Move 基礎語法（下）

Justa from Bucket Protocol

Bucket

大綱

- 中斷交易（abort & assert）

- 自定義型別（struct）與行為（ability）

- 自定義函式（function）與能見度（visibility）

中斷交易

abort

```
let user_has_access = true;

// abort with a predefined constant if `user_has_access` is false
if (!user_has_access) {
    abort 0
};

// there's an alternative syntax using parenthesis`
if (user_has_access) {
    abort(1)
};
```

中斷交易
assert

```
// aborts if `user_has_access` is `false` with abort code 0
assert!(user_has_access, 0);

// expands into:
if (!user_has_access) {
    abort 0
};
```

自定義型別

struct

```rust
/// A struct representing an artist.
public struct Artist {
    /// The name of the artist.
    name: String,
}


/// A struct representing a music record.
public struct Record {
    /// The title of the record.
    title: String,
    /// The artist of the record. Uses the `Artist` type.
    artist: Artist,
    /// The year the record was released.
    year: u16,
    /// Whether the record is a debut album.
    is_debut: bool,
    /// The edition of the record.
    edition: Option<u16>,
}
```

型別能力
abilities

- copy - allows the struct to be copied.

- drop - allows the struct to be dropped or discarded.

- key - allows the struct to be used as a key in a storage.

- store - allows the struct to be stored in structs with the key ability.

自定義函式與能見度
function & visibility

- fun - only used in module

- public fun - can used anywhere

- public(package) fun - only used in the same package

- entry fun - public but can't packed into PTB

練習

C2C交易

- 掛單

- 結算

- 撤單