

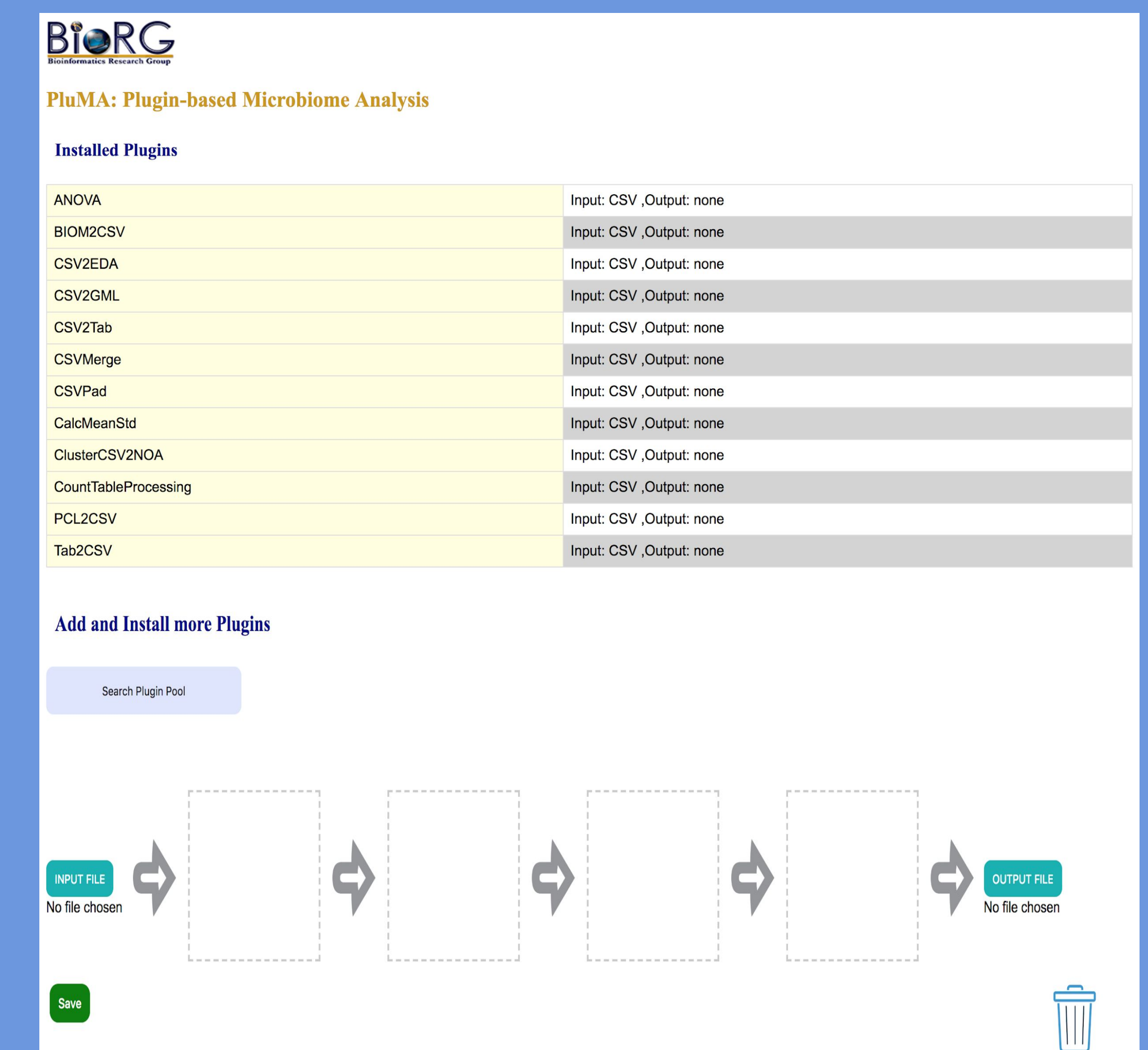
Abstract

Our goal with PluMA is to facilitate the construction of flexible analysis pipelines through which a developer can implement a new algorithm in their programming language of choice, and easily test and debug within a larger pipeline alongside stages in different languages that potentially use different file formats.

