Any questions from last week?

1 question
0 upvotes

SIT773 - SOFTWARE REQUIREMENTS ANALYSIS AND MODELLING

- Lecture 7: Software Life Cycles

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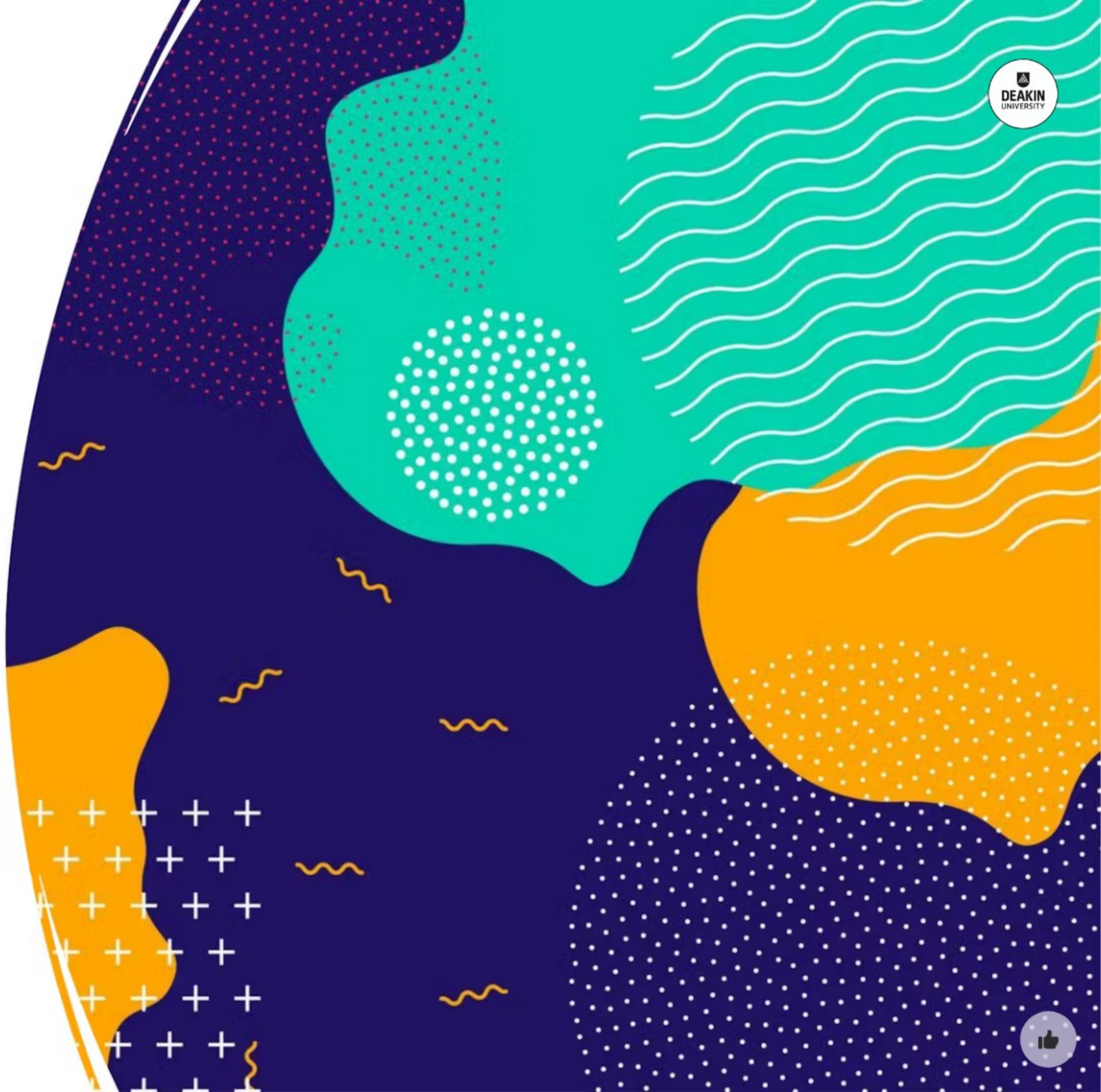
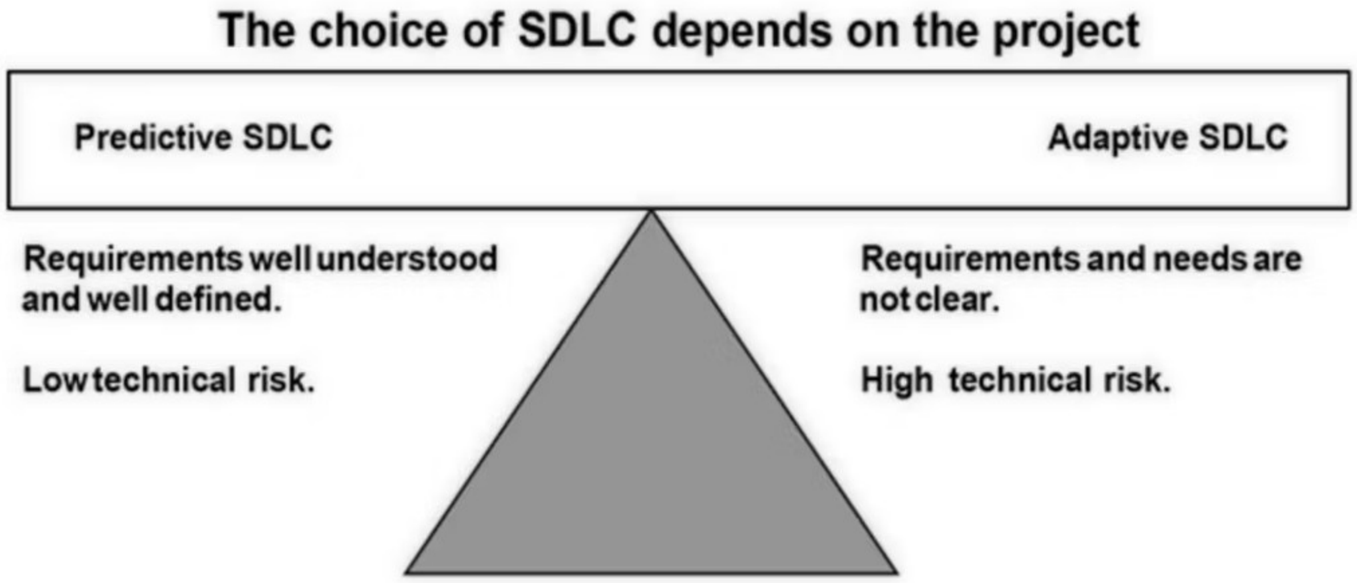


Outline

- Lifecycles: Predictive and Adaptive
- Development: waterfall, parallel and iterative
- Prototyping: Evolutionary & Throw away

Types of SDLC lifecycles

Predictive & Adaptive Lifecycles



Predictive or Adaptive?

