

INTRO TO ELM

PREFACE

FOLDERS

Elm

What is Elm?

```

1 What is Elm?
2 - Functional language that compiles to JavaScript
3   - Meant for developing web apps
4   - Statically typed (with type inference)
5 - Allows us to write well-architected, declarative code
6
7 Why Elm?
8 - Make front end development simpler
9 - Address JavaScript fatigue
10 - Easy to understand and use
11 - Supportive community, and creator (Evan Czaplicki) active in
    community
12
13 Cool features of Elm
14 - Nice built in tools
15 - No runtime exceptions (i.e. null or undefined errors)
16 - Friendly, easy-to-read error messages in the compiler
17 - Immutable data
18 - Functions must be pure
19 - Unidirectional data flow
20 - Centralized state
21
    
```

Line 20, Column 20

Tab Size: 2

Plain Text



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Elm

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```

5 lines, 141 characters selected

Tab Size: 2

Plain Text



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21 - Can describe state instead of transforming the DOM
22 - Built in package manager that enforces semantic versioning
23 - i.e. can tell if there's a breaking change and thus not allow
24   a minor version bump, but enforce a major version bump
25
26

```

Line 23, Column 37

Tab Size: 2

Plain Text



THANKS FOR WATCHING



INTRO TO ELM

INSTALLING ELM

Type to search

- An Introduction to Elm
- Introduction
- Install
- Core Language
- The Elm Architecture
 - User Input
 - Buttons
 - Text Fields
 - Forms
 - More
 - Effects
 - Random
 - HTTP
 - Time
 - Web Sockets

Install

Note: If you do not want to install yet, you can follow along in this guide with the [online editor](#) and the [online REPL](#).

- Mac — [installer](#)
- Windows — [installer](#)
- Anywhere — [npm installer](#) or [build from source](#)

After installing through any of those routes, you will have the following command line tools:

- `elm-repl` — play with Elm expressions
- `elm-reactor` — get a project going quickly
- `elm-make` — compile Elm code directly
- `elm-package` — download packages

We will go over how they all work in more detail right after we get your editor set up!

Troubleshooting: The fastest way to learn *anything* is to talk with other people in the Elm community. We are friendly and happy to help! So if you get stuck during installation or encounter something weird, visit [the Elm Slack](#) and ask about it. In fact, if you run into something confusing at any point while learning or using Elm, come ask us about it. You can save yourself hours. Just do it!

★ elm public

Install the **Elm Platform** via **npm**.

Installing

Run this to get the binaries:

```
$ npm install -g elm
```

Installing behind a proxy server

If you are behind a proxy server, set the environment variable "HTTPS_PROXY".

```
$ export HTTPS_PROXY=$YourProxyServer$  
$ npm install -g elm
```

Use this within your firewall

Combine open-source packages with your private code and publish to a private registry behind the firewall. **npm** ❤ **enterprise developers**

npm install -g elm

[how? learn more](#)

 **rtfeldman** published 5 months ago

0.18.0 is the latest of 25 releases

github.com/elm-lang/elm-platform

BSD-3-Clause

Collaborators [list](#)

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Configure Your Editor

Elm Platform 0.18.0 – a way to run all Elm tools

Usage: elm <command> [<args>]

Available commands include:

make	Compile an Elm file or project into JS or HTML
package	Manage packages from < http://package.elm-lang.org >
reactor	Develop with compile-on-refresh and time-travel debugging
repl	A REPL for running individual expressions

You can learn more about a specific command by running things like:

```
elm make --help
elm package --help
elm <command> --help
```

In all these cases we are simply running 'elm-<command>' so if you create an executable named 'elm-foobar' you will be able to run it as 'elm foobar' as long as it appears on your PATH.

Zebras-MBP:Elm Zebra\$



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Configure Your Editor

Using Elm is way nicer when you have a code editor to help you out. There are Elm plugins for at least the following editors:

- [Atom](#)
- [Brackets](#)
- [Emacs](#)
- [IntelliJ](#)
- [Light Table](#)
- [Sublime Text](#)
- [Vim](#)
- [VS Code](#)

If you do not have an editor at all, [Sublime Text](#) is a great one to get started with!

You may also want to try out [elm-format](#) which makes your code pretty!

The Command Line Tools

So we installed Elm, and it gave us `elm-repl`, `elm-reactor`, `elm-make`, and `elm-package`. But what do they all do exactly?



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elm-repl

`elm-repl` lets you play with simple Elm expressions.

