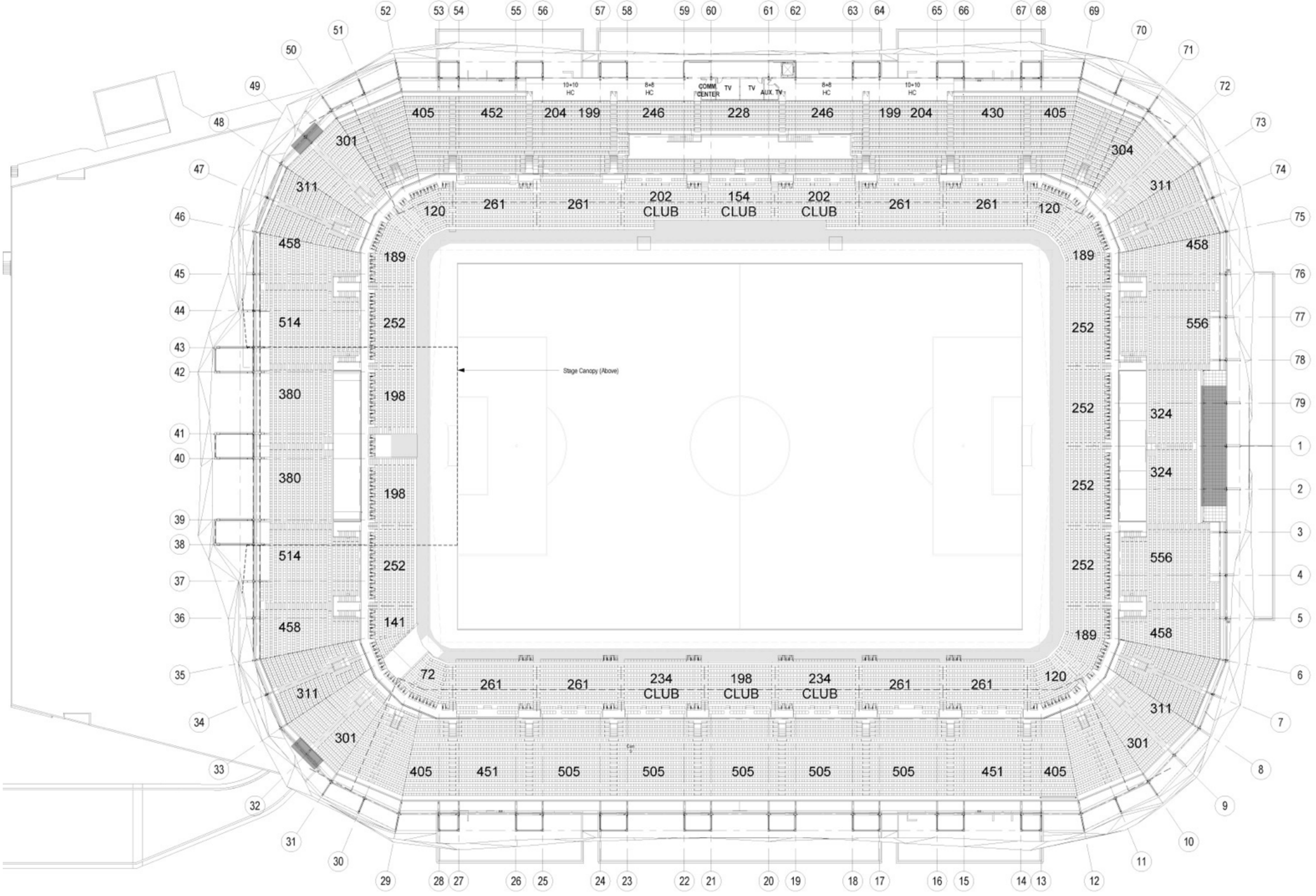
Lecture 2

CSCI 6907.12 - Full Stack Application Engineering

Why do you need architecture?