Problem 1

- Imagine Melbourne City Council is employing you to develop a smartphone mobile application to solve its parking problem. This app should help people locate car park spaces in the inner city and pay for parking with ease.

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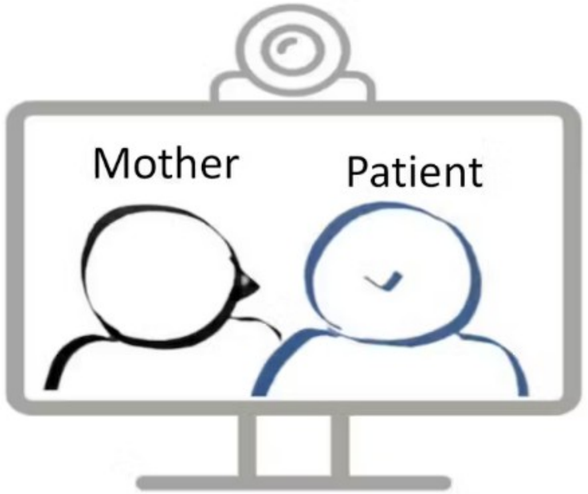
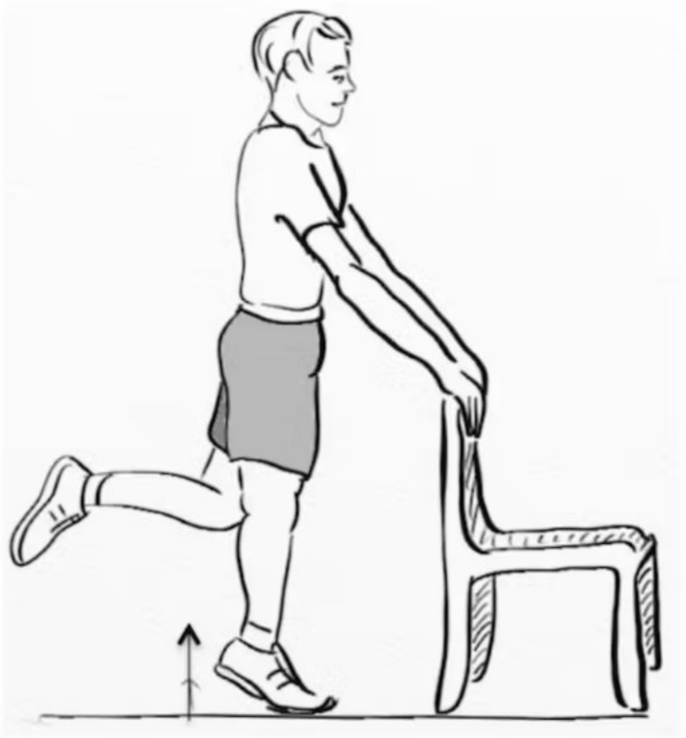
Problem 2

- Design a system that can support physiotherapists in assessing lower limb movements of patients in video consultations?

Video Consultations



Doctor



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Problem 2

- Design a system that can support physiotherapists in assessing lower limb movements of patients in video consultations?

What kind of system would you design for problem 2?

A system that evaluates movement patterns.

audio and video input

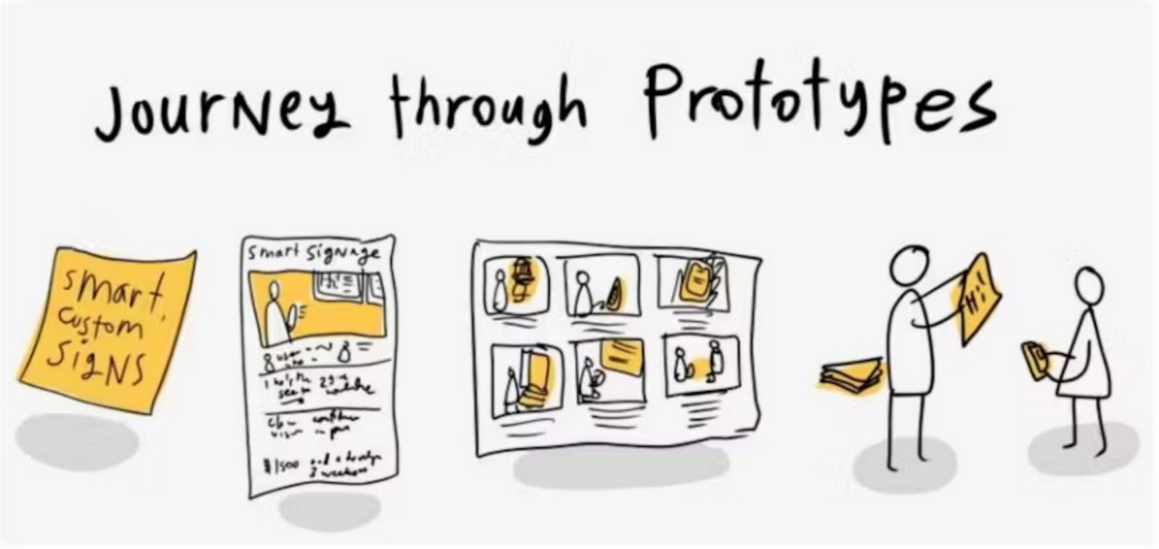
Movement recognition

requirements analysis and their priorities

SoPhy – Socks for Physiotherapy

Prototyping

- Serves as the foundation for early and quick iterative cycles, which is ideal for agile development.
- Primarily concentrates on the application's user interface.
- It's important to set and manage client expectations!
- The prototype is not the final system.

