Specifications & prototyping

Specifications

- Good for a check-list of things to achieve
- Hard to understand the overall idea
- Often full of conflicting specifications
- Bad for conveying the overall idea

Prototyping

- A way of envisioning how all your specifications work together
- A way of testing the consistency of specifications
- Easy to show people and talk about

Prototyping

Making models of idea of what it will be. The architecture is defined in terms of abstract interfaces that encapsulate the services and their implementation. Designing, thinking, throwing away, changing ideas.. etc.

A website **wireframe**, also known as a page schematic or screen blueprint, is a visual guide that represents the skeletal framework of a website.

A prototype is a concrete but partial representation or implementation of a system. Prototypes are used extensively in most design and construction domains

Low fidelity

- Sketches
- Focused on underlying ideas
- Key functionality, content, etc.
- Produced quickly
- Thrown away
- Generates many possible ideas

High Fidelity

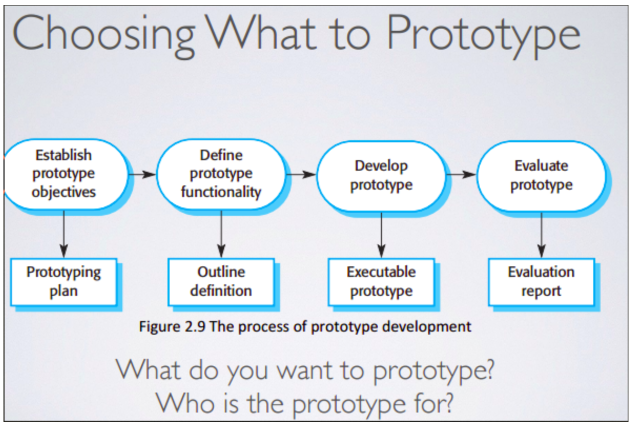
- Built in software for automation
- Similar style to final product
- Accurate detail is important
- Finalises chosen ideas
- Used in realistic studies
- Helps client acceptance

Low fidelity captures the point, the functions, etc. To help envisage the ideas.

Hight fidelity represents parts of the reality. To help agree on the final designs, to see the finalised look and feel, functionality and how it feels to interact.

Benefits of mock ups

- Quick, easy and cheap to construct
- Give concrete from to system requirements
- Accessible to stakeholders
- Communicate requirements effectively
- Can be quickly and easily revised,amended or changed


Choosing What to Prototype
Establish prototype objectives
Define prototype functionality
Develop prototype
Evaluate prototype
Prototyping plan
Outline definition
Executable prototype
Evaluation report
Figure 2.9 The process of prototype development
What do you want to prototype?
Who is the prototype for?

Prototypes to system design(for specifications)

Prototypes help everyone to imagine what we are building. But we still need to be able to tell a developer : you go and build X, look and feel does it for UI Developers, Power points could guide implementation. Sometimes we code up prototypes, these should be partial implementations.

Prototyping risks

- Investing too much time/energy on high-fidelity one, when a low fidelity one would let you test the point
- Adhoc prototyping code is re-used in the real system, even when the code wasn't produced to a professional standard.
- Prototyping is used instead of, rather than alongside documentation. It might be insufficient for the software maintenance people not to have documentation of the prototype.
- Prototypes might be approved by the wrong stakeholders.(e.g. managers rather than the end users)