Machine Learning
Data Analytics

FAU

Human Computer Interaction

Discussion Session 7: Prototyping

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Prototyping **models** the final product and allows **testing** its attributes on this model

Not necessarily representative of a complete system!

Prototyping

What type of prototypes do we know?

Prototyping
Taxonomy

Horizontal vs. Vertical Prototypes

Low-Fidelity vs. High-Fidelity Prototypes

Non-Functional vs. Functional Prototypes

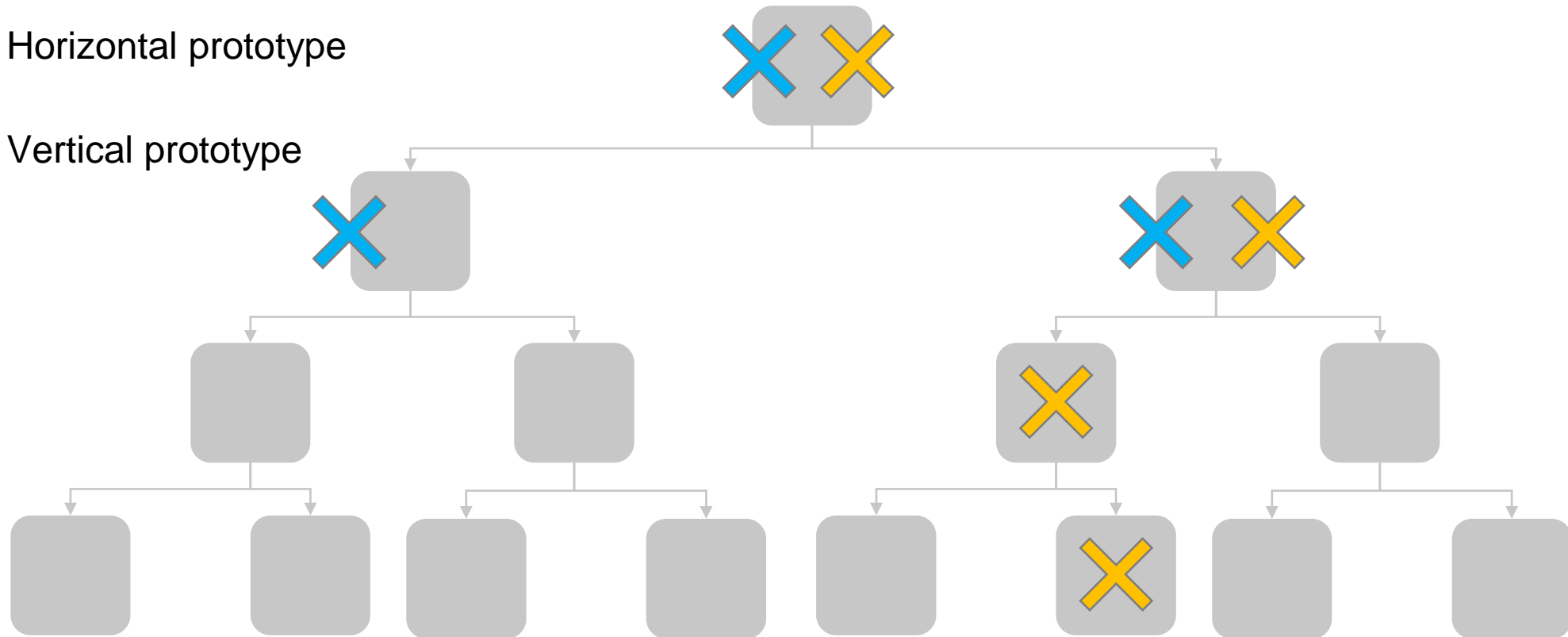Evolutionary vs. Throw-Away Prototypes

Horizontal Vs. Vertical Prototypes

Horizontal prototype

Vertical prototype

When to use horizontal and vertical prototypes?
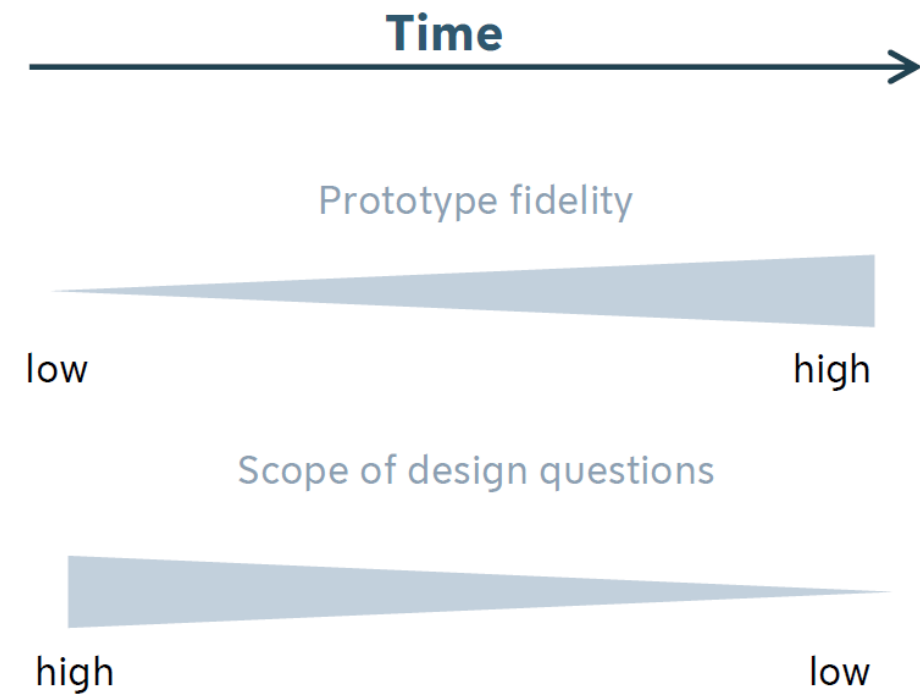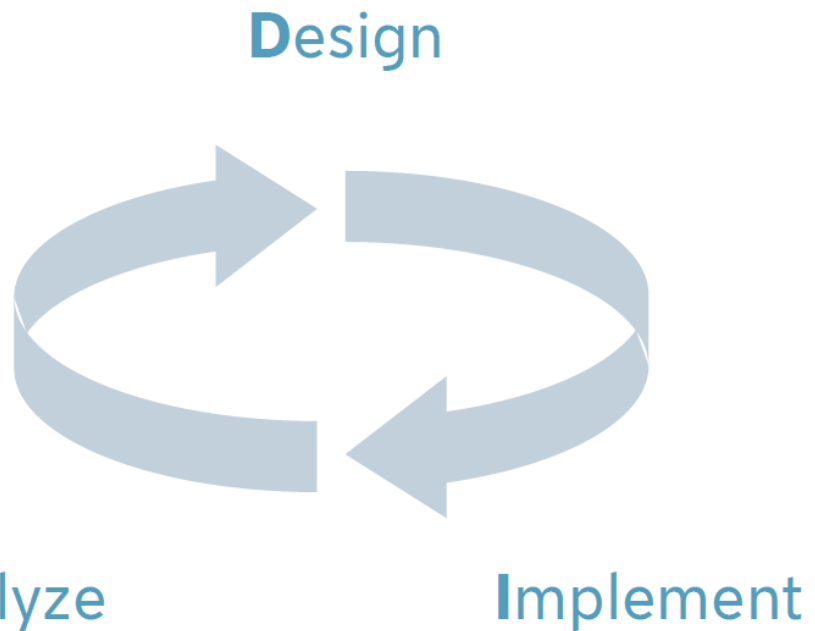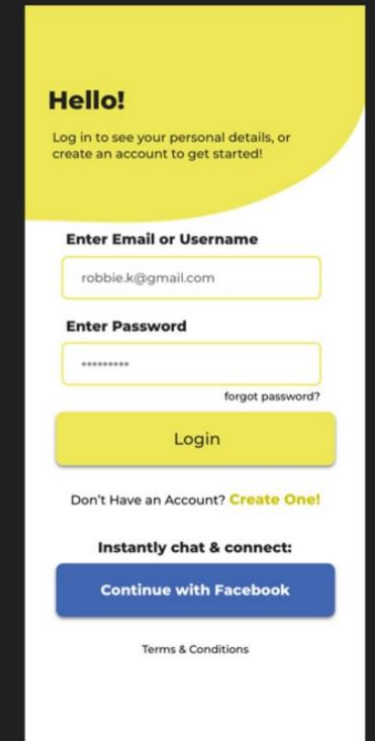
Prototyping
When to Prototype?

