

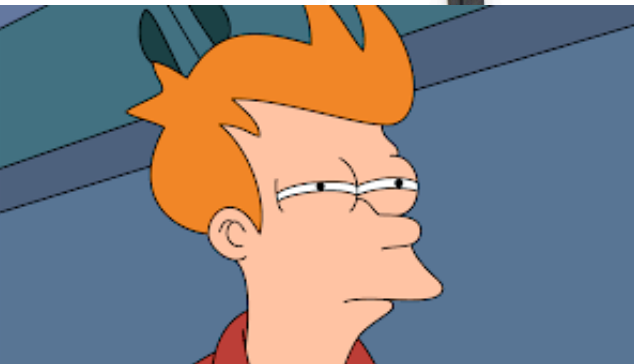
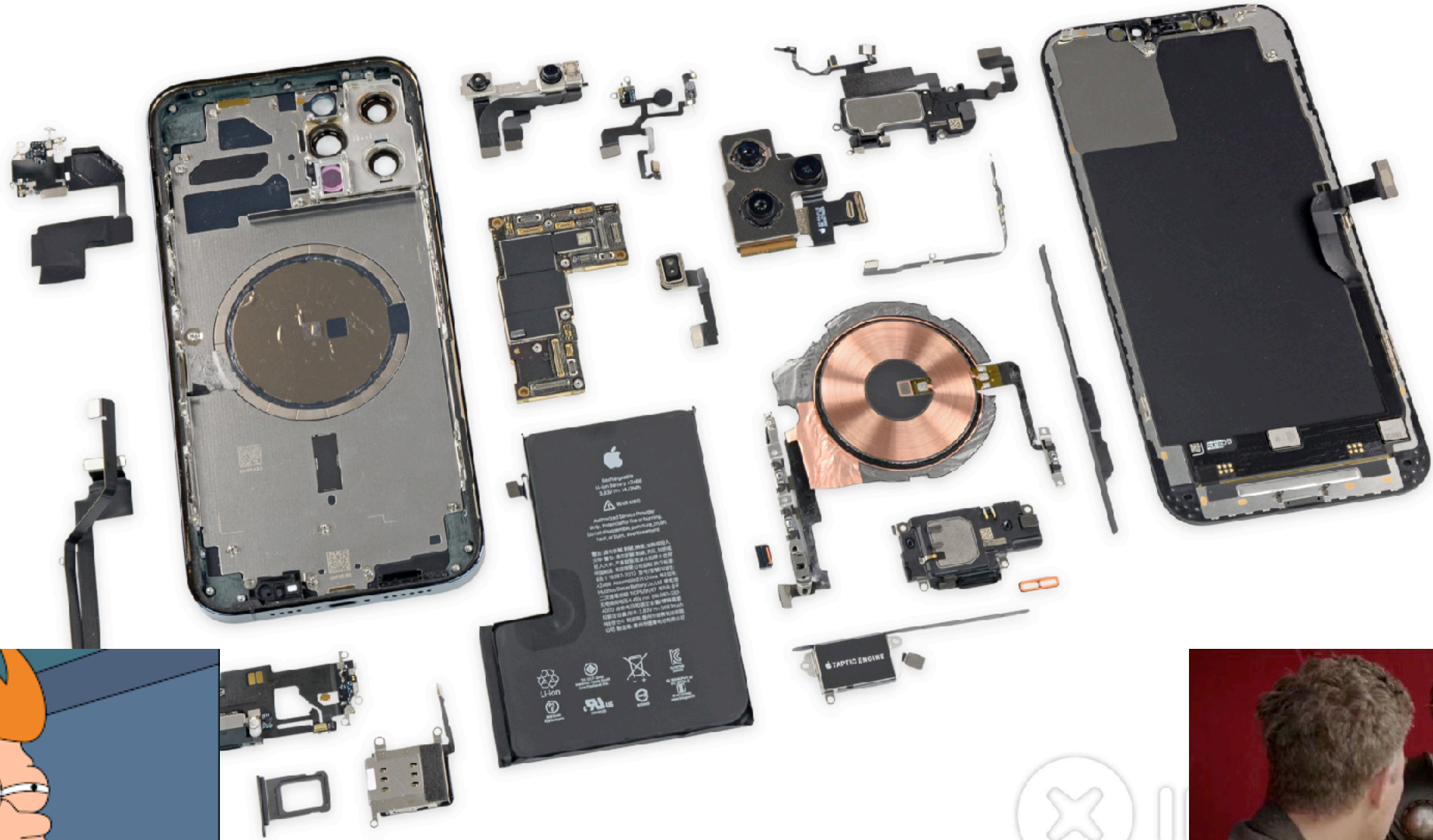
WP03

# Design of Software Architectures

Dr. Vadim Zaytsev aka @grammarware, 9 September 2022



# System = sum of its parts?



WP03

# Scope & Environment

**Design of Software Architectures**

Dr. Vadim Zaytsev aka @grammarware, 9 September 2022

# Software architecture

- The software architecture of a system is
  - a collection of statements
  - that gives direction to
    - the design
    - the realisation and
    - the evolution
  - of the software in its environment
- Statements are a model of:
  - structure of the system elements and their relations, or
  - guidelines for creating structure, elements and their relationships

