Testing Document

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Testing Strategy

* Unit Tests: Unit tests on the code running server, CloudCheck to ensure product’s functionality by testing the helper methods and on the parser API classes.
* E2E Testing: Cypress frontend tests on my NextJS app developed in the first weeks and frontend tests on the Quarterfall platform

Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Helper Method** | **Case 1** | **Case 2** | **Case 3** | **Case 4** |  |
| ***runCommand()*** | Without options | Invalid command | Command with options | ----------------- |  |
| ***cleanupLog()*** | Log is null | Log element not string | Log element is null | Log elements all string |  |
| ***executeVMCode()*** | Run console.log | Run empty code | Run erroneous code |  |  |
| ***runScript()*** |  |  |  |  |  |
|  |  |  |  |  |  |

**Technologies**

*-My App-*

1. Typescript

Typescript is an extension of JavaScript, meaning that every feature JavaScript has, Typescript has, plus some more. These extra features include type safety, a feature that prevents errors by discovering them before runtime.

1. NextJS

Next.js is a React framework for developing single page JavaScript applications. The difference between this framework and ReactJS or Node.js is the speed of rendering the web pages. By default, Next.js **pre-renders** every page. This means that Next.js generates HTML for each page in advance, instead of having it all done by client-side JavaScript. Pre-rendering can result in better performance and search engine optimization. Each generated HTML is associated with minimal JavaScript code necessary for that page. When a page is loaded by the browser, its JavaScript code runs and makes the page fully interactive.

1. MermaidJS

Mermaid is a JavaScript based diagramming and charting tool that uses Markdown-inspired text definitions and renderer to create and modify complex diagrams. The main purpose of Mermaid is to help documentation catch up with development. Mermaid makes use of a technology called Jison, a parser in which you can define grammar in a .jison file and it outputs a JavaScript parser. I used Mermaid for its built in diagram parser.

Test-Driven Development

Going forward into this project, developing my plugin