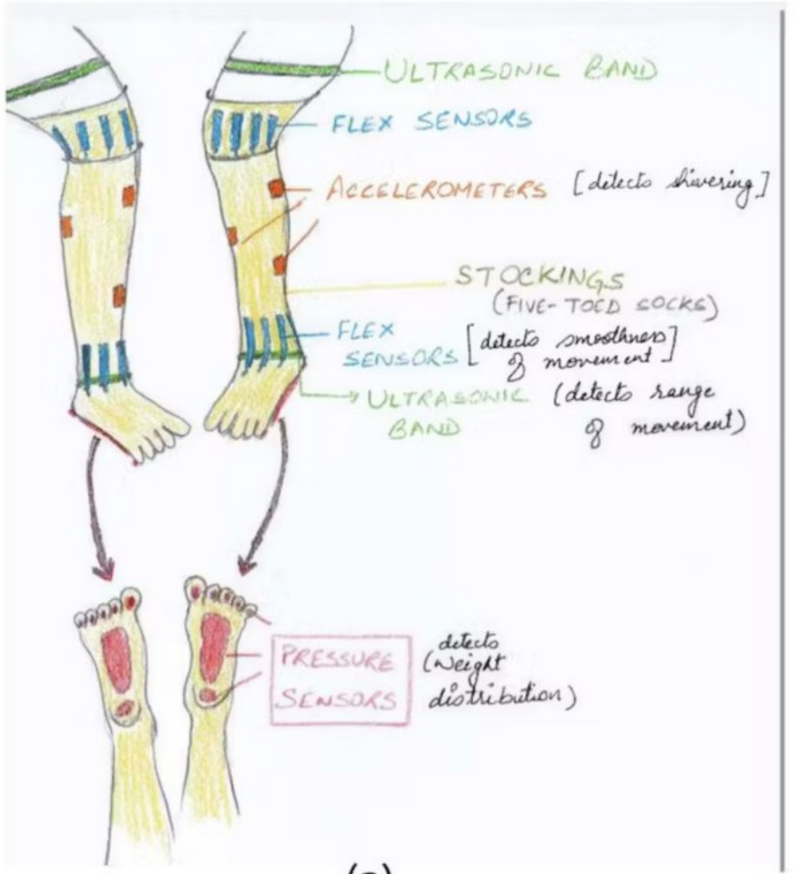


Prototype

EVOLUTIONARY

THROW-AWAY PROTOTYPE

Paper prototypes



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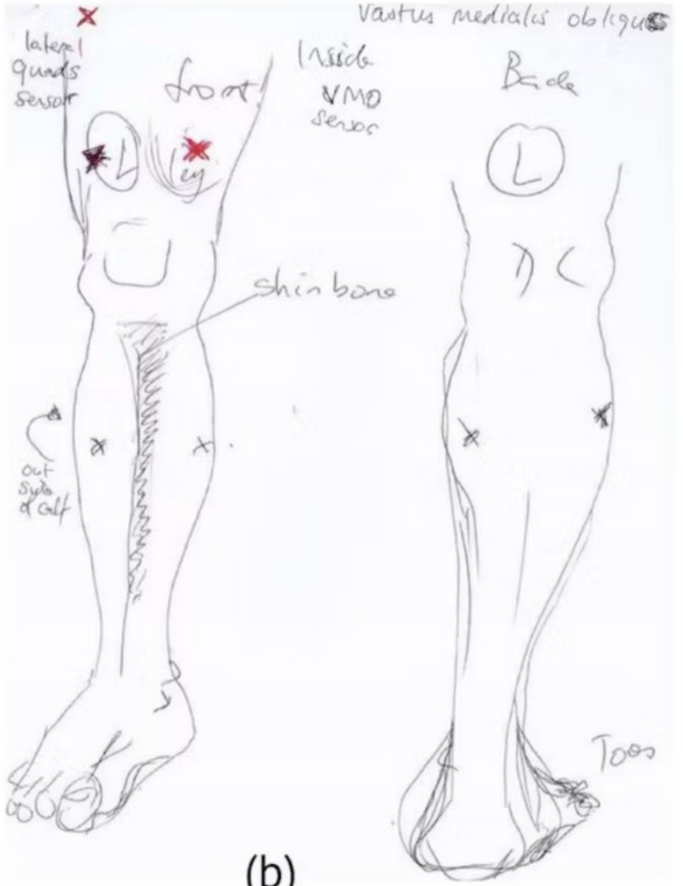
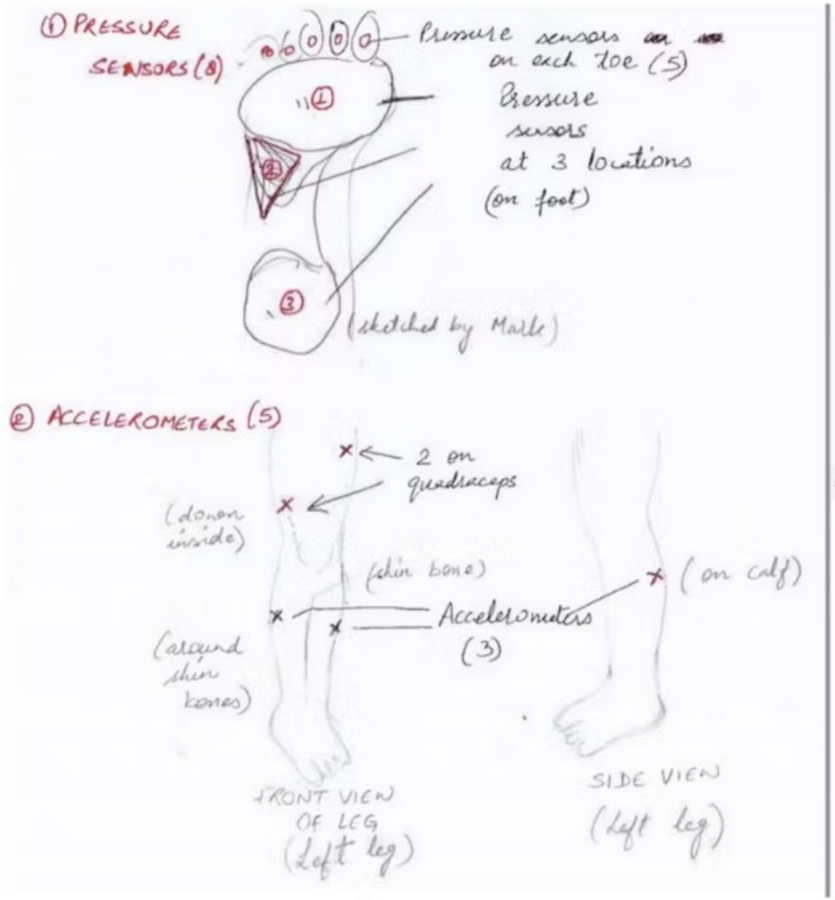


