

## Causes

## Operations

## Consequences

**Code Defect Bug**

- Missing Code
- Mismatched Operation
- Erroneous Code

**Data Fault**

- Forbidden Address
- Wrong Size

**Type Fault**

- Casted Pointer

**Address Fault**

- NULL Pointer
- Wild Pointer
- Dangling Pointer
- Untrusted Pointer
- Over Bounds Pointer
- Under Bounds Pointer
- Wrong Position Pointer

**Size Fault**

- Not Enough Memory

**Initialize Object**

- Dereference
- Read
- Write
- Clear

**Operands**

- Data
- Type
- Address
- Size

**Data Error**

- Uninitialized Object

**Memory Corruption/Disclosure**

**Final Exploitable Error**

- Not Cleared Object
- NULL Pointer Dereference
- Untrusted Pointer Dereference
- Object Corruption
- Type Confusion
- Use After Free
- Buffer Overflow
- Buffer Underflow
- Buffer Over-Read
- Buffer Under-Read
- Uninitialized Pointer Dereference