

**mozilla**



**MOZCAMP**  
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# Creating Add-ons for Android Firefox

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<http://mzl.la/sin-android>

# The Plan

- Firefox Mobile background.
- How to create add-ons for Android.
- Examples.
- Code!

# Firefox Mobile

- Desktop Firefox is built using:
  - XUL (kinda like HTML)
  - JS, CSS
  - XPCOM
- Mobile Firefox was initially this way.
- Changed in Android
  - Much less XUL.

# Add-ons on Android

- There are 2 ways:
  - Add-ons SDK. [Docs.](#)
  - Bootstrapped extensions. [Docs.](#)

# Available features

## Add-ons SDK

- page-mod
- page-workers
- passwords
- request
- simple-prefs
- simple-storage
- More to come later.

## Bootstrapped extensions

- **BrowserApp**: tabs, windows, prefs.
- **NativeWindow**: menu, doorhanger, context menus, toast notifications.
- Userscripts
- XMLHttpRequest
- XPCOM

# Using the SDK

- The easiest way to create SDK add-ons is using the [Add-ons Builder](#).
- Also, you can [install the SDK](#) and build your add-on locally.
- As long as you're careful about the APIs you use, you can debug and test in desktop Firefox.



# Using bootstrapped extensions

- Two files: `install.rdf` and `bootstrap.js`
- `bootstrap.js` [template](#) makes things easier.
- If you don't use the Android-specific APIs (`BrowserApp` and `NativeWindow`), you can use desktop to debug and test.

# Installing on your device

- You can either install through the web, or transfer the files to the device via USB.
- Web install is easy, but inefficient.
- USB install is more efficient, but needs some time to set up.

# Web Install

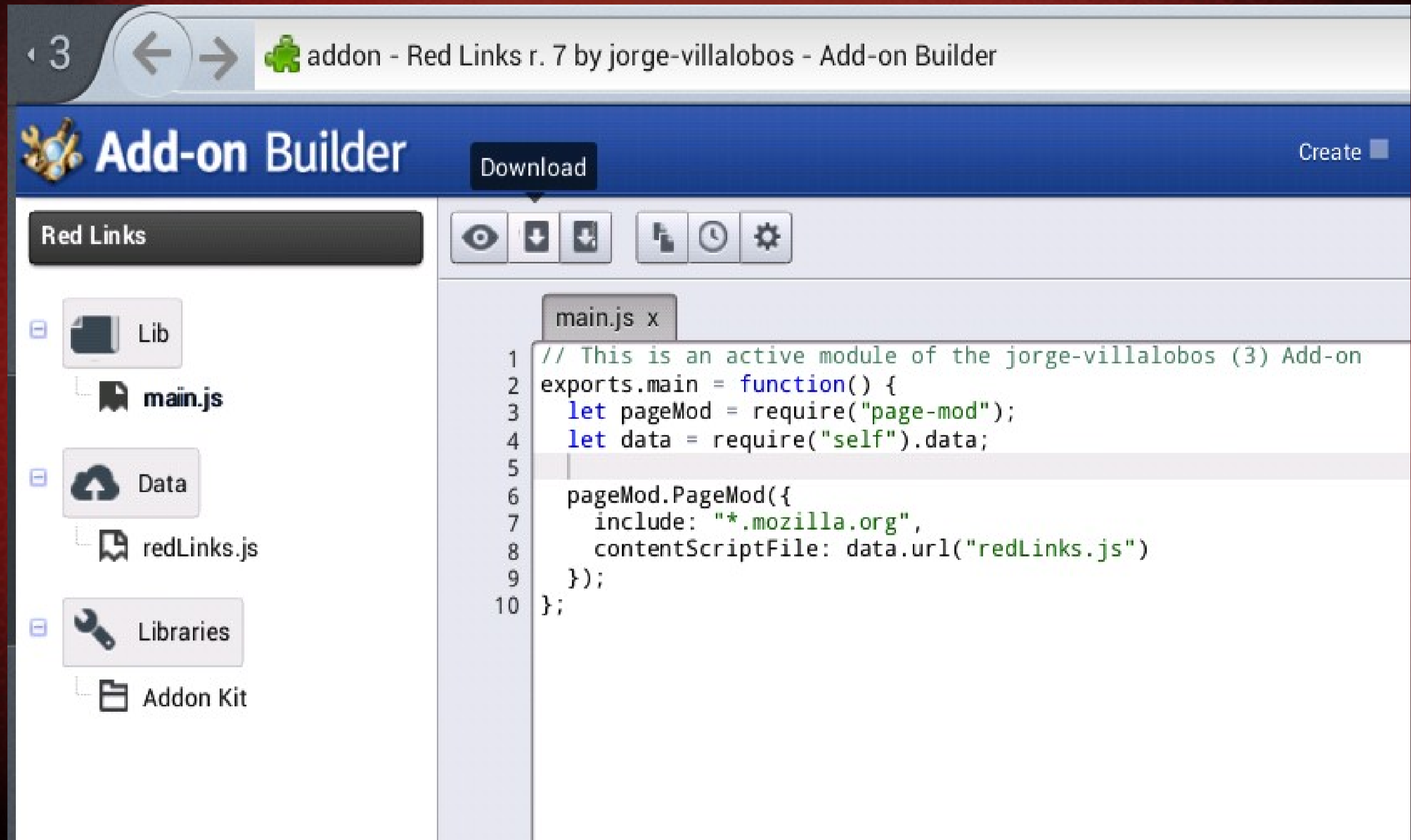
- Upload XPI file to a free file sharing service (like [Dropbox](#)).
- You can also use the [Mobile Installer](#) add-on to install XPIs generated from the Builder.



