

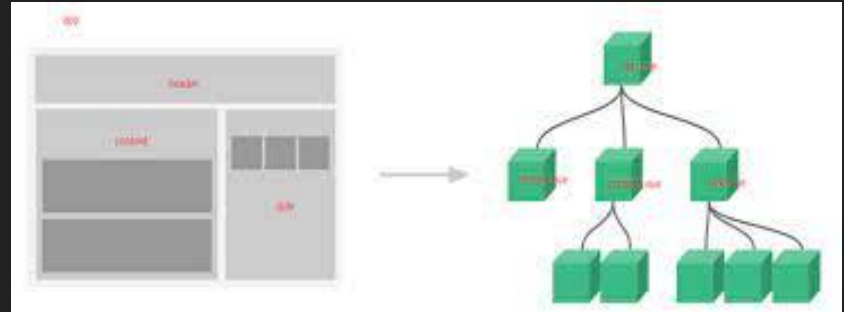
# Felicette

A no-code/low-code platform to bootstrap frontend applications.

# How it works

We can view an application as a nested structure, where each component has the following properties:

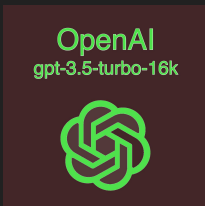
- source code (HTML/JavaScript/CSS)
- input: props
- output: emits
- parent component
- child components



Given these properties we can break down "frontend development" into a series of small prompts and functions:

1. Base prompt ('Create a login component ...')
2. Optional: a series of q&a prompts ('How many input fields? Email and password. ...')
3. LLM generates initial source code
4. Optional: modifications ('Make sure the passwords contain 10 digits.', 'Emit a 'submit' event when a user is logging in')
4. Optional: LLM wants to needs parent component: `get_parent_component('my-new-comp')` # Modify parent component to write a callback for the emit
5. Finally: run unit tests on generated component and on the whole application to maintain consistency

# Architecture



Generate source-code

```
<!DOCTYPE html>
<html id="home-layout">
  <head>
    <meta http-equiv="content-type" conte
    <title>Source Code Pro</title>
    <!-- made with <3 and AFDKO -->
    <meta name="keywords" content="sans,
      monospace, open source, coding, for
    <link rel="stylesheet" type="text/css
  </head>
  <body>
    <div id="main">
```

Run unit tests



```
<!DOCTYPE html>
<html id="home-layout">
  <head>
    <meta http-equiv="content-type" conte
    <title>Source Code Pro</title>
    <!-- made with <3 and AFDKO -->
    <meta name="keywords" content="sans,
      monospace, open source, coding, for
    <link rel="stylesheet" type="text/css
  </head>
  <body>
    <div id="main">
```

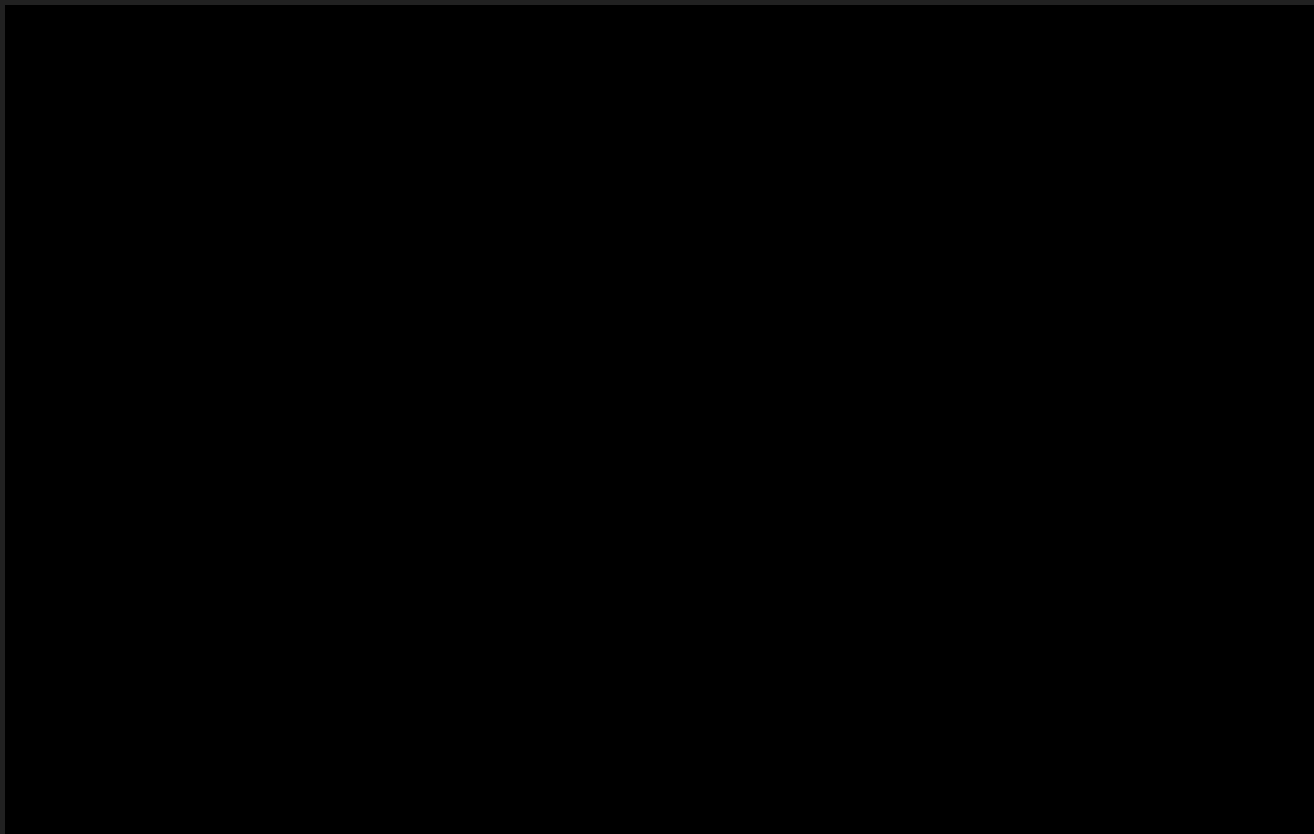
```

Hello.vue
<template lang="jade">
  div
    p {{ greeting }} World!
    other-component
</template>
<script>
import OtherComponent from './OtherComponent.vue'
export default {
  data () {
    return {
      greeting: 'Hello'
    }
  },
  components: {
    OtherComponent
  }
}
</script>
<style lang="stylus" scoped>
p
  font-size 2em
  text-align center
</style>
```

Break down into:  
template, script, props  
and emits



Demo



# Future work

- Implement outlines package to generate source-code given a specific syntax
- Fine-tune models for every major frontend framework with high quality source code
- Fine-tune on various UI component libraries e.g. Bootstrap, Quasar Framework
- Export source code to VS Code, GitHub or StackBlitz