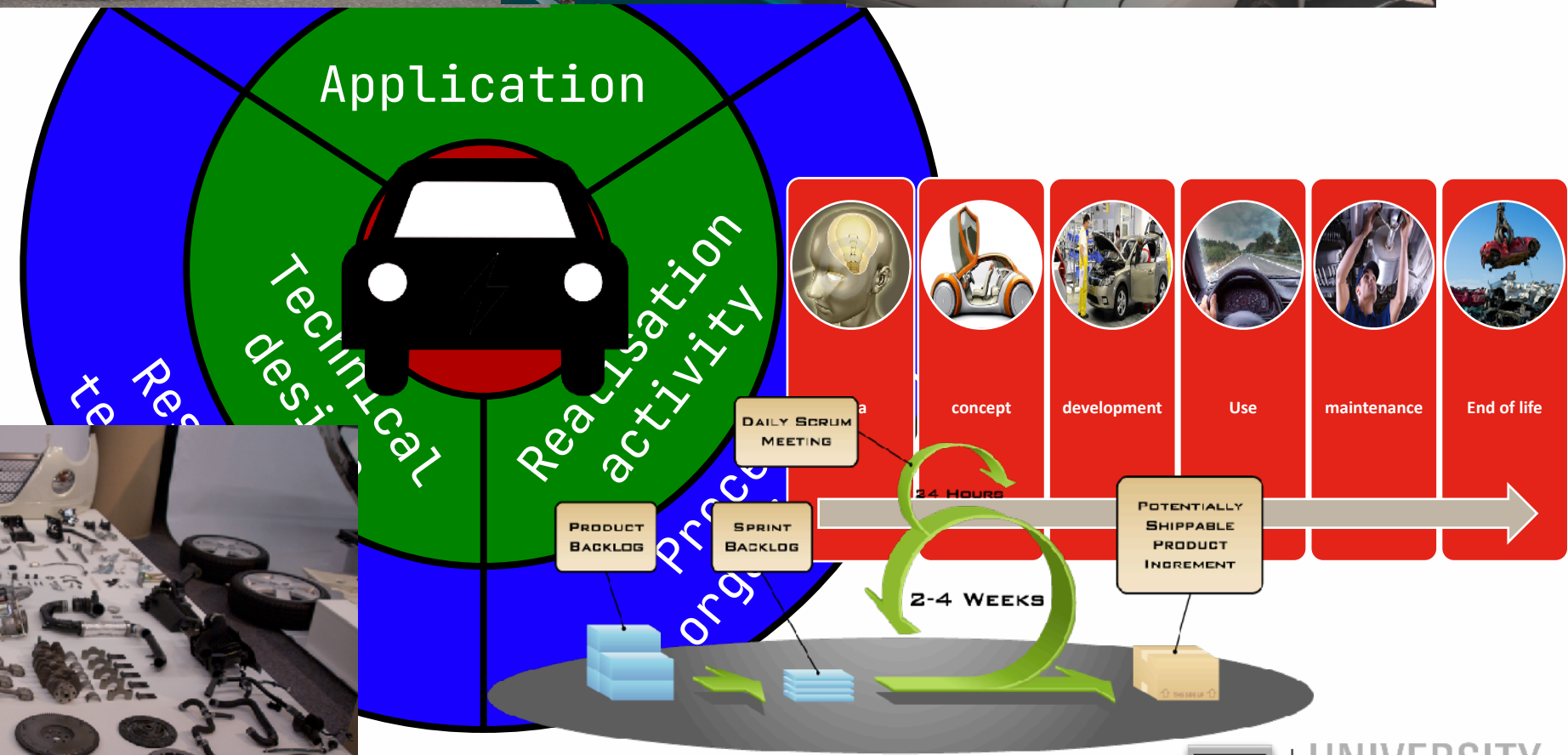
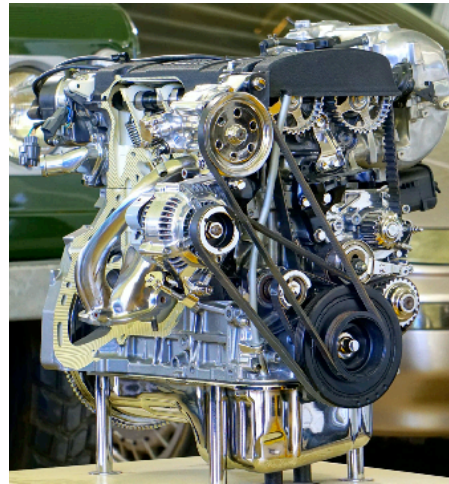
# Ways to interact with the env?

- being parked
- use turning signals
- collides with objects
- it moves through
- pollute the env
- collides with actor
- conforms to traffic rules
- the horn
- the car can be driven
- it creates light
- consumes fuel
- needs to be created
- slowly damages the road
- needs to conform to standards
- produces sound



# Ways to interact with the env?





# Define your scope

- Define the **scope** of your system
  - the essence in one or two sentences
- Add details about
  - **application**
  - **design**
  - **realisation**
- The system **boundary** is up to you
- Make explicit what your architecture will cover and what is **out** of your scope
- (This may change during your project)

