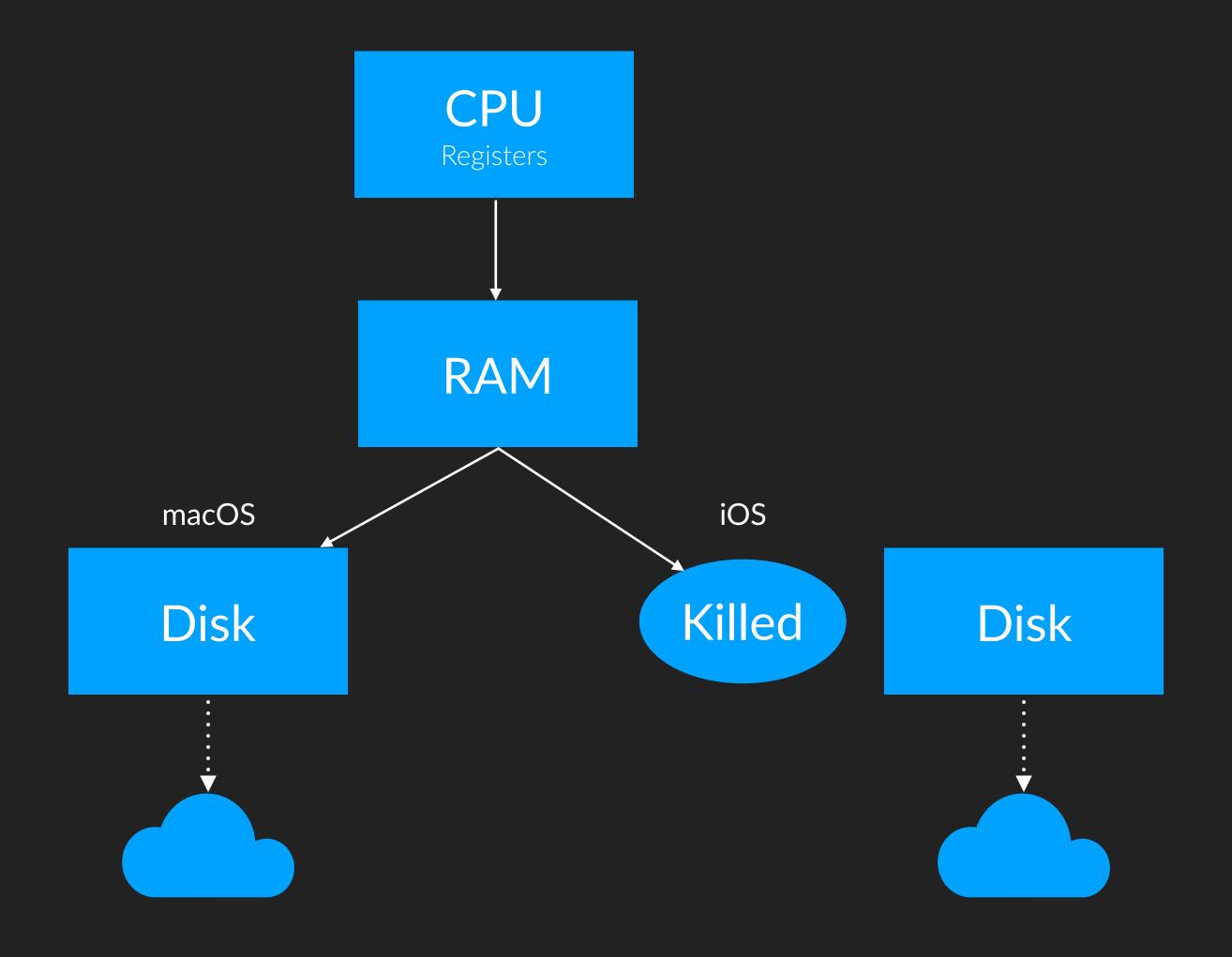
CocoaHeads Aachen

SEPTEMBER 2017

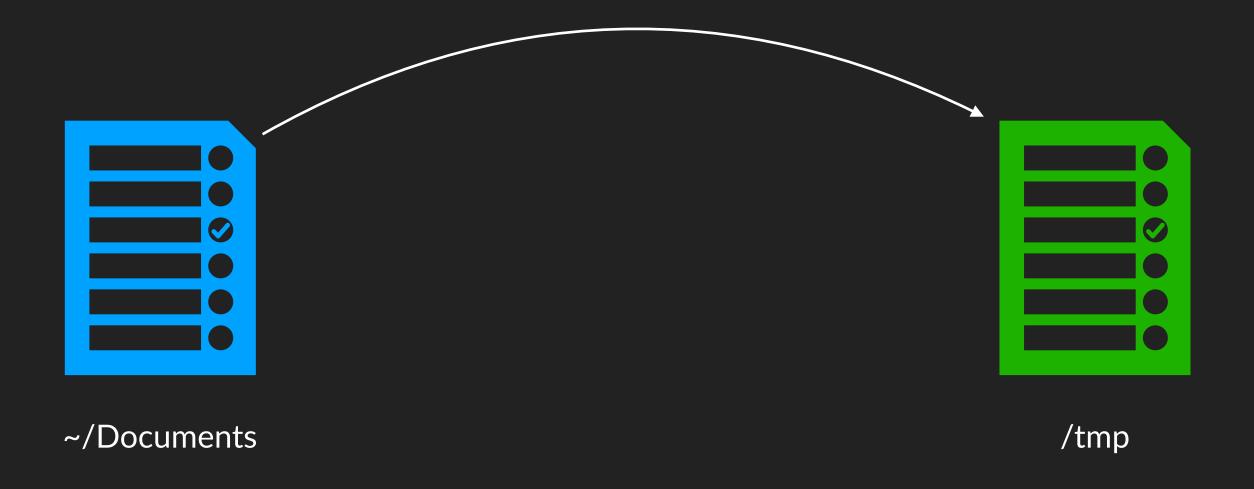
# WHEN THE LAST BYTE IS TAKEN

WHAT CAN GO WRONG WHEN YOU'RE RUNNING OUT OF DISK SPACE

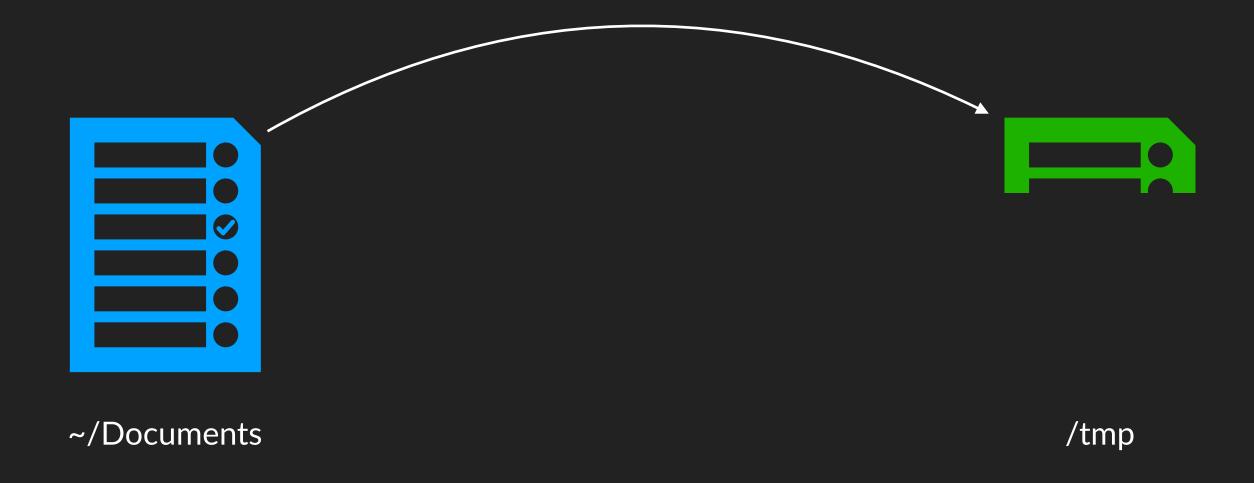
# HIERARCHY OF STORAGE



# NORMAL SAVING PROCESS



## WHAT IF NO STORAGE IS AVAILABLE?



#### ERROR HANDLING

- FileHandle.write(\_:)
  - Throws exception
- FileManager.createFile(atPath:contents:)
  - Returns false
- ▶ FileManager.createDirectory(at:withIntermediateDirectories:)
  - Throws Swift error / NSError pointer

#### SIMULATING LOW STORAGE?

- Create small virtual disk
- Mount as the app's documents directory for the iPhone simulator
- Fill disk image with data to cause out of storage situations
- Instructions:
  - https://stackoverflow.com/a/27821104/3969089

### SIDESTEPPING THE PROBLEM

- If atomicity is not needed, override file instead of creating a new file
- If low storage situations are to be expected, consider keeping temporary data in main memory instead of writing it to disk

# THANK YOU

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