10+10 HC
8+8 HC
COMM. CENTER
TV
TV
AUX. TV
8+8 HC
10+10 HC
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202 CLUB
154 CLUB
202 CLUB
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Stage Canopy (Above)
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234 CLUB
198 CLUB
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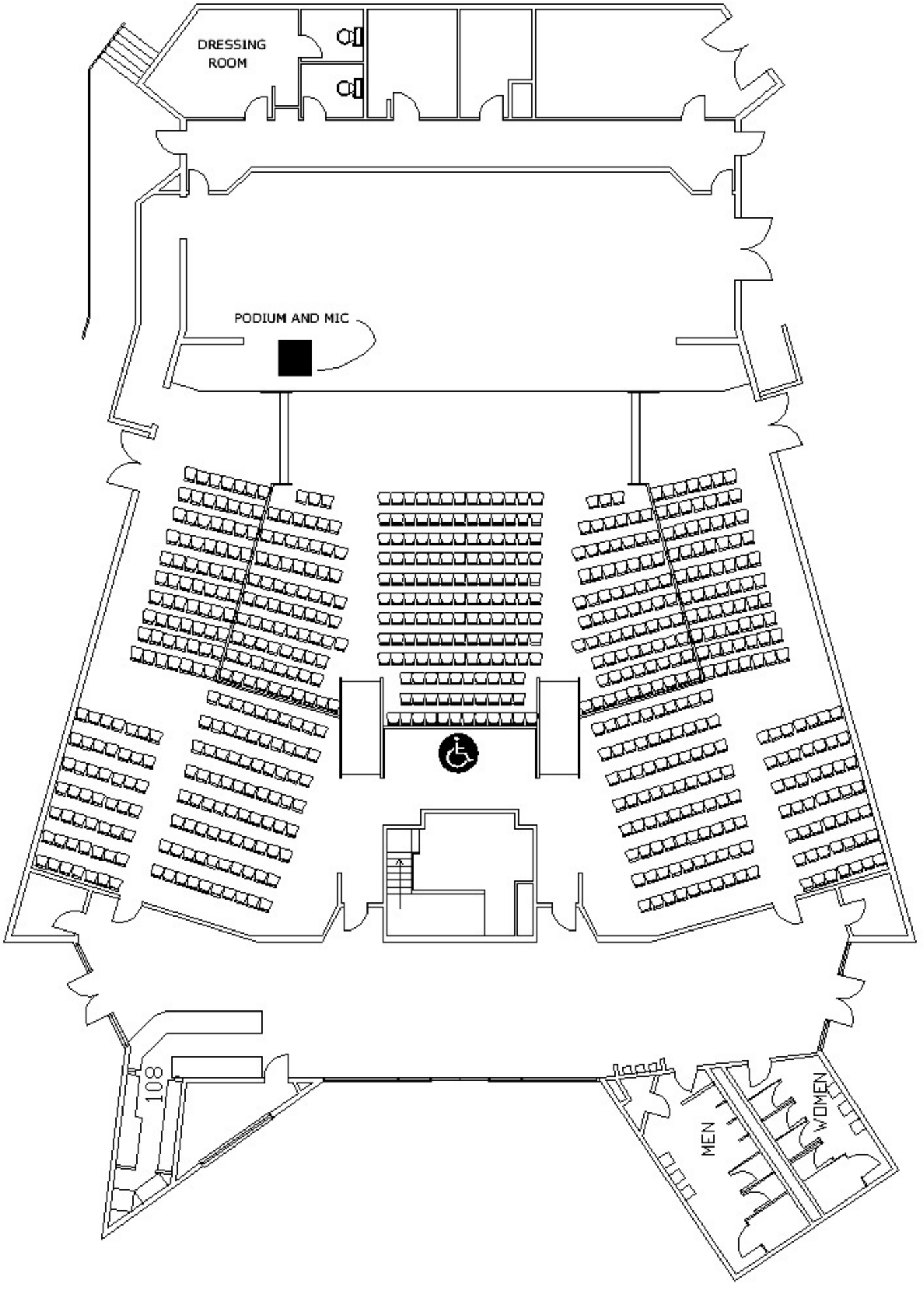
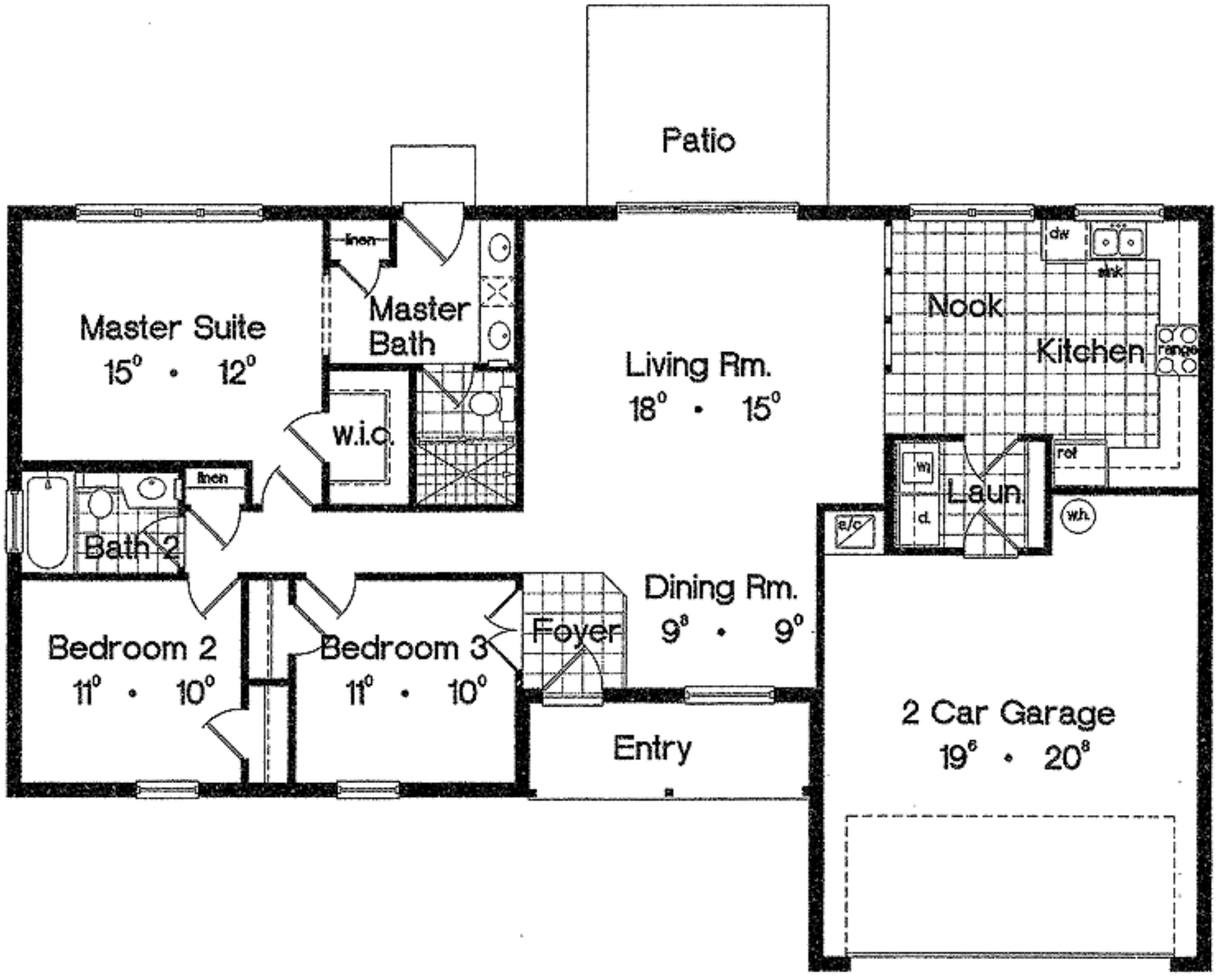
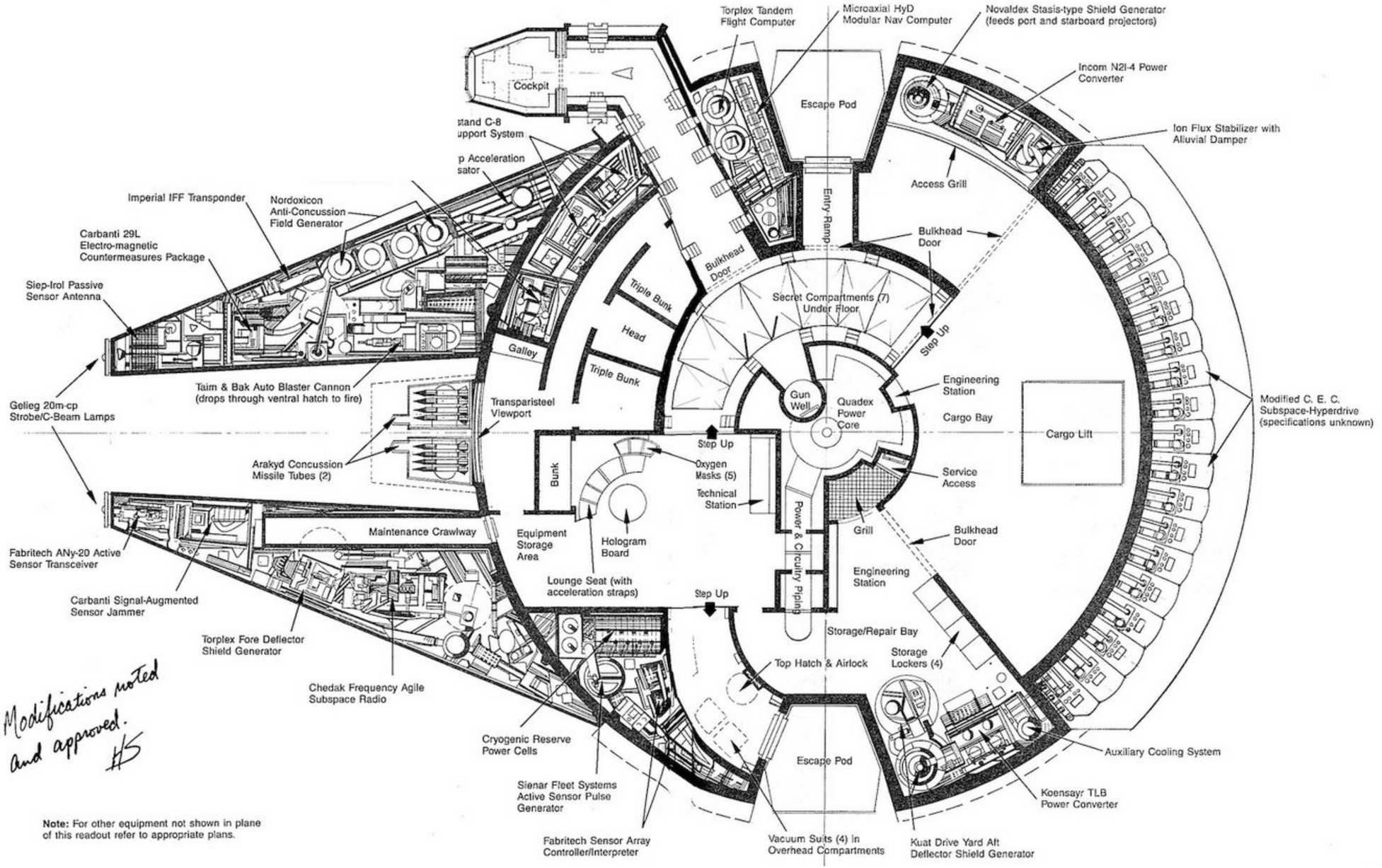