# Using Mobile Installer

1. Create your mobile add-on using the Builder.
2. Install Mobile Installer on device:  
<http://mzl.la/mbl-inst>

# 3. Download from Builder

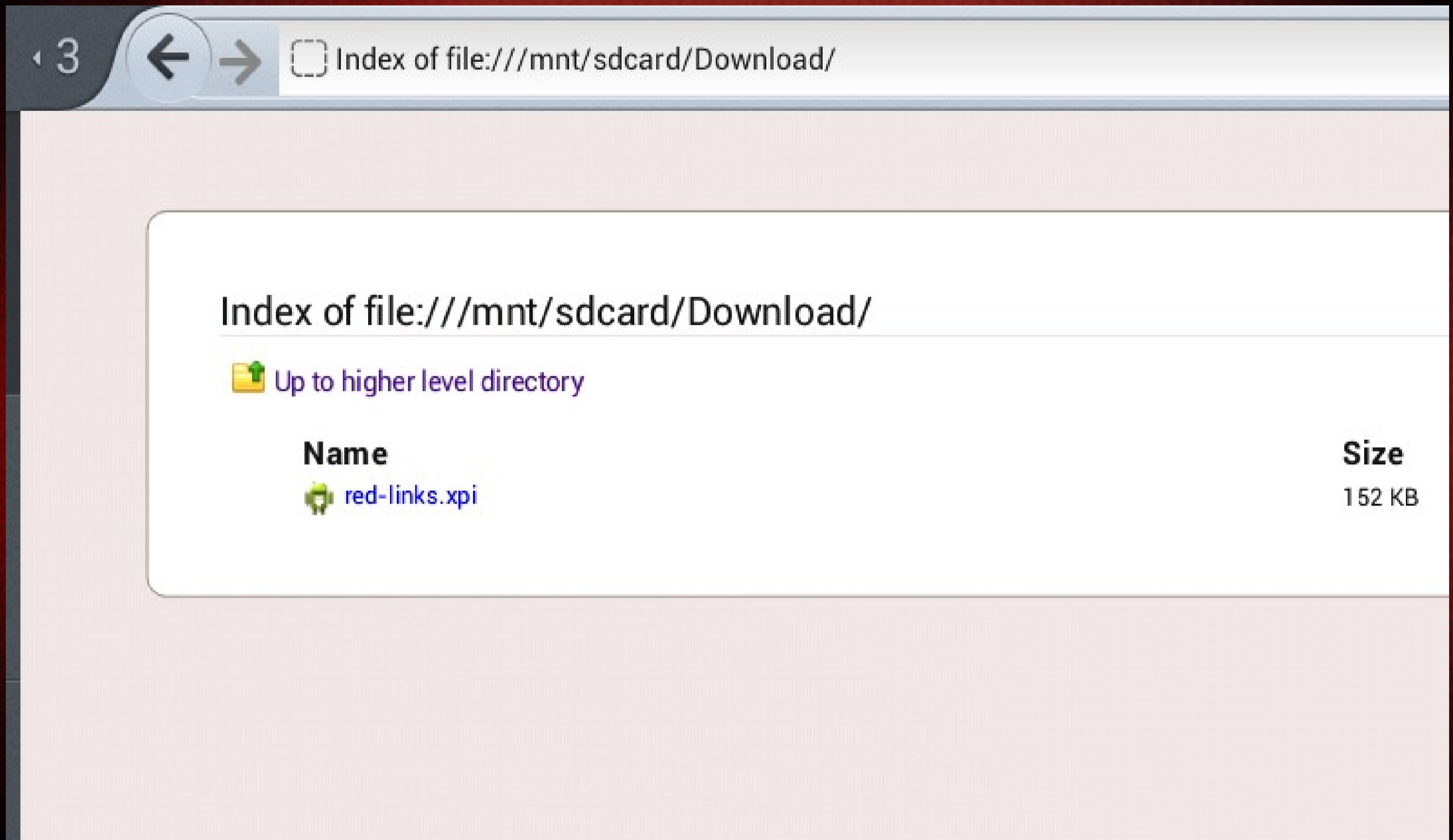


The screenshot shows the Mozilla Add-on Builder interface for an add-on named "Red Links" by jorge-villalobos. The interface is divided into several sections:

