# More details about Xcode

# The Anatomy of Xcode

Instruments

Interface
Builder

**clang**

compiler

**LLDB**

debugger
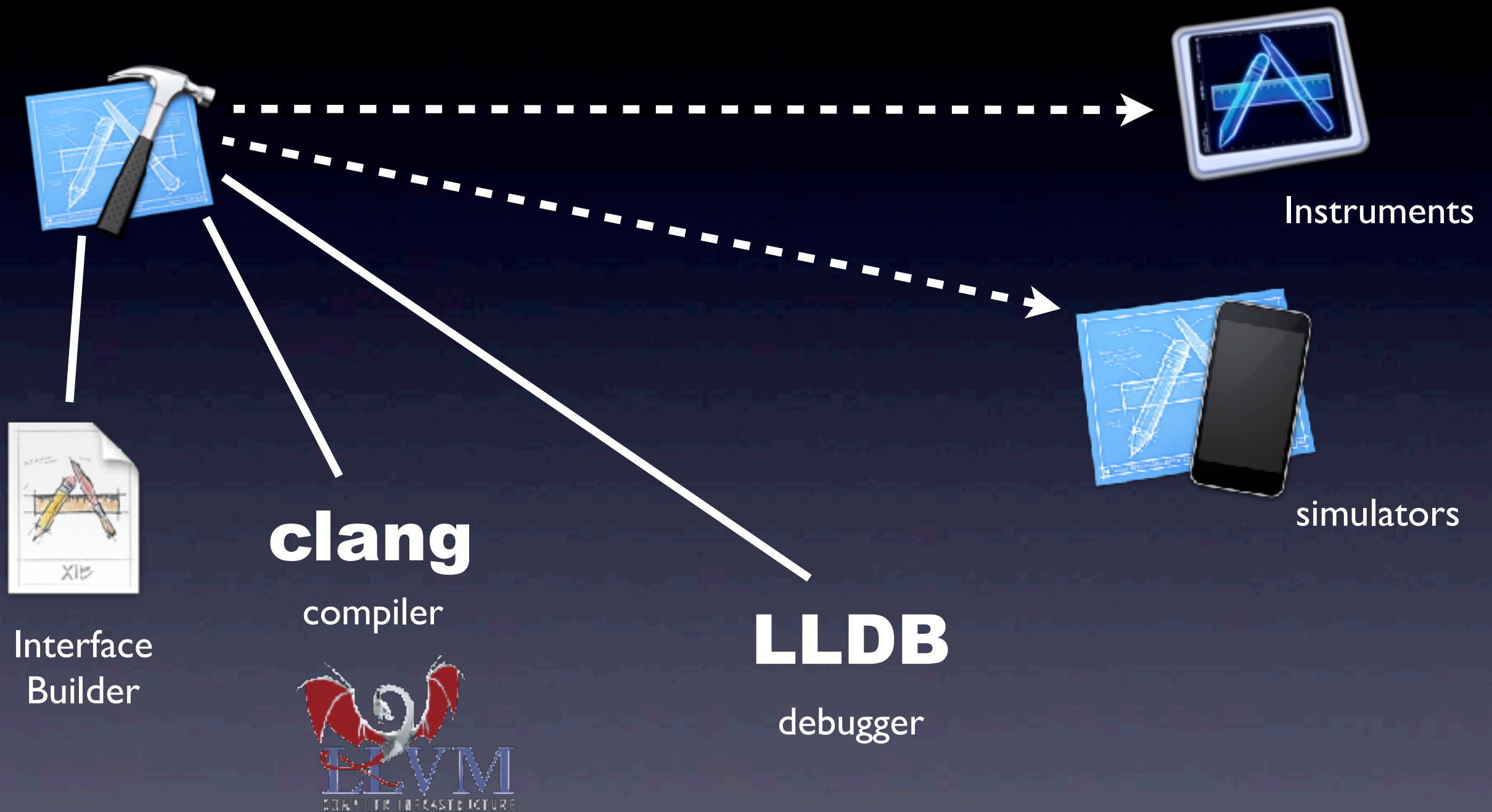
simulators

# LLVM Details

Modular 3-stage compiler



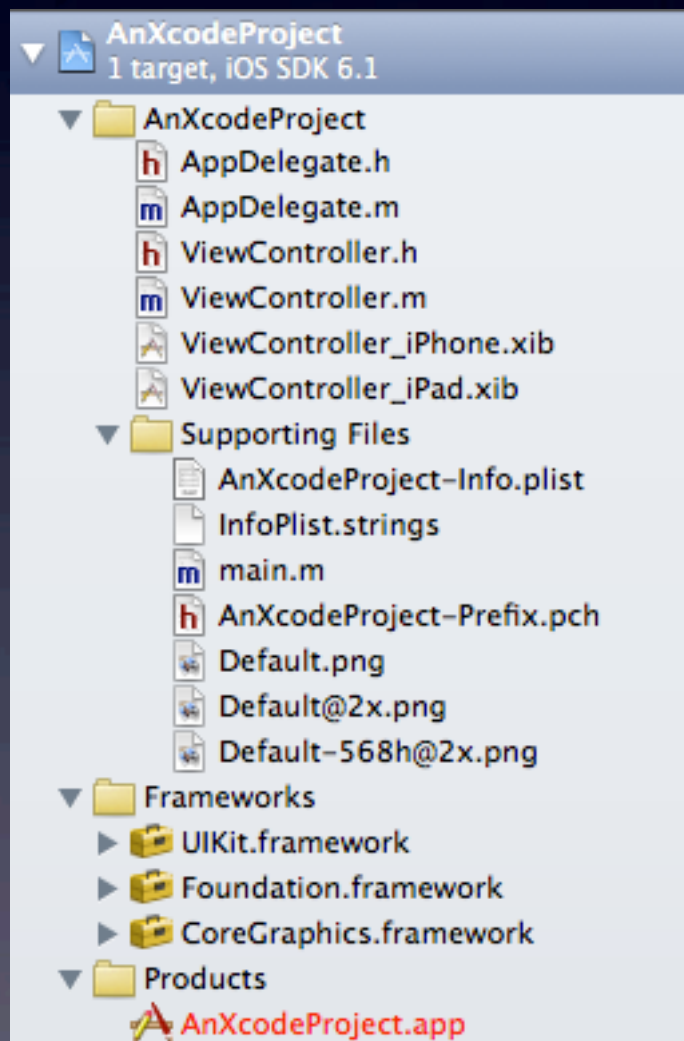