(b)

Paper prototypes



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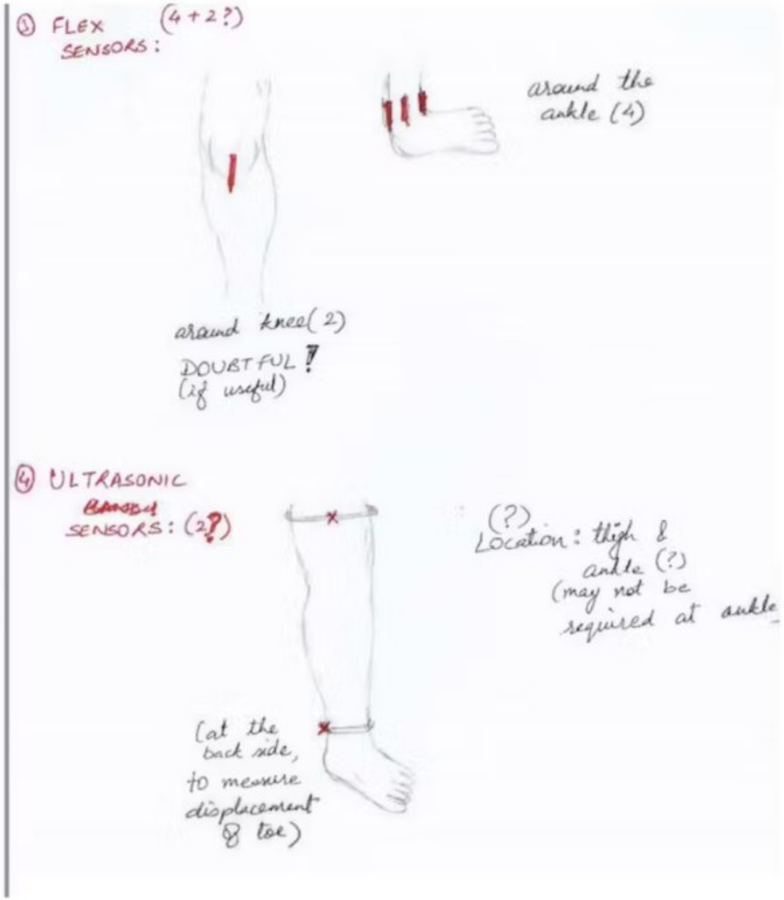


(b)

Types of Development

How do you decide an iteration?

Process improvement

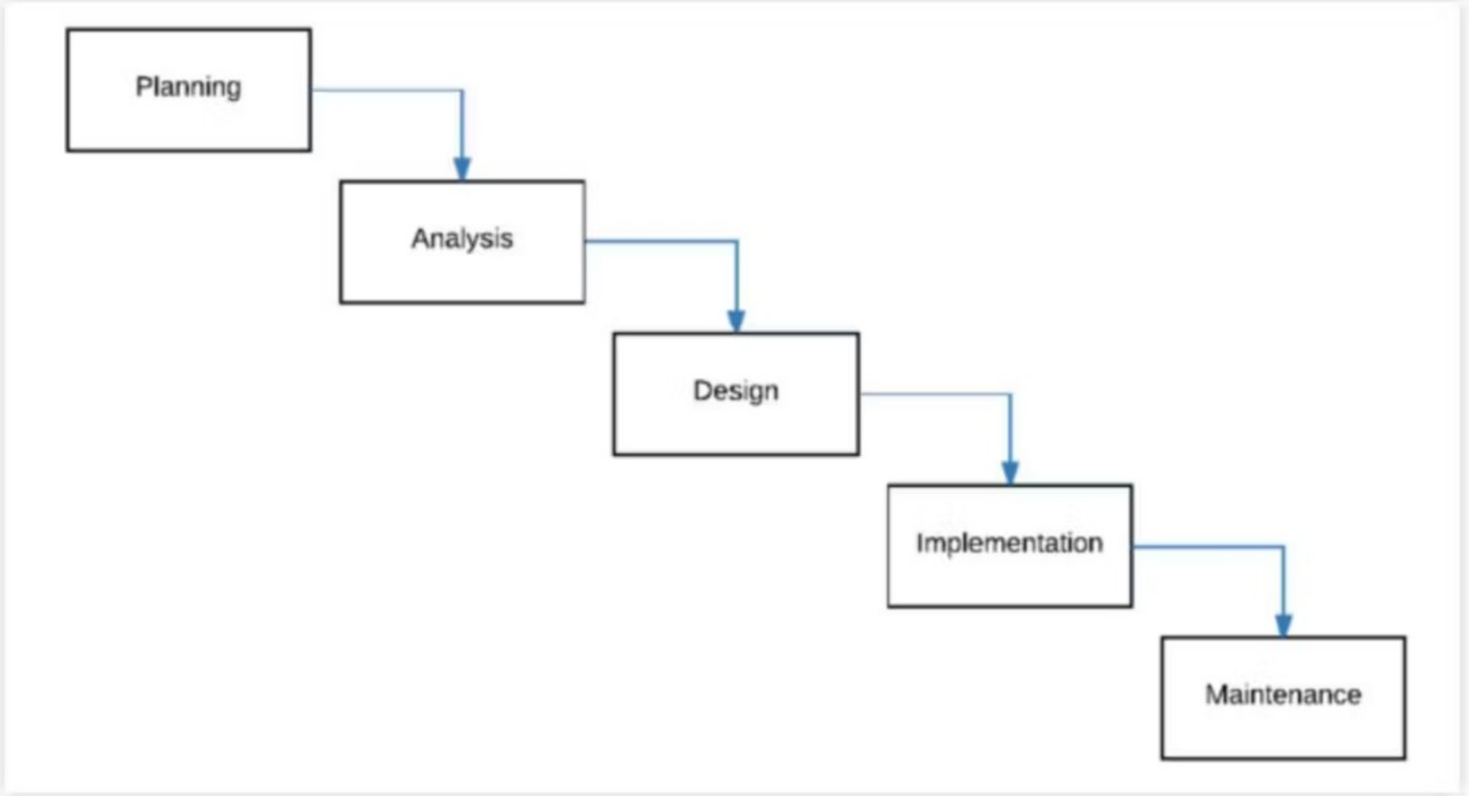
Consider the complexity and how much of the requirements you know up front.

