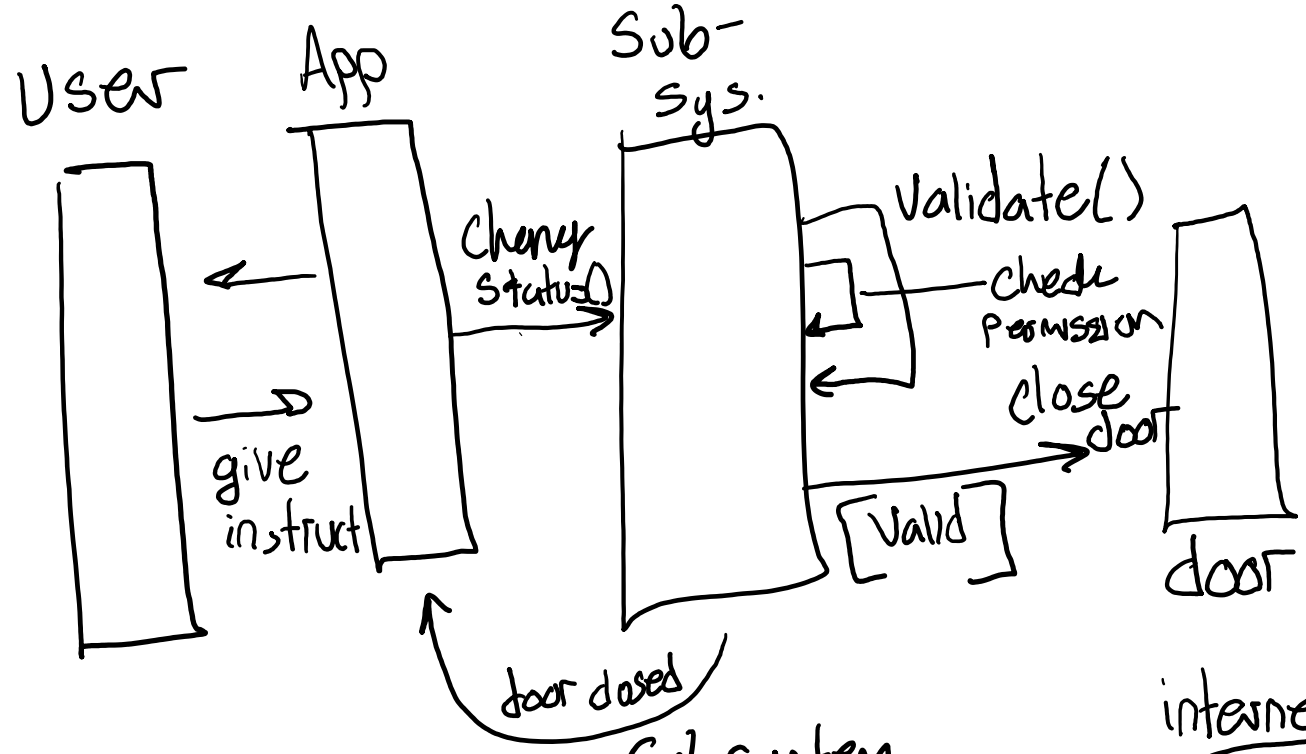
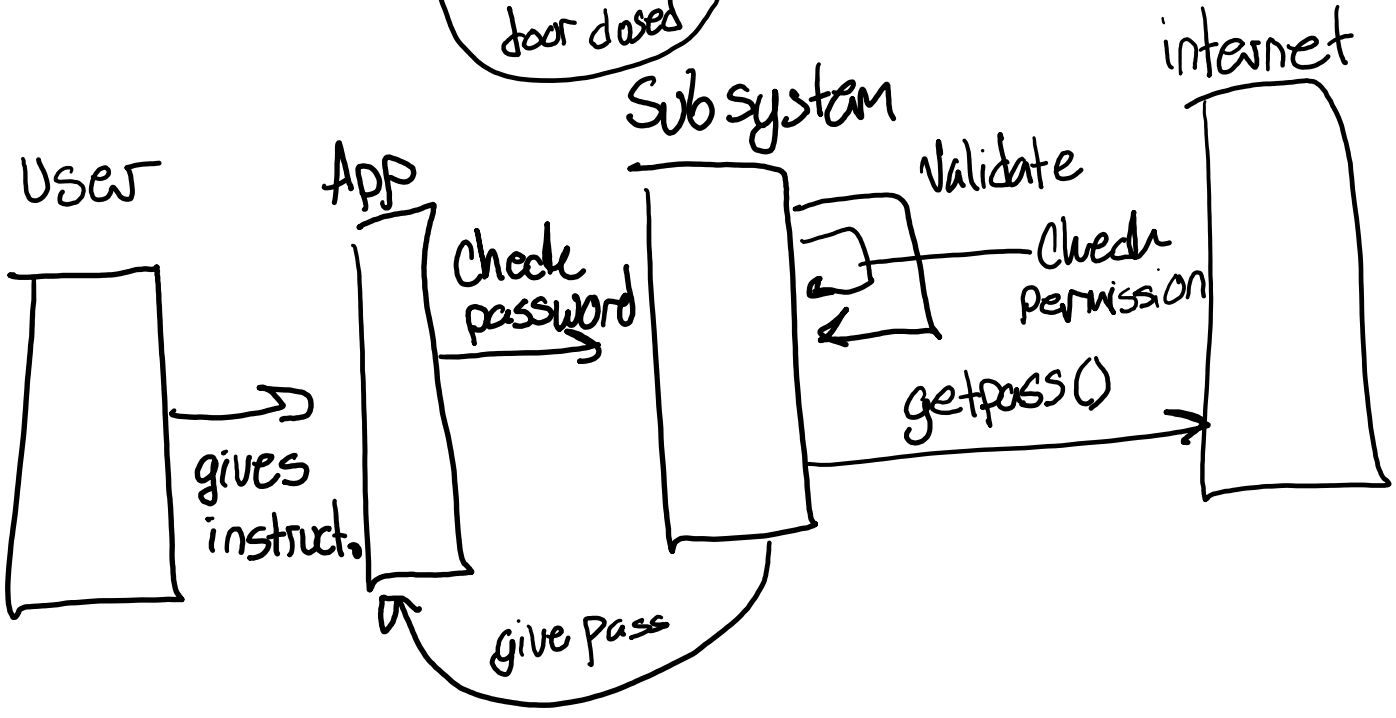
Data Driven UML