DRESSING
ROOM
PODIUM AND MIC
108
MEN
WOMEN


Patio
linen
Master Suite
15° • 12°
Master
Bath
w.i.c.
Living Rm.
18° • 15°
dw
sink
Nook
Kitchen
range
linen
Bath 2
w
d
Laun.
ref
w.h.
e/c
Dining Rm.
9° • 9°
Foyer
Bedroom 2
11° • 10°
Bedroom 3
11° • 10°
Entry
2 Car Garage
19° • 20°



Modifications noted and approved. HS

Note: For other equipment not shown in plane of this readout refer to appropriate plans.

Why do you need architecture?

- It's a way of communication
- You are not alone
- Things change
- Overhead of architecture gives your efficiency in the long wrong

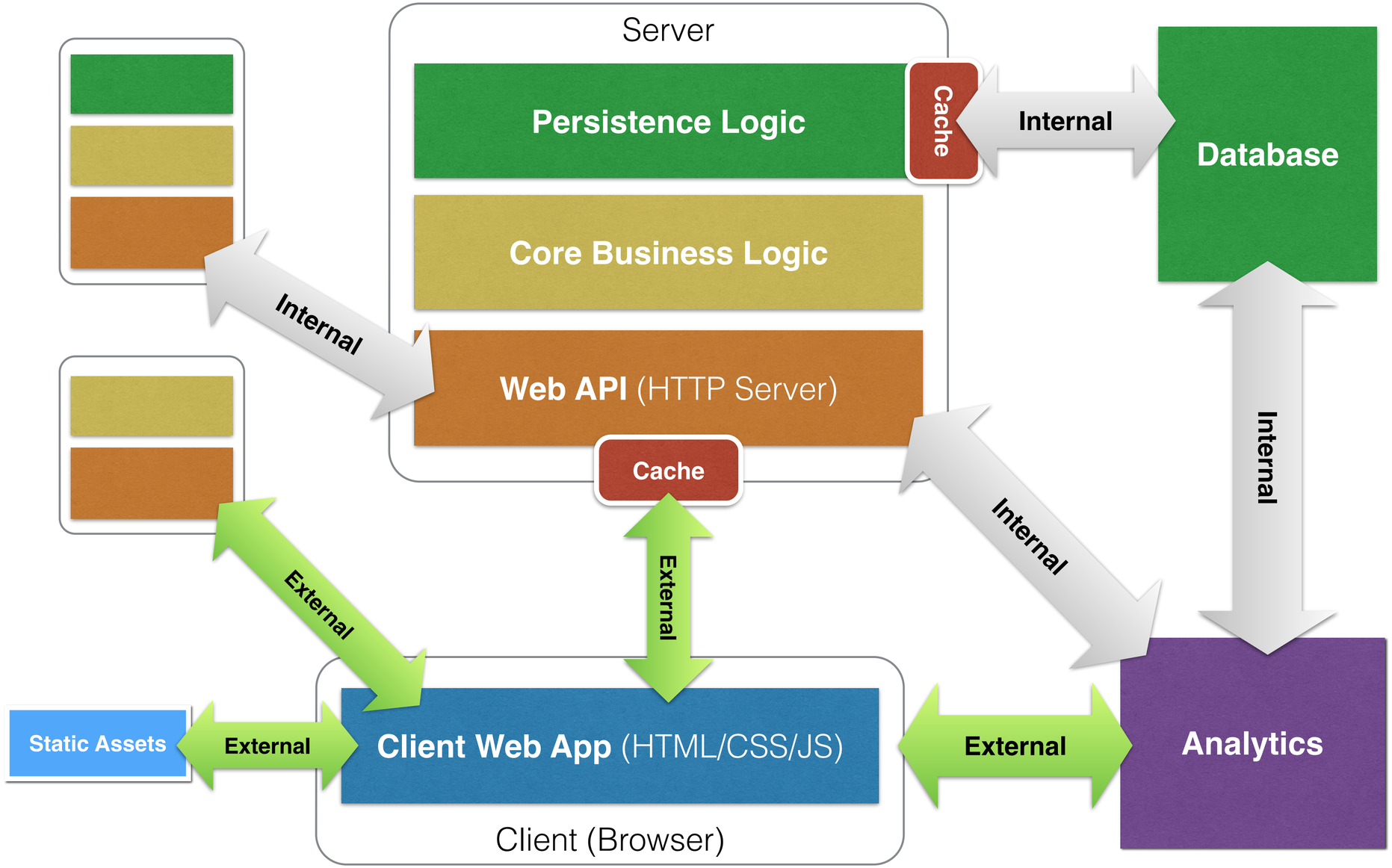
Web Scale!

- Scalability means too many things to too many people

Things Change!

- Users Change
- Business Requirements Change
- Laws Change
- Technology Change
- Developers Change
- You Change

Microservice Architecture



Core Business Logic

- Brain of the application
- All computation needed to carry out the application show live here
- Should NOT contain any code regarding persistence or web
- It should be pure logic/computation
- Provides internal interface to other components

But why?

- You want your core logic to be independent of other peripheral technology as much as possible
  - Separation of concern is a good thing
  - Simple is better than complex
  - Allows changes
  - Allows testable code

Write the Test FIRST!

Side-effect free functions

Do one thing and one thing well

Avoid Booleans if possible

Restrict your data domain

DateMe.com

- Dating website where users can post their profiles
- Based on profiles, matches are made
- Recommendations are provided