Connection handling

The For Mainframe plugin allows user to connect his machine with installed IntelliJ IDEA to a mainframe and add, edit or delete datasets on it. Here we will introduce how the connections are being handled. A diagram of connection handling can be seen in Figure 1. There we have divided the plugin into API, UI and Storage.

The UI is composed of tool windows, dialogs, etc. The user can give the plugin instructions for handling the connection through the Settings Dialog. Upon some instruction, more data needs to be inputted by the user through Connection Dialog. In the current version of the plugin, the testing for invalid connection is being done within the dialogs. Upon receiving an invalid error, an error dialog is shown to the user. For clarity, this is not reflected in the Fig. 1.

The API section represents all of the methods and classes which operate in the plugin and do not need UI to exist. One of them is the ConnectionTableModel class, which receives the instruction from the Settings Dialog and calls an appropriate method. The UI representation of this class is a table in the Settings Dialog. The method edits the information within the ConnectionTableModel and two storage variables called sandboxCrudable and configCrudable. The information in these variables is then used in other parts of the plugin, such as the creation of a work set or data set. Upon the successful completion of the method, the changed table is shown in the Settings Dialog.

As an example, when user wants to add a connection, they click on the add action button in the Settings Dialog, which results in the opening of a Connection Dialog. Upon adding additional information to the Connection Dialog, the ConnectionTableModel calls the onAdd method, which adds a row to the table and new information to the Storage. The changed table is then being shown in the Settings Dialog.

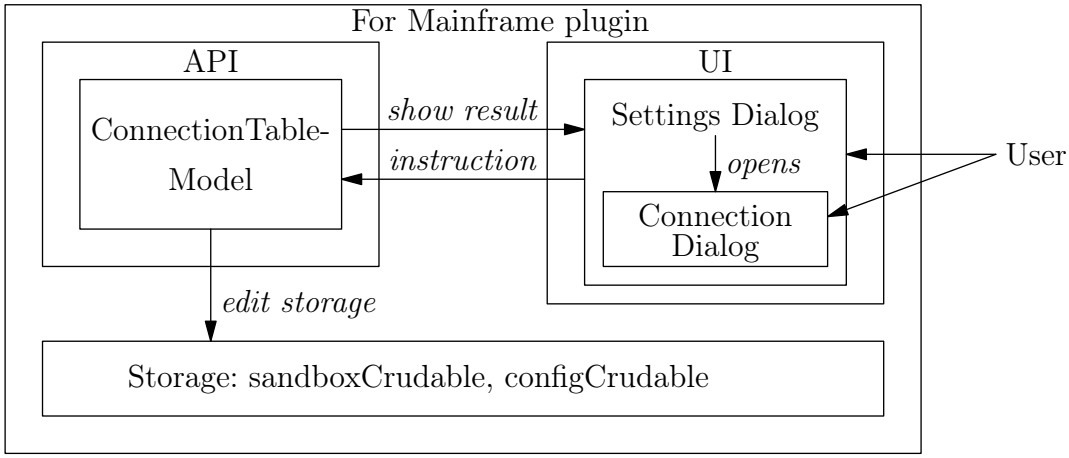

Fig. 1: Diagram of connection handling. We can see the UI, API and Storage sections of the plugin along with their parts.