The Move Book

Move is a language for writing smart contracts - programs that are stored and run on the blockchain. A single program is organized into a package. A package is published on the blockchain and is identified by an <u>address</u>. A published package can be interacted with by sending <u>transactions</u> calling its functions. It can also act as a dependency for other packages.

To create a new package, use the sui move new command. To learn more about the command, run sui move new --help.

Package consists of modules - separate scopes that contain functions, types, and other items.

Locally, a package is a directory with a Move.toml file and a sources directory. The Move.toml file - called the "package manifest" - contains metadata about the package, and the sources directory contains the source code for the modules. Package usually looks like this:

The tests directory is optional and contains tests for the package. Code placed into the tests directory is not published on-chain and is only available in tests. The examples directory can be used for code examples, and is also not published on-chain.

During development, package doesn't have an address and it needs to be set to 0x0. Once a package is published, it gets a single unique <u>address</u> on the blockchain containing its modules' bytecode. A published package becomes immutable and can be interacted with by sending transactions.

Package Structure

Locally, a package is a directory with a Move.toml file and a sources directory. The Move.toml file - called the "package manifest" - contains metadata about the package, and the sources directory contains the source code for the modules. Package usually looks like this:

```
bash sources/ my_{module.move} another_module.move ... tests/ ... examples/ using_{my_{module.move}} Move.toml
```

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During development, package doesn't have an address and it needs to be set to 0x0. Once a package is published, it gets a single unique <u>address</u> on the blockchain containing its modules' bytecode. A published package becomes immutable and can be interacted with by sending transactions.

```
bash 0x... my module: <bytecode> another module: <bytecode>
```

Published Package

During development, package doesn't have an address and it needs to be set to 0x0. Once a package is published, it gets a single unique <u>address</u> on the blockchain containing its modules' bytecode. A published package becomes immutable and can be interacted with by sending transactions.

```
bash 0x... my_module: <bytecode> another_module: <bytecode>
```

Links