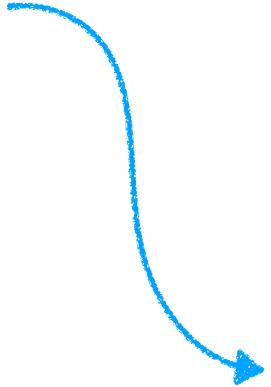


## Apple Does Things Differently

## .unwind info







# IS NOT FUNCTION START



#### OPCODE

- (X86):
- 0: RBP-Based
- 1: Stack-IMM
- 2: Stack-IND
- 3: DWARF

Operands



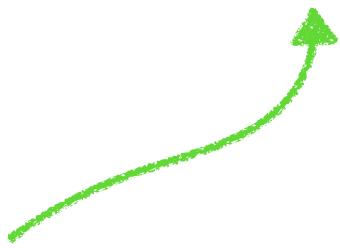


# Regular 2nd Level Page functionOffset Encoding

functionOffset
 Encoding

functionOffset Encoding

### gxx personality v0







## Apple Does Things Differently

## .unwind\_info

```
functionOffset
secondLevelPages
 LSDAIndexArray
 functionOffset
secondLevelPages
 LSDAIndexArray
 functionOffset
secondLevelPages
 LSDAIndexArray
 functionOffset
secondLevelPages
```

LSDAIndexArray

```
gxx personality v0
   IS NOT FUNCTION START
     HAS LSDA
        -Personality
                         Operands
                     0x..
                            0x..
                                    Ox..
   Regular
                     OPCODE
2nd Level Page
functionOffset
                     (X86):
   Encoding
                     0: RBP-Based
functionOffset
                     1: Stack-IMM
   Encoding
                     2: Stack-IND
functionOffset
                     3: DWARF
   Encoding
```



# Apple Does Things Differently

### .unwind\_info

functionOffset
secondLevelPages
LSDAIndexArray

functionOffset
secondLevelPages
LSDAIndexArray

functionOffset
secondLevelPages
LSDAIndexArray