After user/internal feedback

requirements analysis and their priorities

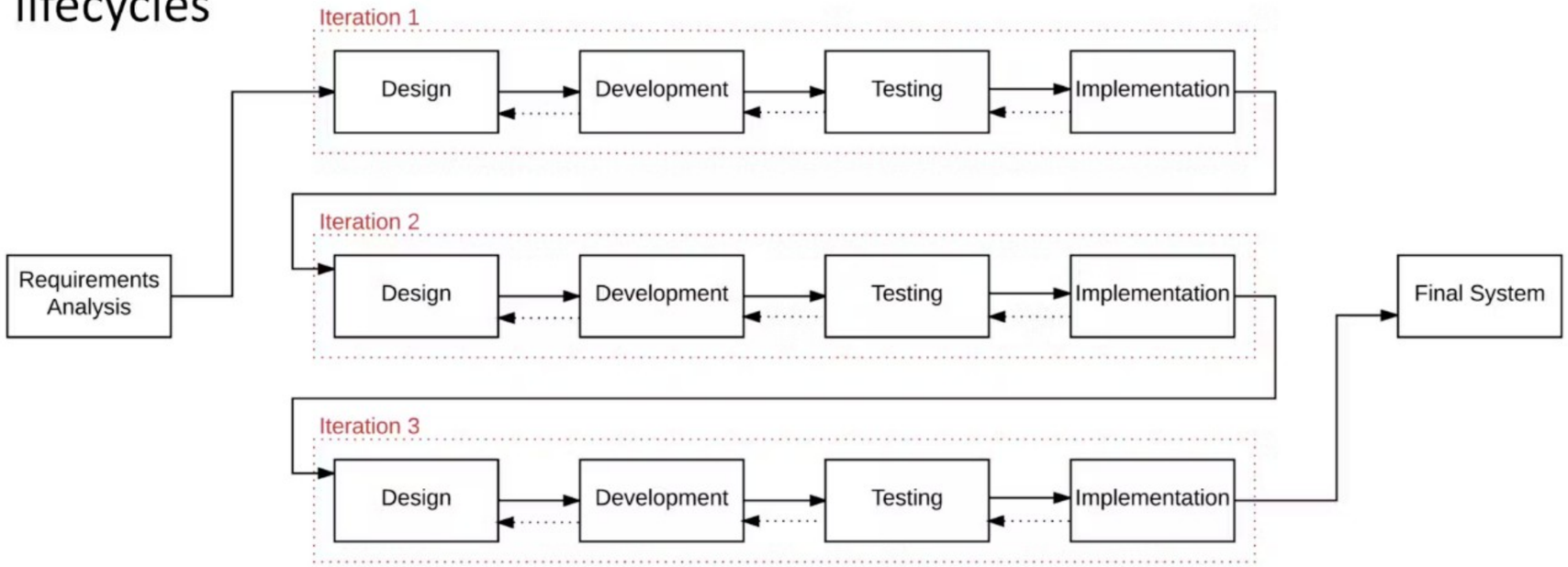
Waterfall model

Predictive lifecycles



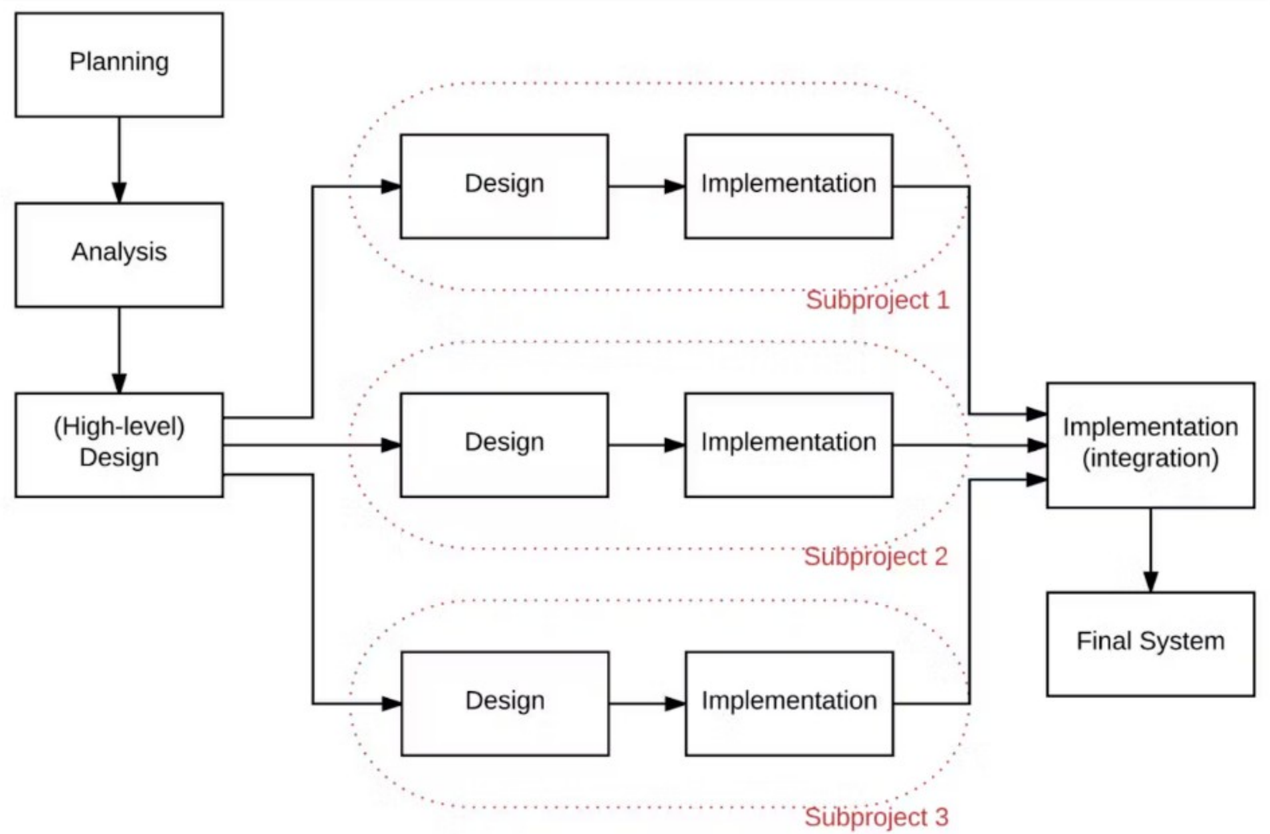
Iterative development

Adaptive lifecycles



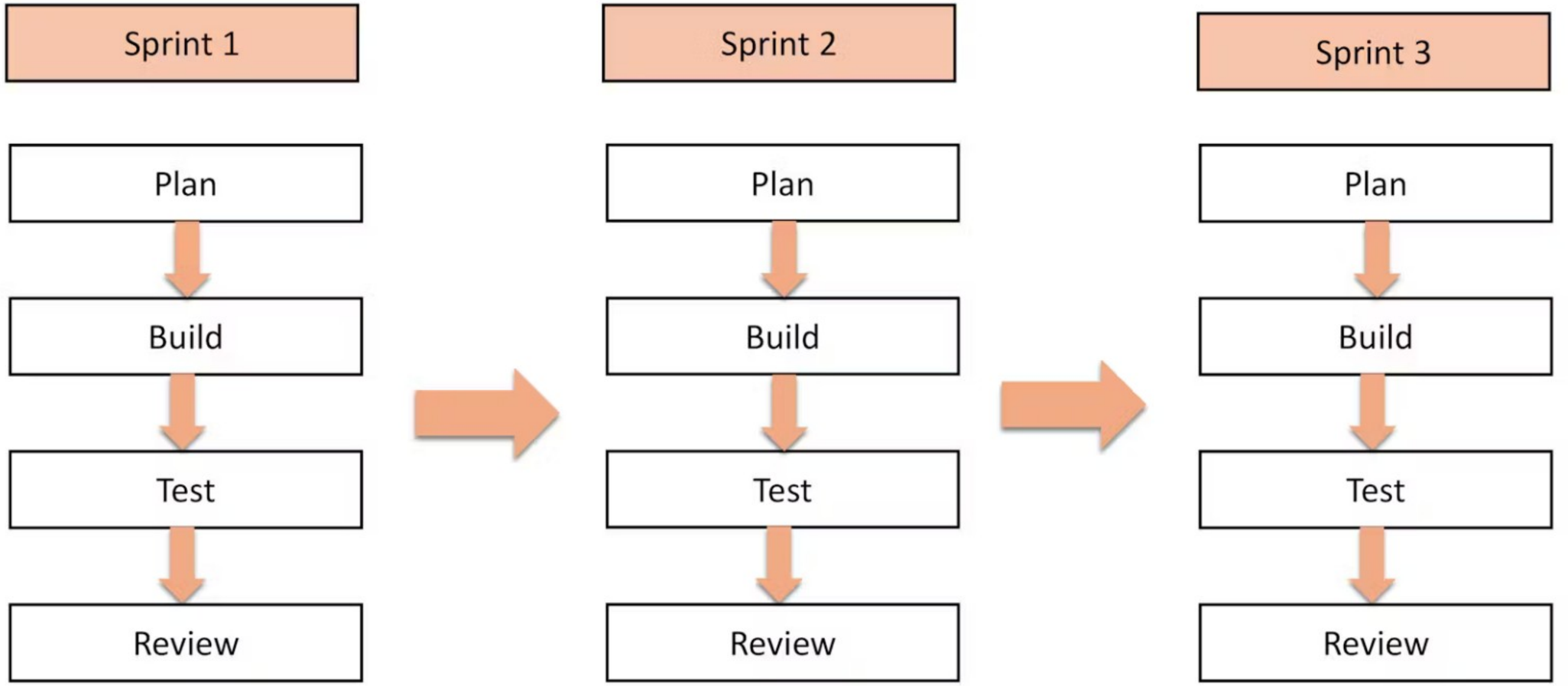
Parallel development

Predictive and Adaptive lifecycles



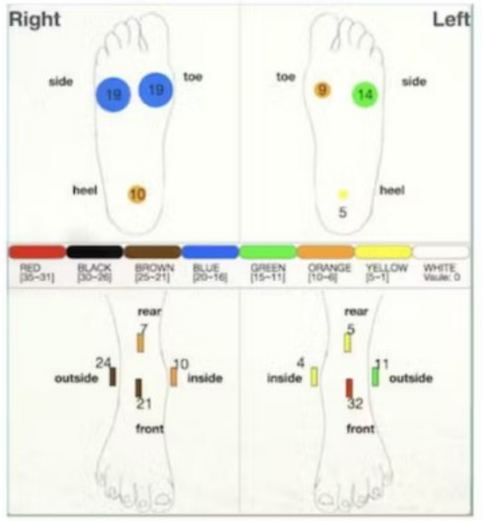
Agile

- Each iteration begins and concludes at a predetermined time, typically two weeks.
- Each sprint builds incrementally, progressing until the product is ready for release.