```
$ elm-repl
```

```
----- elm-repl 0.18.0 -----
```



avh4 / elm-format

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Code Issues 93 Pull requests 5 Projects 0 Wiki Pulse Graphs

elm-format formats Elm source code according to a standard set of rules based on the official Elm Style Guide

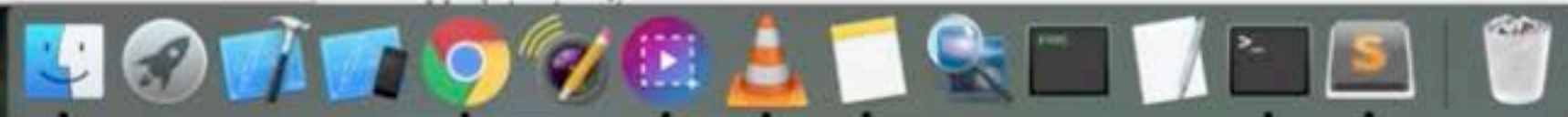
elm formatter code-style

998 commits 7 branches 13 releases 29 contributors BSD-3-Clause

Branch: master New pull request Create new file Upload files Find file Clone or download

avh4	Add CommonMark test suite	Latest commit afbde0c 3 days ago
ci	Add Concourse CI scripts for windows and linux	a year ago
img	Update JetBrains setup screenshot to reflect new layout	5 days ago
markdown	Remove unused files from markdown/	24 days ago
package	Merge pull request #341 from mattjbray/archlinux-pgp	15 days ago
parser	Extract Parse.Markdown	24 days ago
src-cli	Remove the elm-format-0.16 executable	a month ago
src	HTML blocks in markdown should be followed by a blank line	23 days ago

Connecting...



`elm-format` is still in alpha. If you run into any problems, please [report them](#).

The format produced by `elm-format` may change significantly before the 1.0.0 release. If this will cause problems for you, please refrain from using `elm-format` during the alpha- and beta-test periods.

You will need to download the version appropriate for your OS, unzip it, and place `elm-format` or `elm-format.exe` (windows) on your `PATH`. Simpler installation options will be available once there is a stable release of `elm-format`.

If you need to verify the downloads, see the [releases page](#) for the PGP signatures and [keybase.io/avh4](#) for the PGP keys.