DIA cycle

Design

Analyze

Implement

Time

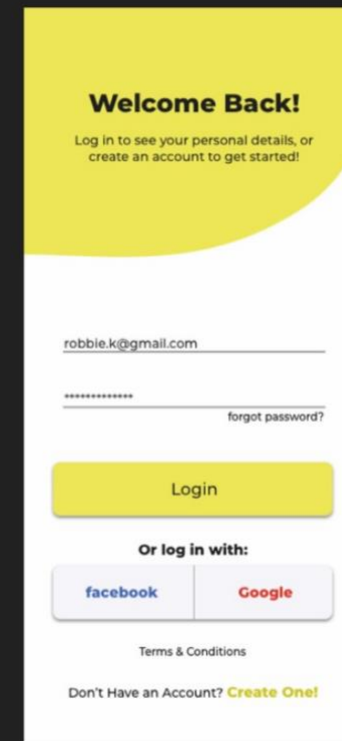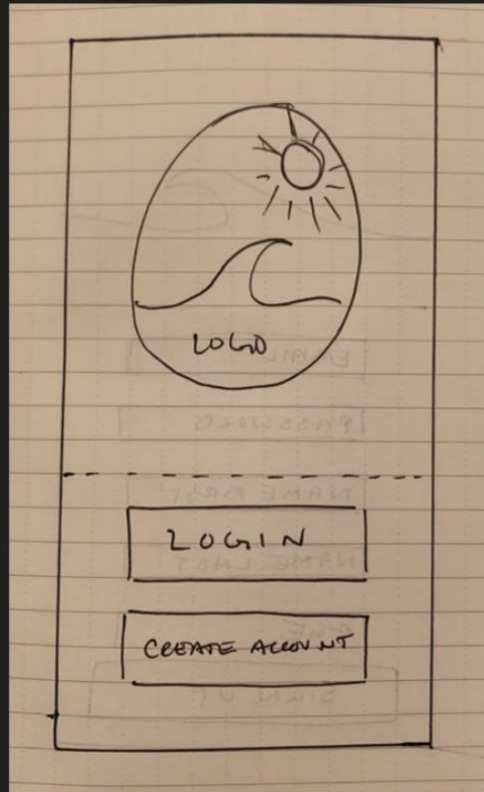Prototype fidelity

low → high

Scope of design questions

high → low

Prototyping
is performed through multiple iterations

Prototyping

nature

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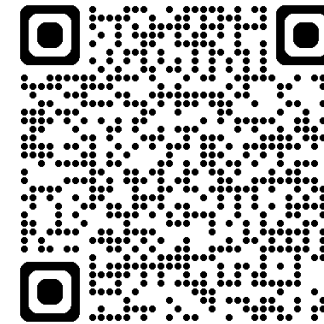
nature > articles > article

Article | Published: 05 August 2020

SARS-CoV-2 mRNA vaccine design enabled by prototype pathogen preparedness

Kizzmekia S. Corbett, Darin K. Edwards, [...]Barney S. Graham ✉

Nature **586**, 567–571 (2020) | Cite this article

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RESEARCH-ARTICLE

What is a Prototype? What are the Roles of Prototypes in Companies? 🛒

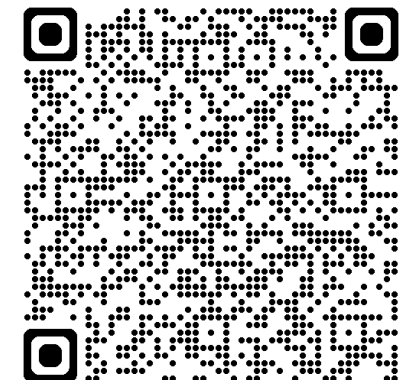Carlye A. Lauff, Daria Kotys-Schwartz, Mark E. Rentschler

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J. Mech. Des. Jun 2018, 140(6): 061102 (12 pages)

Paper No: MD-17-1650   https://doi.org/10.1115/1.4039340 ⟩

Published Online: March 23, 2018   Article history

Prototyping

Let's assume you need to develop a supporting device that helps elderly people monitor and manage their health and daily tasks.
Consider an interaction concept and a terminal that are both suitable for this target group, considering the specific needs of people not used to using mobile terminals and computer systems.

created by DCStudio - www.freepik.com

Please answer the following questions below.

1. Name four potential Stakeholders for your product.

2. What type of prototype would you deploy for a first evaluation of your product? Explain why you decided to use this kind of prototype.

Thank you for your attention!

Are there questions **?**