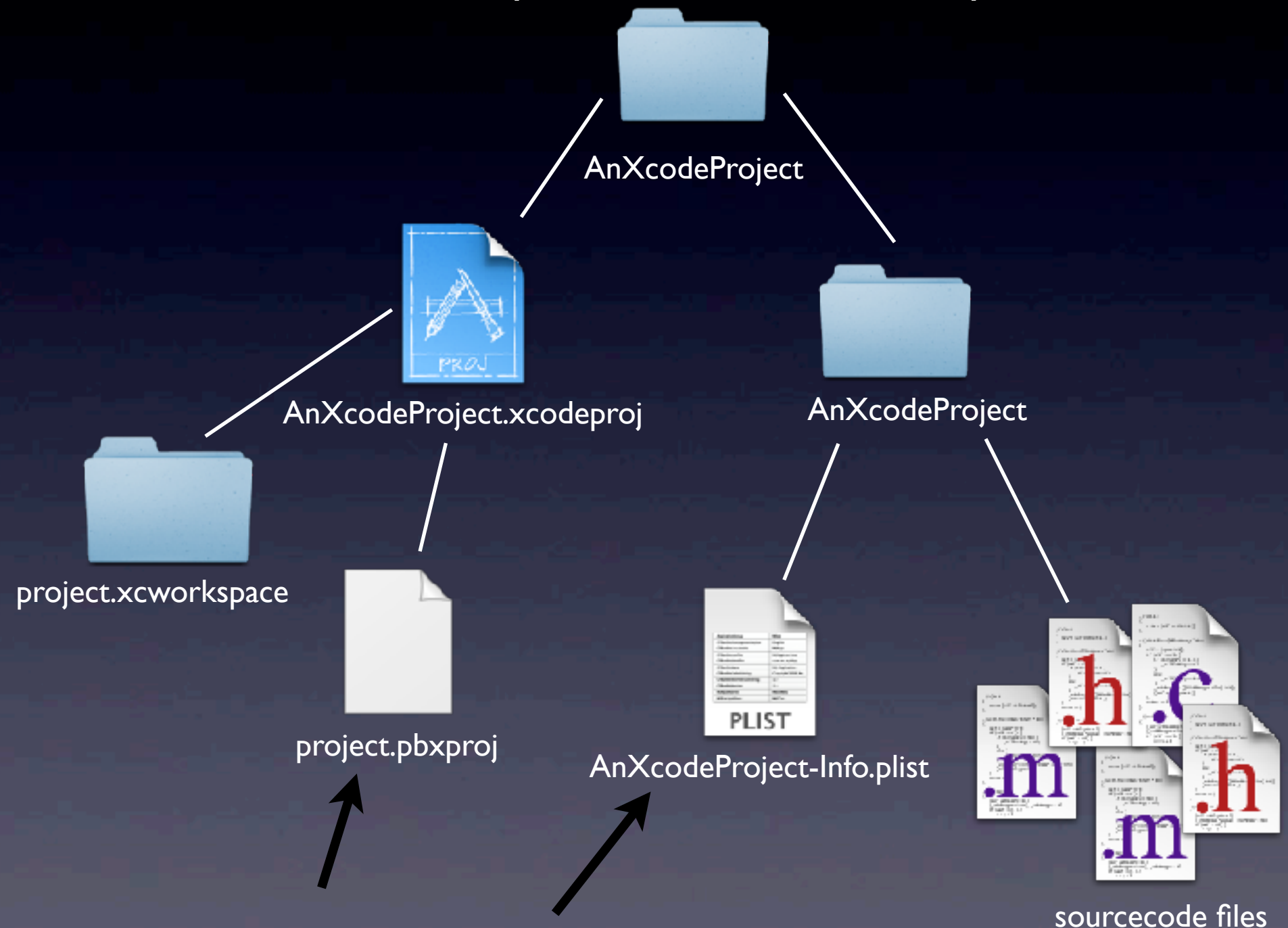Intermediate
Representation(IR)
code
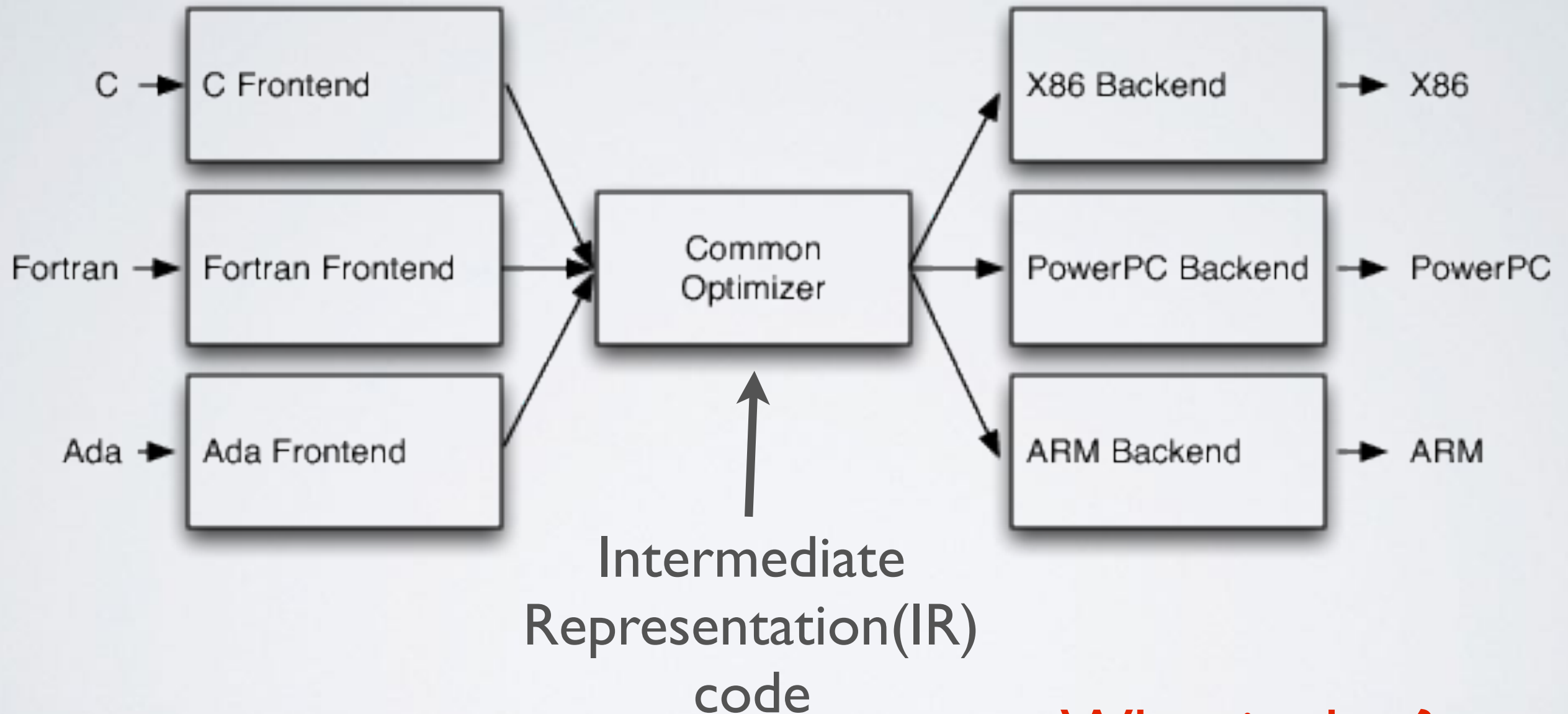
What is that?