🔗 For Elm 0.18

(To upgrade your Elm 0.17 project to Elm 0.18, see the [Elm 0.18 upgrade guide](#).)

- Mac: [download](#)
- Linux: [download](#)
- Windows: [download](#)

For Elm 0.17

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Editor integration

THANKS FOR WATCHING



INTRO TO ELM

ELM FORMAT IN PATH

Installation version 0.6.1-alpha

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- Mac: [download](#)
- Linux: [download](#)
- Windows: [download](#)

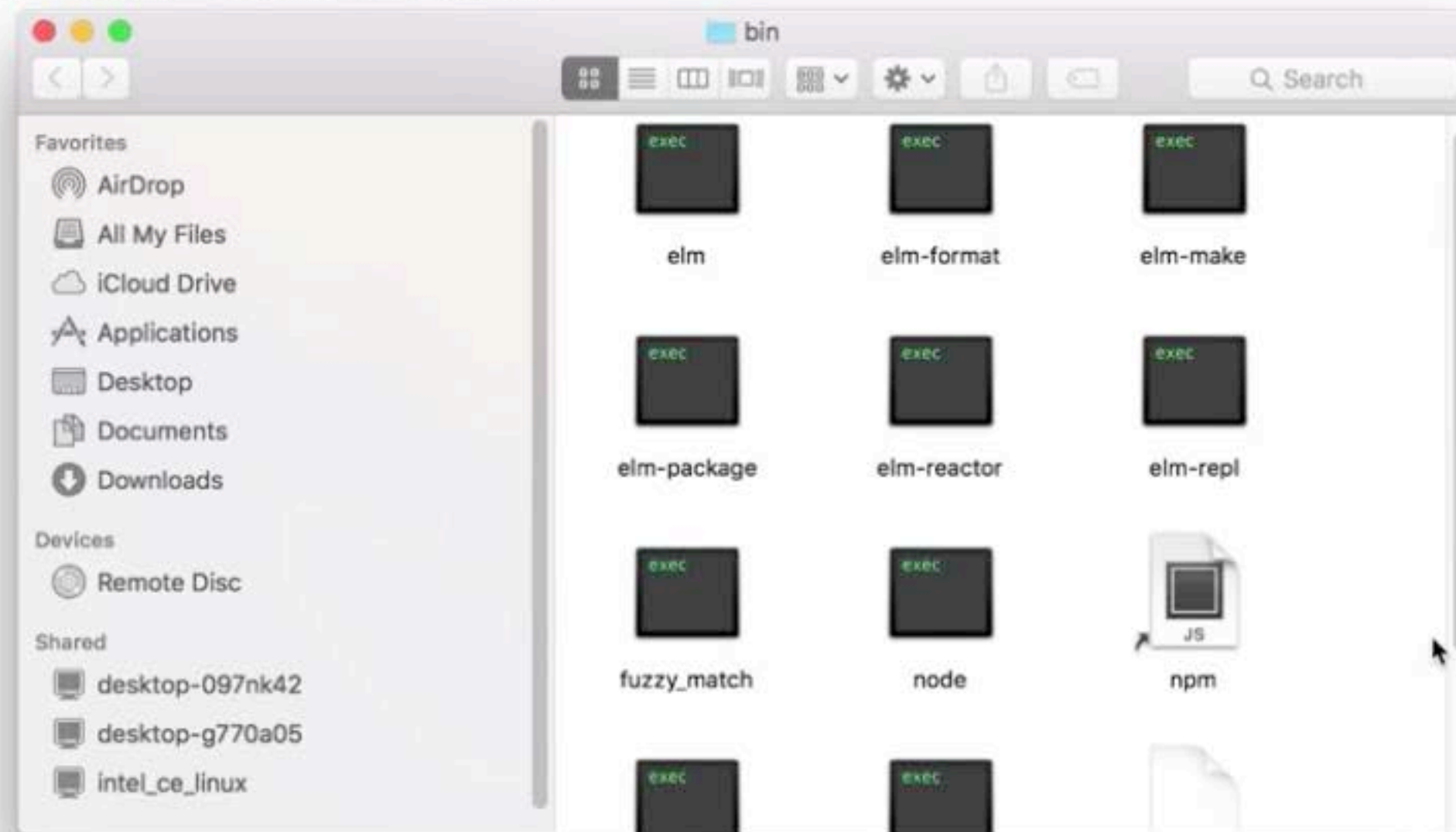
For Elm 0.17

- Mac: [download](#)
- Linux: [download](#)
- Windows: [download](#)

Editor integration



```
Zebras-MBP:Elm Zebra$ which elm
/usr/local/bin/elm
Zebras-MBP:Elm Zebra$ open /usr/local/bin
Zebras-MBP:Elm Zebra$
```



Available options:

<code>-h, --help</code>	Show this help text
<code>--output FILE</code>	Write output to FILE instead of overwriting the given source file.
<code>--yes</code>	Reply 'yes' to all automated prompts.
<code>--validate</code>	Check if files are formatted without changing them.
<code>--stdin</code>	Read from stdin, output to stdout.
<code>--elm-version VERSION</code>	The Elm version of the source files being formatted
<code>--upgrade</code>	Valid values: 0.16, 0.17, 0.18. Default: 0.18 Upgrade older Elm files to Elm 0.18 syntax

Examples:

```
elm-format Main.elm           # formats Main.elm
elm-format Main.elm --output Main2.elm # formats Main.elm as Main2.elm
elm-format src/                # format all *.elm files in the src
directory
```

Full guide to using elm-format at <<https://github.com/avh4/elm-format>>

Zebras-MBP:Elm Zebra\$



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