High Level Design

In this project, we will firstly look at the initial version of the For Mainframe plugin and propose a way to test it. At the time of this project, the plugin is still being reworked. Because of that we, validated our approach on some methods of a smaller part of the plugin, which handles connections. These methods are already in use and we expect they should not be changed much in the future. The testing approach is composed of three testing levels called unit tests, API tests and UI tests. Unit tests are the fastest. However, they are not always cost-effective to implement as mocking all of the plugin components can be difficult. The API tests are slower, run in a headless IDEA and use real plugin components. UI tests are the slowest. All tests are executed in a pipeline used by GitHub Actions.

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                    │   GitHub Actions  │
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    ┌──────────────┐ ┌──────────┐ ┌──────────┐
    │  Unit tests  │ │ API tests│ │ UI tests │
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                    ┌──────────────┐
                    │  Connection   │
                    │  handling     │
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                    ┌──────────────┐
                    │ For Mainframe │
                    │   Plugin      │
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```