image"/>
        <meta name="twitter:title" property="twitter:title"</pre>
content="uFincs"/>
        <meta name="twitter:description"</pre>
property="twitter:description" content="uFincs is the easiest,
privacy-friendly way of taking control of your finances. Control your
money. Keep your data."/>
        <meta name="twitter:image" property="twitter:image"</pre>
content="/og-image.png"/>
        <script id="script-backend-config">
            window.BACKEND HOST = "backend.ufincs.com",
            window.BACKEND_PORT = "80",
            window.BACKEND PROTOCOL = "https",
            window.MARKETING HOST = "ufincs.com",
            window.MARKETING PORT = "80",
            window.MARKETING PROTOCOL = "https",
            window.SOFTWARE \overline{T}AG = "86901ba",
            window.STRIPE KEY =
"pk live 51IPd3fAp2ZfinMgzTa2EQZ4YqG08s0kB8k6zLsMwfFven1L9qpfNFtG0xD5B
4StH6W48Al1UX9g8ypixF7IN1rKJ00d61hQMGS"
        </script>
        <link href="/static/css/main.67bcd5f6.chunk.css"</pre>
rel="stylesheet">
    </head>
    <body>
        <noscript>uFincs is the easiest, privacy-friendly way of
taking control of your finances. Control your money. Keep your
data.</noscript>
        <div id="root"></div>
        <script src="/static/js/runtime-main.18aefc3d.js"></script>
        <script src="/static/js/2.36f50bce.chunk.js"></script>
        <script src="/static/js/main.324d3010.chunk.js"></script>
    </body>
</html>
```

So... it seems like the worker is just updating itself incorrectly? Because it seems like what happened was that the web worker updated before... the Frontend server was finished restarting? Because the only reason that JS file would be written as the index.html file is if the JS file didn't yet exist on the Frontend server, so the Fronted hits the "*" route to server the index.html.

However, since the worker then caches the incorrect file, it has no way to bust its own cache because... well, the app is completely broken.

So, how do we fix this? Change the "*" route to exclude JS file extensions? But then what happens when the Frontend server tries to serve the not-yet-existent JS file then? A 404? But how does a web worker handle a file 404?? And what does that do to the app???

In any case, at least we've finally figured out *what* error is happening here, with a pretty good guess for *why*. But it seems rare enough to... not really be worth P0 fixing? Whatever.

Reproduction Steps

TODO

Bug Details

TODO

Fix Brainstorming

TODO

Fix (Finalized)

TODO

Tasks

TODO

Postmortem

TODO