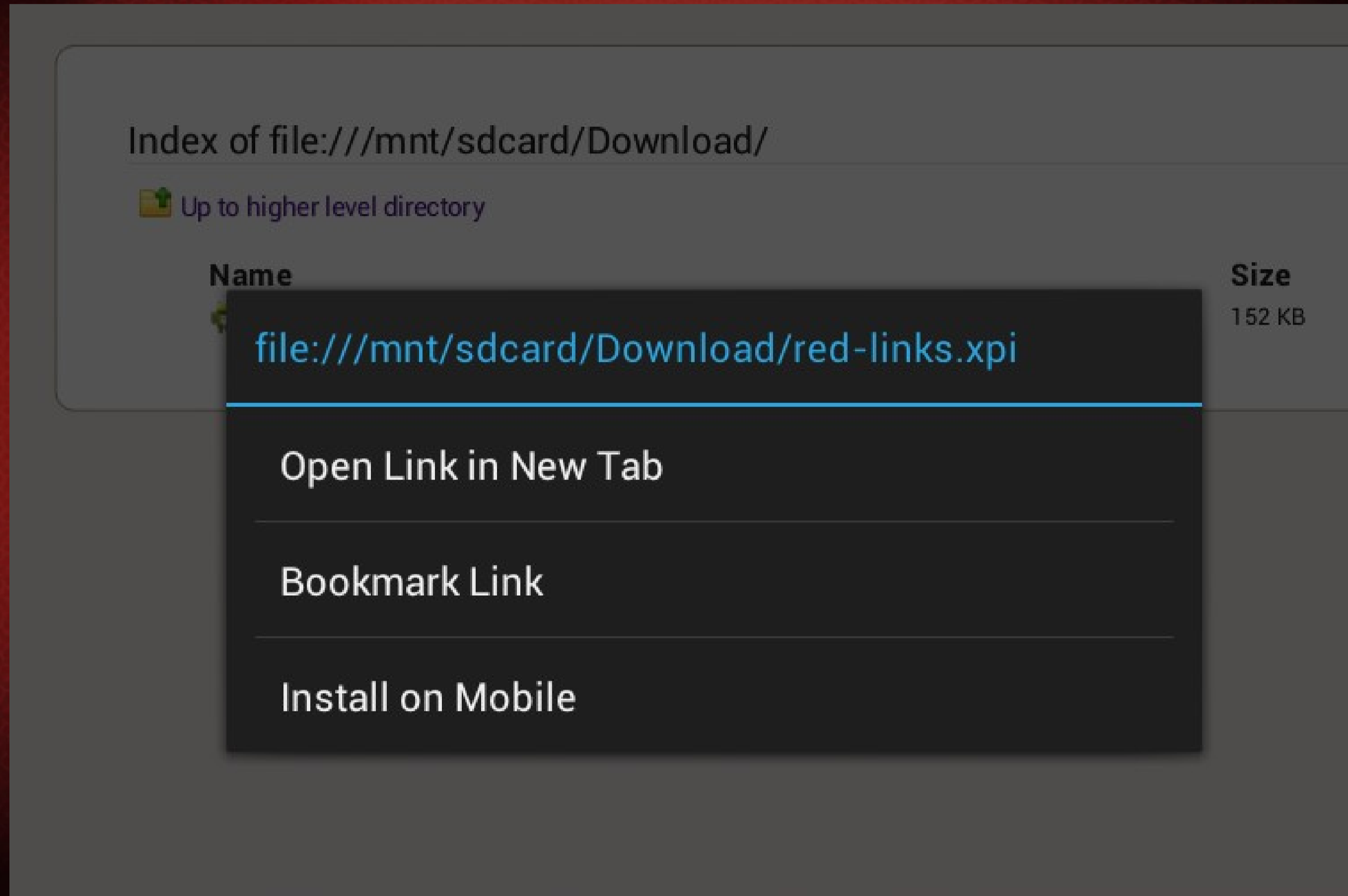
- Header:** "Add-on Builder" with a "Download" button and a "Create" button.
- Left Sidebar:** A file tree showing the project structure:
  - Red Links
    - Lib
      - main.js
    - Data
      - redLinks.js
    - Libraries
      - Addon Kit
- Toolbar:** Icons for view, download, and settings.
- Main Editor:** A code editor showing the content of "main.js":

```
1 // This is an active module of the jorge-villalobos (3) Add-on
2 exports.main = function() {
3   let pageMod = require("page-mod");
4   let data = require("self").data;
5
6   pageMod.PageMod({
7     include: "*.mozilla.org",
8     contentScriptFile: data.url("redLinks.js")
9   });
10 };
```

# 4. Find the file



# 5. Click and hold



# USB Install

1. Download and install Android SDK.
2. Download and install additional platform tools.
3. Copy files using *adb push*
  - Add-ons SDK.
  - Bootstrapped extensions.





Code!



# Code!

- Add-ons SDK:
  - Example: <http://mzl.la/red-links>
  - Docs: <http://mzl.la/mbl-sdk>
- Bootstrapped extensions:
  - Example: <http://mzl.la/mbl-inst>
  - Docs: <http://mzl.la/mbl-ext>

# Thank you!

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