

sequenceDiagram

participant User

participant Compiler

participant StorageBase

participant StoragePath

participant StoragePointer

participant ContractStorage

User->>Compiler: self.owner.name.read()

Compiler->>StorageBase: Get base address for 'owner'

StorageBase->>StoragePointer: Create pointer for 'name'

StoragePointer->>ContractStorage: Read value

ContractStorage-->>User: Return value

User->>Compiler: self.user_values.entry(addr).read()

Compiler->>StorageBase: Get base address for 'user_values'

StorageBase->>StoragePath: Create initial path

StoragePath->>StoragePath: Hash with 'addr'

StoragePath->>StoragePointer: Convert to pointer

StoragePointer->>ContractStorage: Read value

ContractStorage-->>User: Return value

User->>Compiler: self.user_values.entry(addr).write(value)

Compiler->>StorageBase: Get base address for 'user_values'

StorageBase->>StoragePath: Create initial path

StoragePath->>StoragePath: Hash with 'addr'

StoragePath->>StoragePointer: Convert to pointer

StoragePointer->>ContractStorage: Write value

ContractStorage-->>User: Confirm write