Current System

Our interface is a desktop application that uses Electron to help create a more user friendly experience when using PluMA. Electron is a framework for creating native applications with web technologies. The desktop application runs on a built-in server and has several features implemented including web scraping, drag and drop, and parsing filenames.

Screenshots

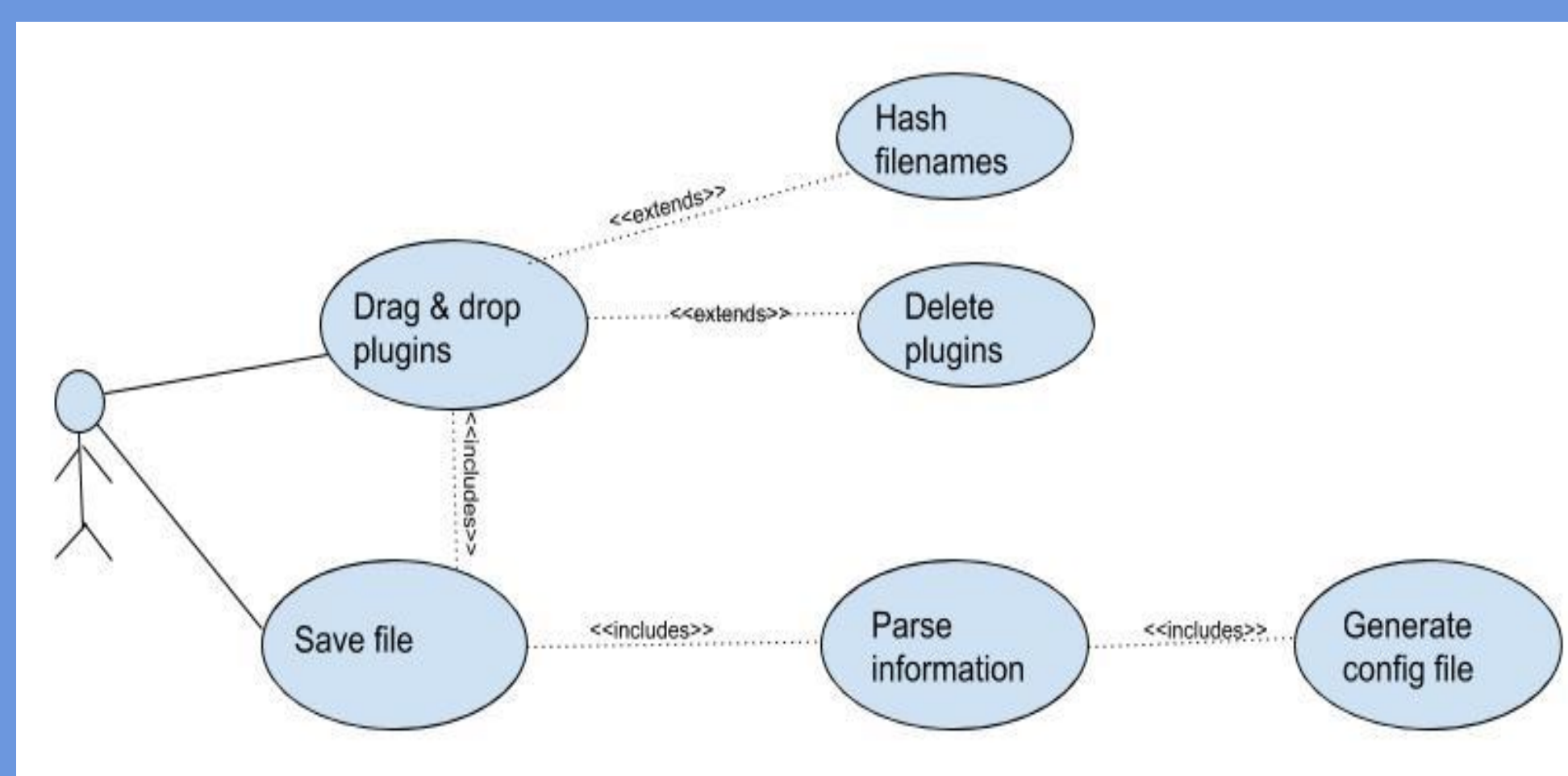


Technologies Used

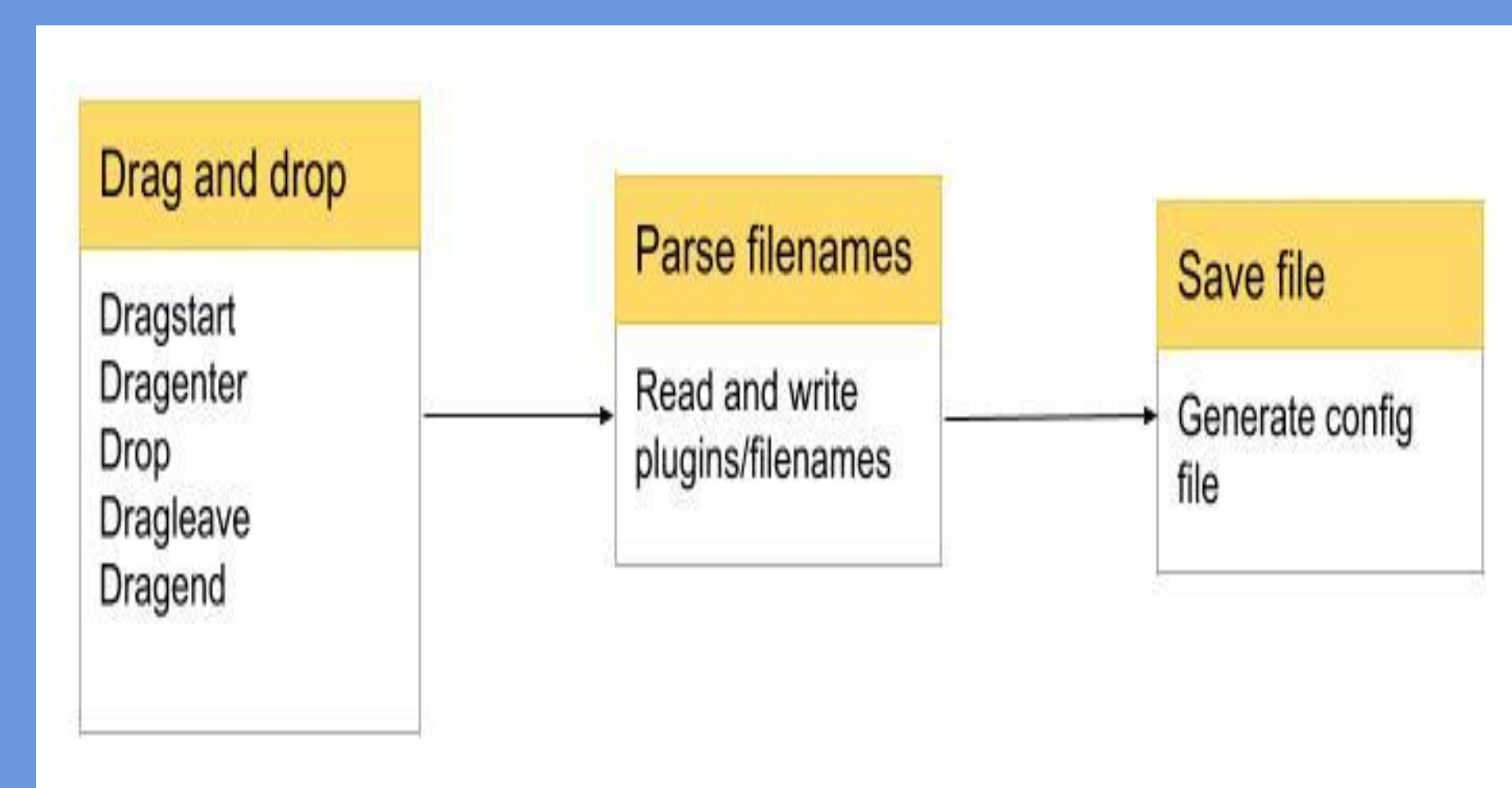
- Electron
- CSS
- JavaScript
- Node.js
- HTML
- Chromium