Iterative development

Iterative development



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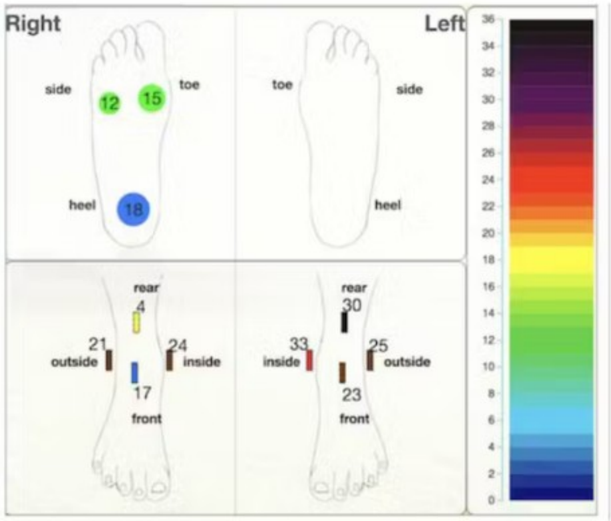

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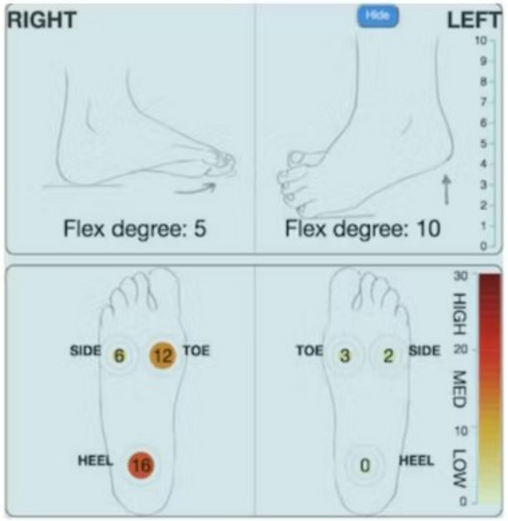

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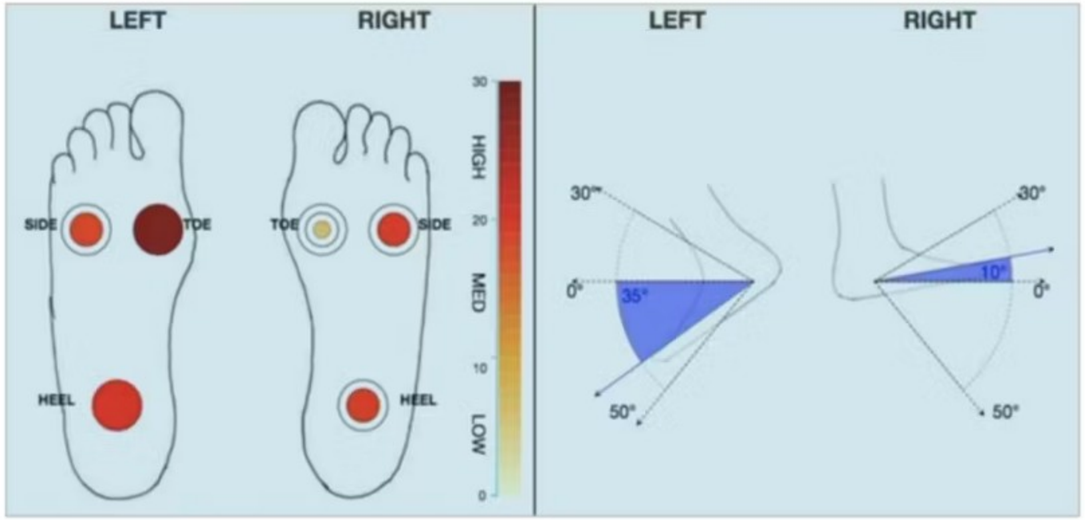

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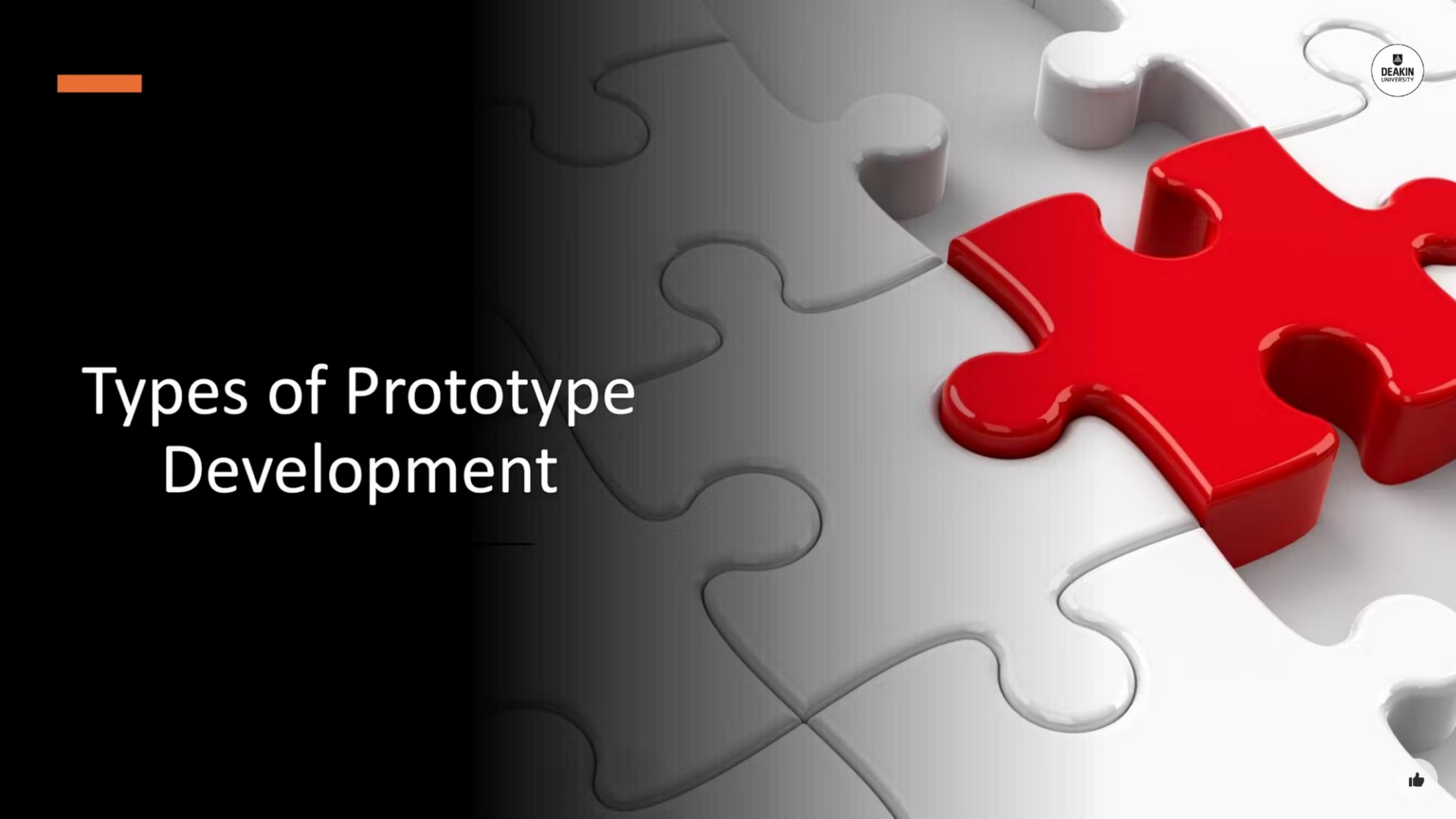
Types of Prototype Development