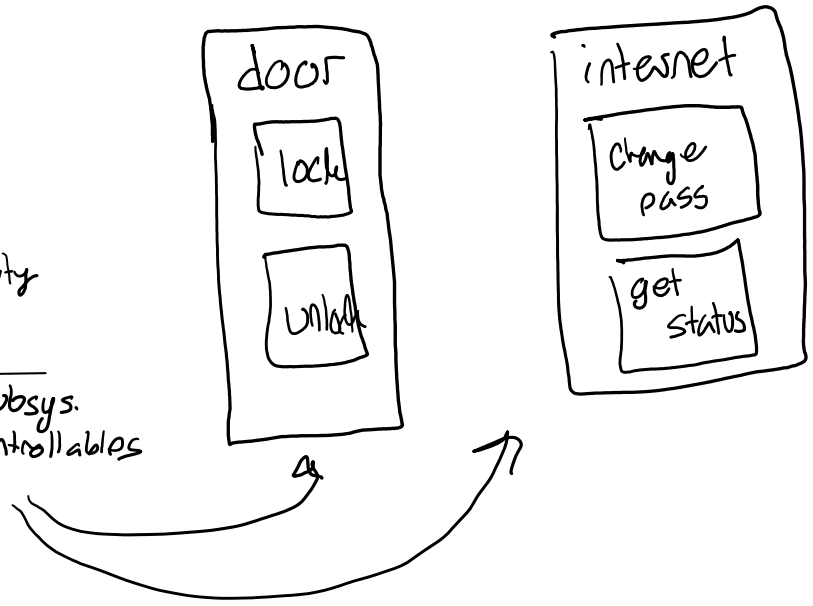




Stakeholder

Tuesday, September 17, 2024 8:31 AM

element	description
• stakeholder	homeowner, system designer, smart home manu.
◦ Concerns	show interactions between systems in home + how security works to make things safer
• Modeling	◦ nested boxes – outer : subsys. inner : controllables