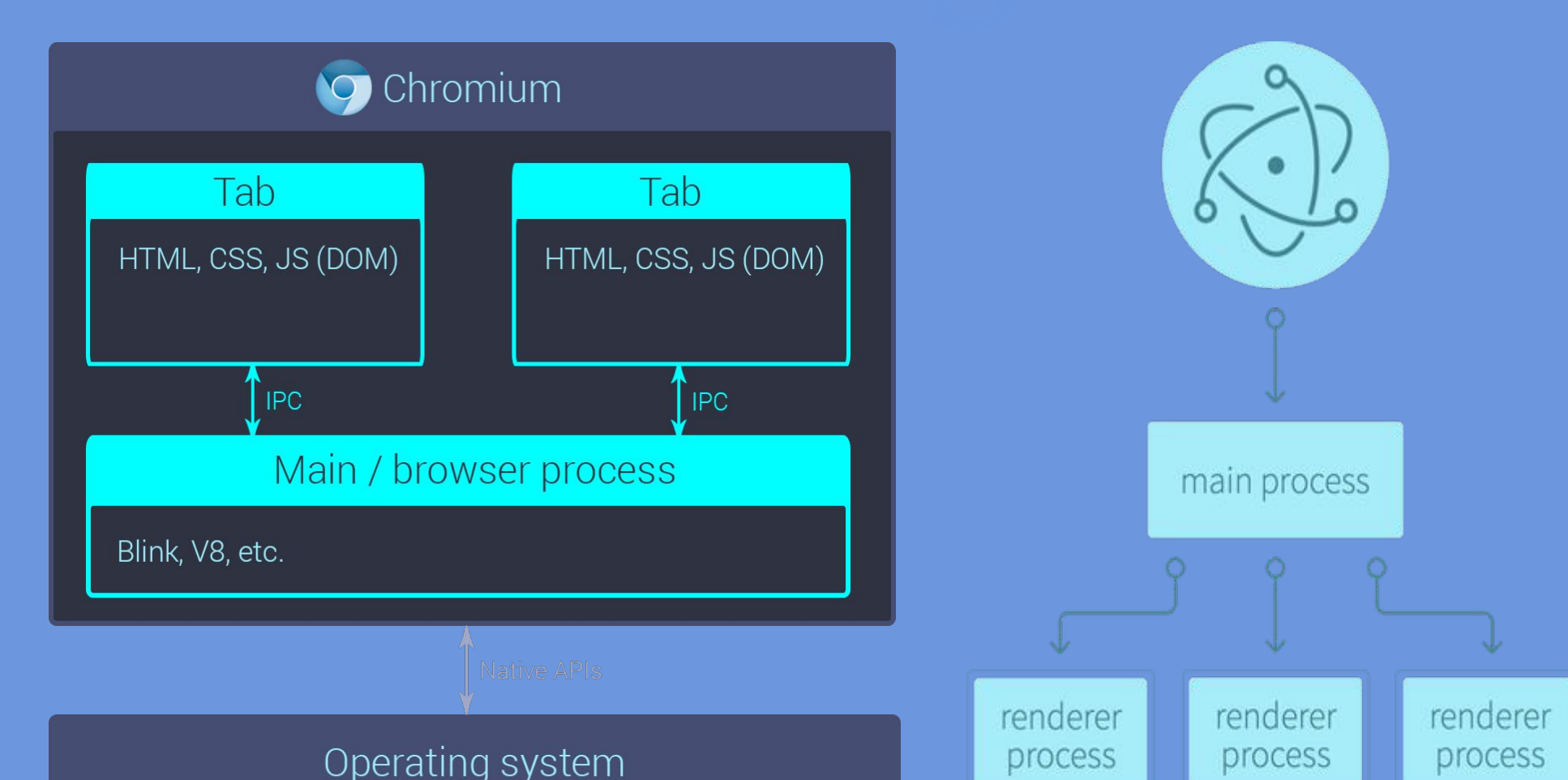
Use Case Diagram



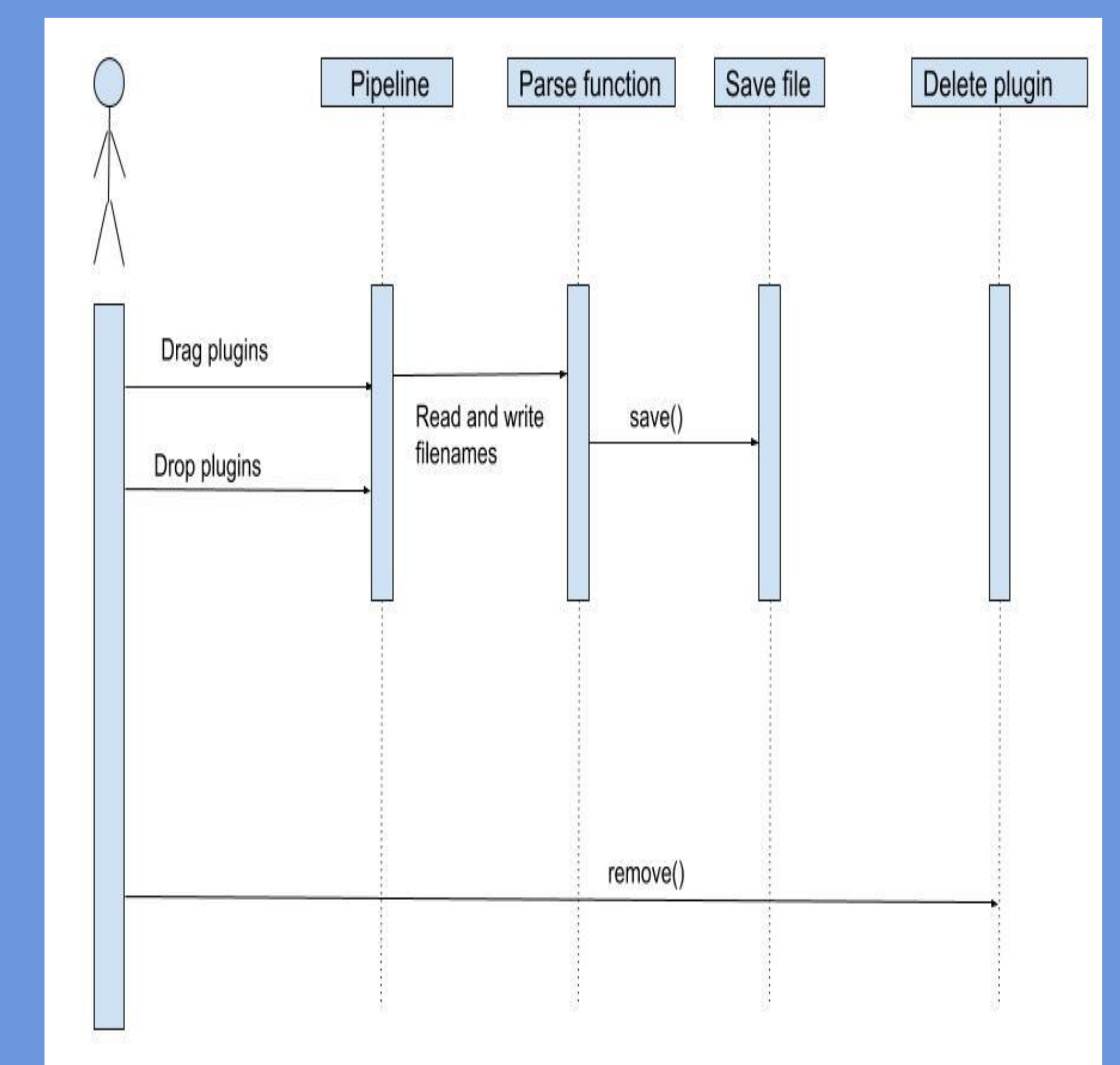
Class Diagram



Architecture



Sequence Diagram



Contribution

I was responsible for implementing the functionality of the drag and drop feature, the delete plugin feature, parsing the plugins added, and saving the information into a config file.

Acknowledgements

Special thanks to Trevor Cickovski for his guidance. Thank you to my teammates Bhavyta and Cesia. Thank you to Emtanis for helping with the poster design.