try: clang -S -emit-llvm srcfile.m

# Innards of an Xcode Project

In the navigation pane it looks like this

The reality of the source in the filesystem
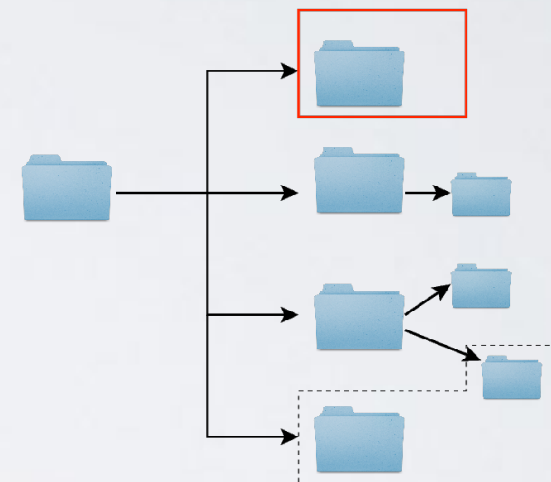
AnXcodeProject

AnXcodeProject.xcodeproj

AnXcodeProject

project.xcworkspace

project.pbxproj

AnXcodeProject-Info.plist

sourcecode files

Most project configuration (groups, resources, etc...) exists in these two files

# LIFE IN A SANDBOX

not writeable

App Bundle

App home
directory

Documents

UserData

NSHomeDirectory()

or

NSUserDefaults is here

NSSearchPathForDirectoriesInDomains()

Library

Preferences

Caches

tmp

not backed-up by iTunes

# SIMULATORS (LIFE IN A VIRTUAL SANDBOX)

The simulator creates the sandbox file structure on the development machine's file system.

```
~/Library/Application Support/iPhone Simulator/6.1/Applications/APP_UUID/
```

simulator version

big ugly hex number with dashes