Architectural View Point

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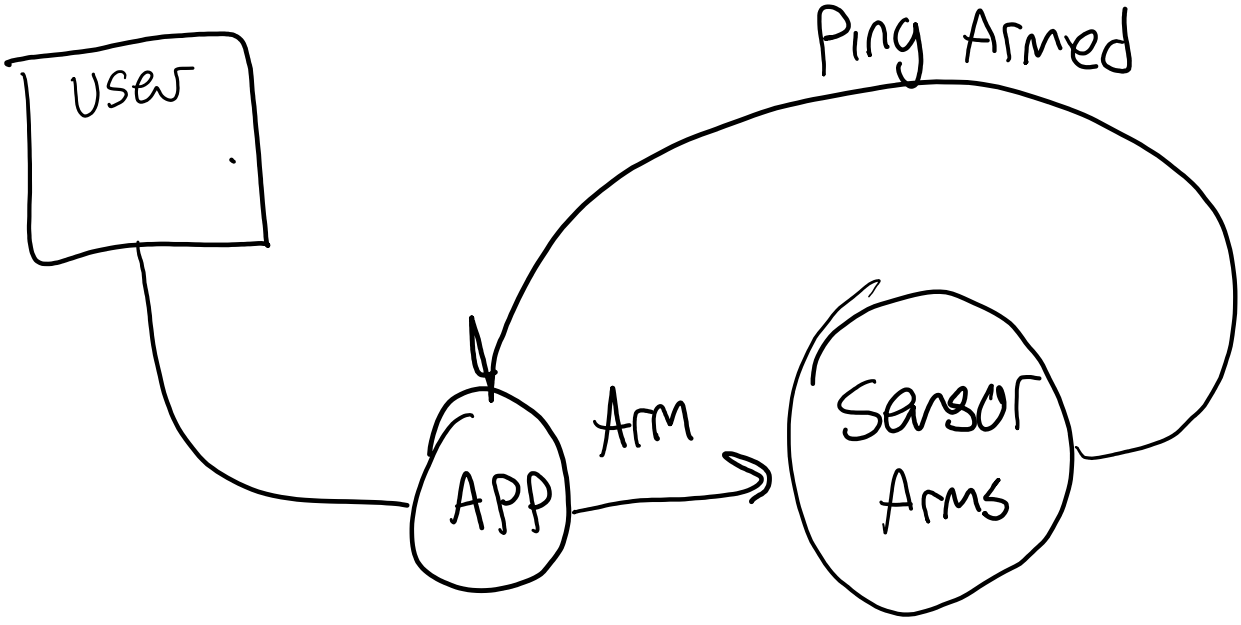
Arch. Viewpoint → Physical view

- Communications

- Dataflow for model based (physical object comm)

- Event based interaction (user → app → object)



Distributed or No

Thursday, September 19, 2024 8:30 AM

Our system is a Centralized system

↳ Data is only handled w/i a household

There is no reason for data to be queried over web

↳ other than accessing systems from far away, but that will be controlled w/i over ping to home network

* Review design decisions in Lecture 8 slides! *

- Layered Architectural structure

User stories

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non functional → sys.

As a home owner, I want to be able to ~~easily~~ (not measurable) secure my property from own app, so that I can ensure my anxiety about security is alleviated.

As a homeowner, I want my information to be secure behind a login so that I don't need to worry who can access my system

- Yes, these use cases provide necessary abstraction of most important requirements because they state that the system must be efficient, fast, and secure whenever a user changes a part of their system.
  - ↳ App focused, so mobile architecture
  - ↳ Databases?
    - ↳ Can we store our info in the cloud or do we need a physical database?

