

# An Introduction to Elm

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# Overview

An  
Introduction  
to Elm

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What is Elm?

Why Elm?

What are we  
going to do?

1 What is Elm?

2 Why Elm?

3 What are we going to do?

# What is Elm?

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What is Elm?

Why Elm?

What are we  
going to do?

- Functional programming language
- Competes with projects like React as a tool for creating web apps.
- Compiles to JS, HTML and CSS
- Statically typed
- Type inference
- Pure
- All values are immutable.

# Why Elm?

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What is Elm?

Why Elm?

What are we  
going to do?

- No runtime exceptions!
- Friendly error messages.
- Enforced Semantic versioning for all community libraries.
- Haskell like syntax
- Fast!
- Javascript interoperability

# What are we going to do?

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What is Elm?

Why Elm?

What are we  
going to do?

- Learn about the Elm architecture.
- User input examples
- Interacting with the outside world.

# First things first

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What is Elm?

Why Elm?

What are we  
going to do?

```
npm install -g elm
```

```
git clone
```

```
https://github.com/patrickcorrigan/  
FunctionKatzElmTalk.git
```

# Elm architecture

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What is Elm?

Why Elm?

What are we  
going to do?

Every elm program has the same architecture.

- Model
- Update
- View

# Button Example

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What is Elm?

Why Elm?

What are we  
going to do?

# Build a simple counter.



# Now it's your turn

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What is Elm?

Why Elm?

What are we  
going to do?

Your terrible boss has asked you to add a reset button. He says it's going to make the company millions.

Modify the code in `examples/counter`

# Text input example

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Why Elm?

What are we  
going to do?

## Text reverser

# Now it's your turn 2

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What is Elm?

Why Elm?

What are we  
going to do?

Your underpaying boss has asked you to convert it a palindrome checker.

Modify the code in `examples/reverse`

# Friend List Example

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What is Elm?

Why Elm?

What are we  
going to do?

## Friend List Example

# Now it's your turn 3

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What is Elm?

Why Elm?

What are we  
going to do?

Feature request for you friends list. When clicking on a person it should reveal their disposition.

Modify the code in `examples/friends-list`

# GET request example

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Why Elm?

What are we  
going to do?

## Simple Pokedex

# Effects

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What is Elm?

Why Elm?

What are we  
going to do?

Commands : Demanding some effect. Asking for a random number. Making a HTTP request.

Subscriptions : Register that you are interested in something. Geolocation changes. Messages coming in on a web socket.

# I lied

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What is Elm?

Why Elm?

What are we  
going to do?

# I lied.



# Elm architecture

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What is Elm?

Why Elm?

What are we  
going to do?

Every elm program has the same architecture.

- (Model, Initial Command)
- Update
- View
- Subscriptions

# Thank you

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What is Elm?

Why Elm?

What are we  
going to do?

# Thank you