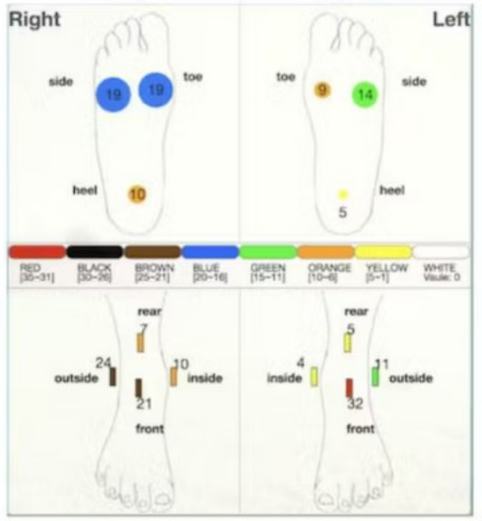
Prototype

- Evolutionary
- Throw-away prototype

Throwaway prototypes




Evolutionary and throw-away



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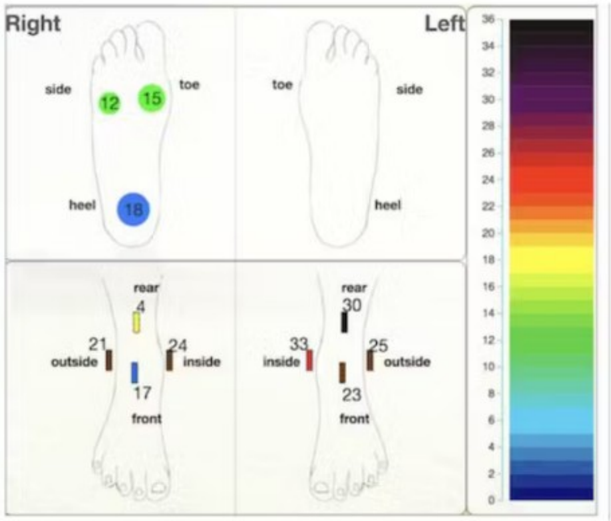

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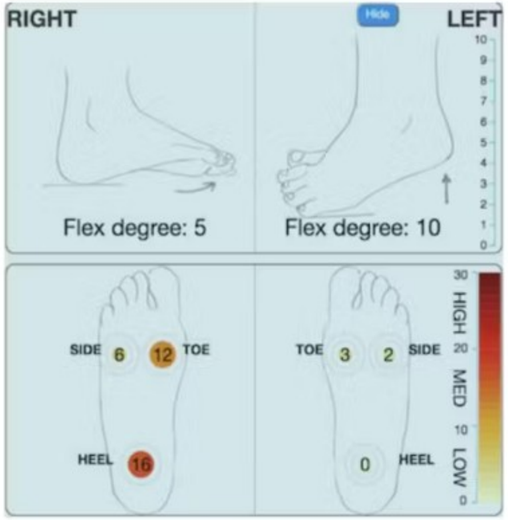

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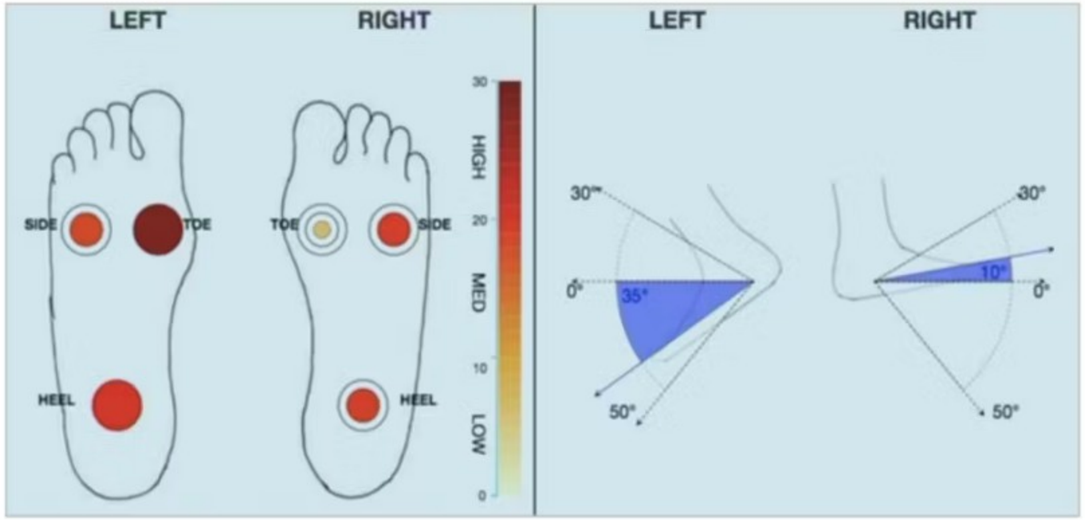

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Any questions?

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Let us look at the tasks now.

Thank you!

I will see you all next week.