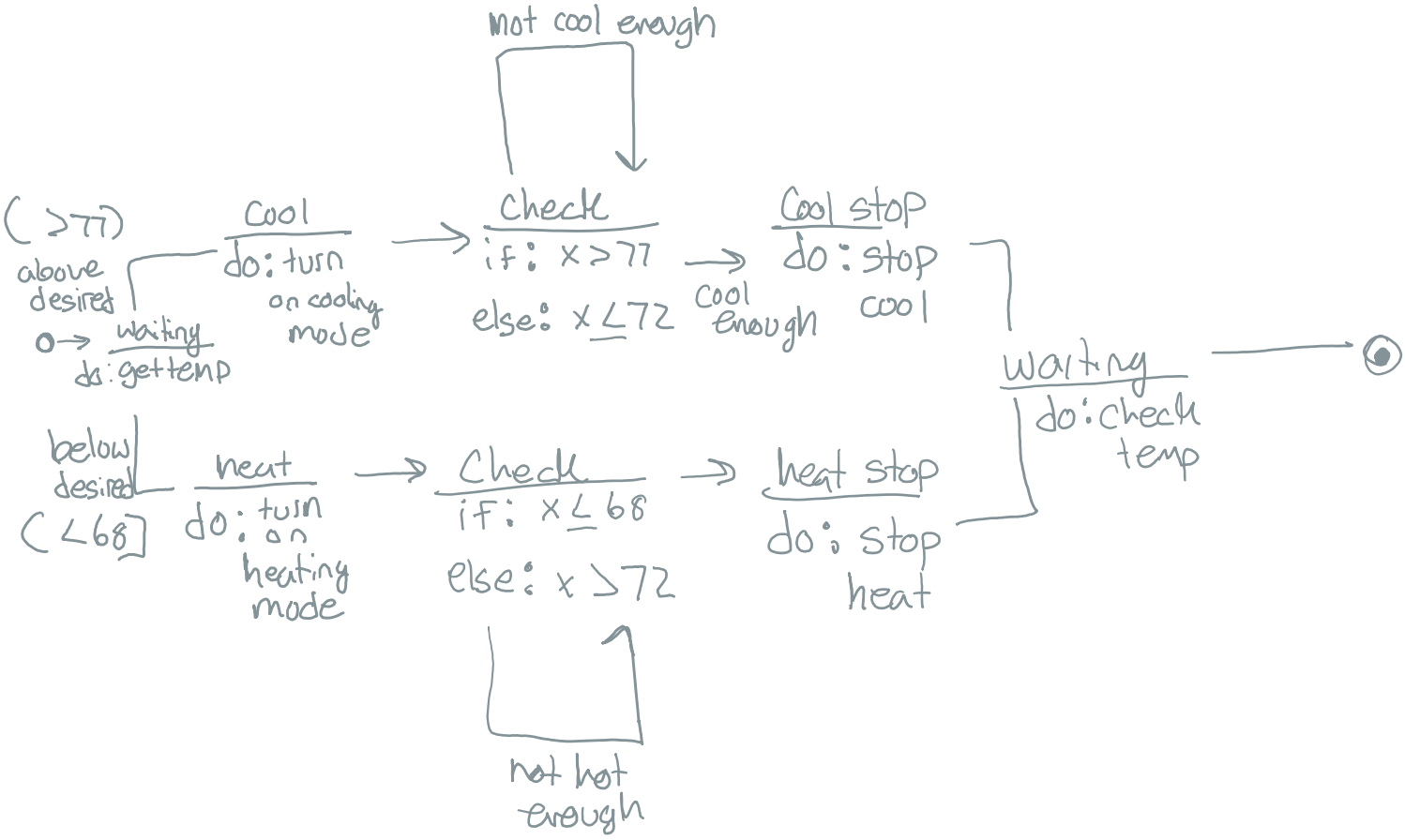
Functional → user interacts w/

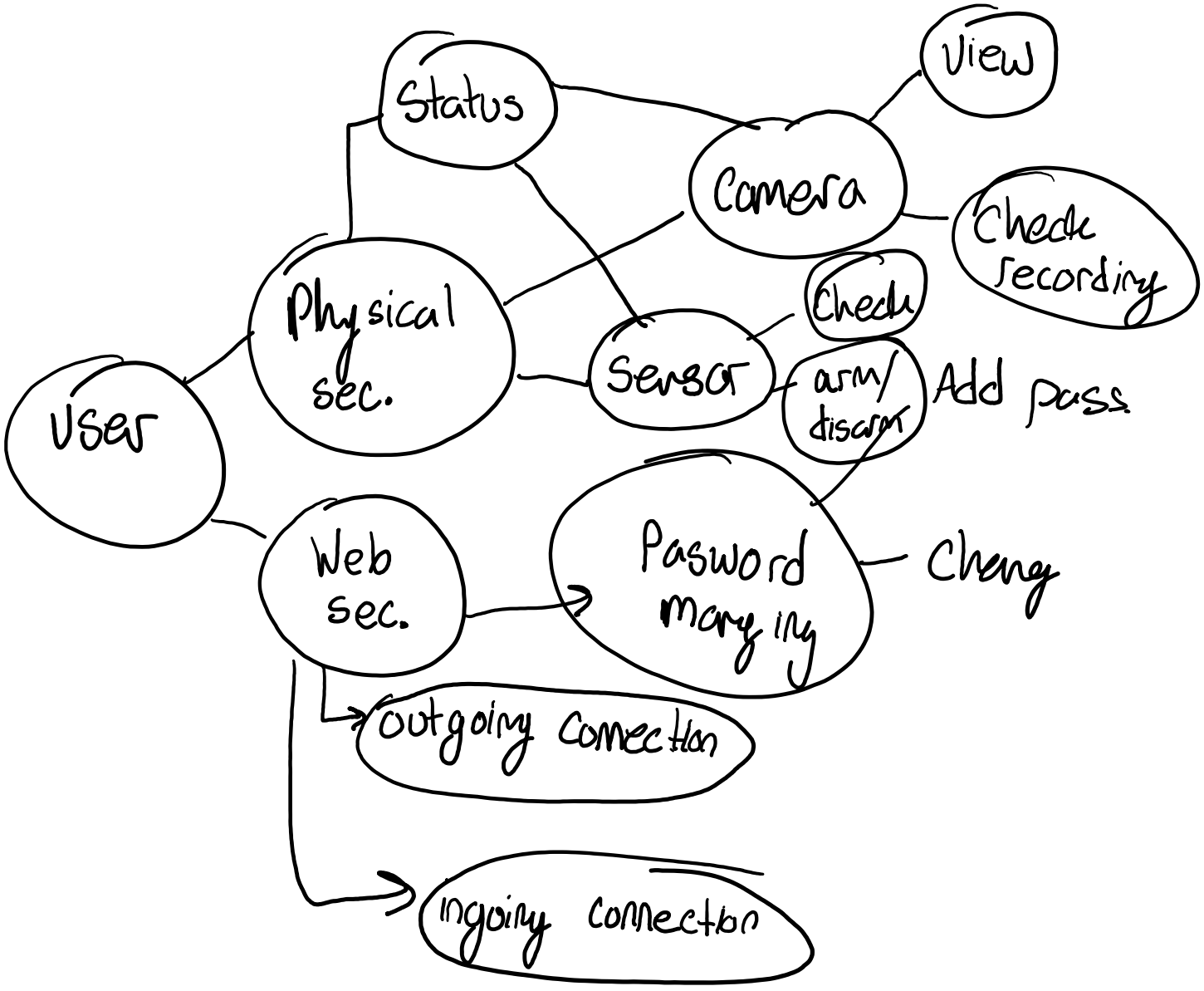
As a home owner, I want to be able to access my security status and change it, so that I can ensure my most important posessions are secure.

As a home owner, I want a run down of all systems, so that I can be up to date on status of all sub systems.

Example Of A Event Driven UML diagram

Monday, September 23, 2024 9:07 AM



Interaction Model (VERY MESSY))

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