Hover for solang-vscode

Hover in solang-vscode can be used to quickly check the variable types of the respective variables for hassle free programming.

Hover can be experienced when you:

- Open a solidity file(.sol).
- Place/Hover the mouse(pointer) over a variable name.

Wondering how this works?

Before starting to process the hover requests from the client, the server computes a tuple array of (left-offset, right-offset, message) by traversing the ast statements, followed by expressions and stores each hover type messages in the lookup table mapping to the correct offset.

When you point at a position, the client sends the cursor position to the server. The server converts line, char to respective file offsets. The server looks for the particular position inside its lookup table which has pre-computed hover messages for the respective left-right ranges of file offsets. After locating the respective messages it is rendered back to the client as a new Hover object.

Which properties are supported:

- 1. Variables types in the enums, structs, functions, contracts.
- 2. Tag and fields processing for structs, enums, events and functions.
- 3. Definition of function including args and return types.

We are working on more features, stay tuned!