CS449/649:
Human-Computer Interaction

Spring 2017

Please sit with your team

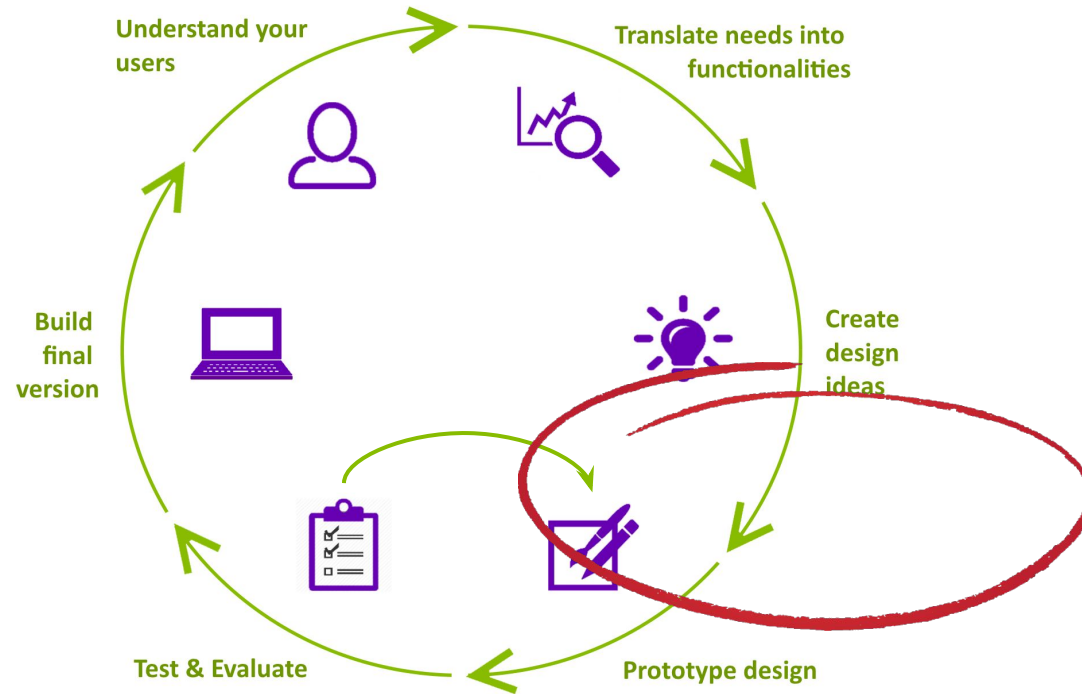Lecture IX

Anastasia Kuzminykh

Learners cannot do

Learners can do with guidance

Learners can do
on their own

Zone of Proximal
Development
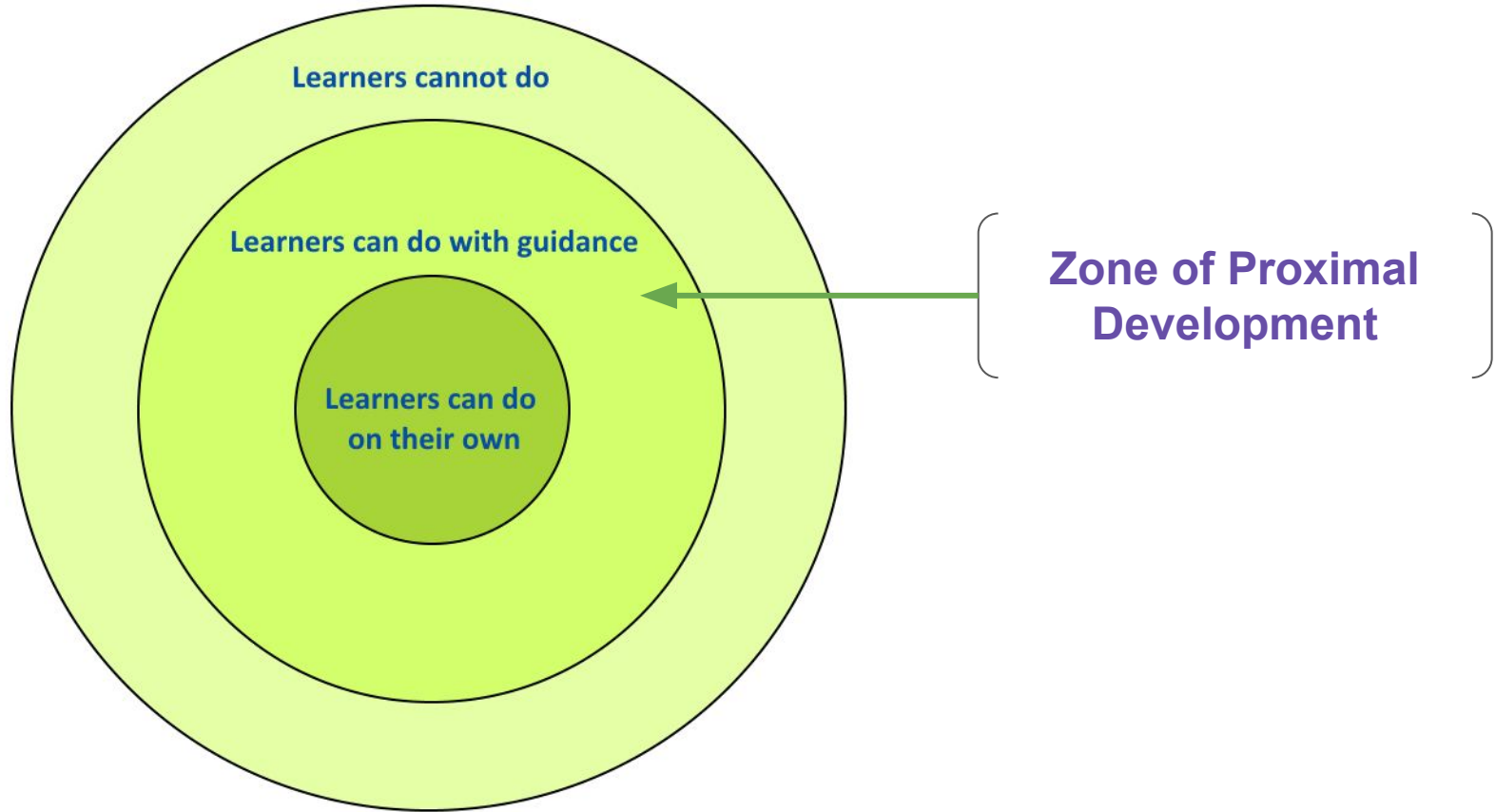
Create Design Ideas

Exercise: time management application

Understand your users

Translate needs into functionalities

Create design ideas

Prototype design

Test & Evaluate

Build final version

Create Design Ideas → **Prototype Design**

Information Architecture - structural design of shared information environments

Richard Saul Wurman

Users flow through your product

Catalog user's information

Presentation of the information

Decision driving function

Create Design Ideas → **Prototype Design**

Knowledge Organisation

Taxonomy   **Folksonomy**   **Domain Analytics Approach**

Create Design Ideas → **Prototype Design**

Knowledge Organisation

Taxonomy

Folksonomy

Domain Analytics Approach

Practice of classification based on hierarchical relationship.

Parent-child hierarchies

Create Design Ideas → **Prototype Design**

Knowledge Organisation

Taxonomy

Practice of classification based on <u>hierarchical</u> relationship.

Parent-child hierarchies

Folksonomy

Practice of classification based on <u>non-hierarchical</u> relationship.

Public tags and their frequencies

Domain Analytics Approach

Create Design Ideas → **Prototype Design**

Knowledge Organisation

Taxonomy

Practice of classification based on <u>hierarchical</u> relationship.
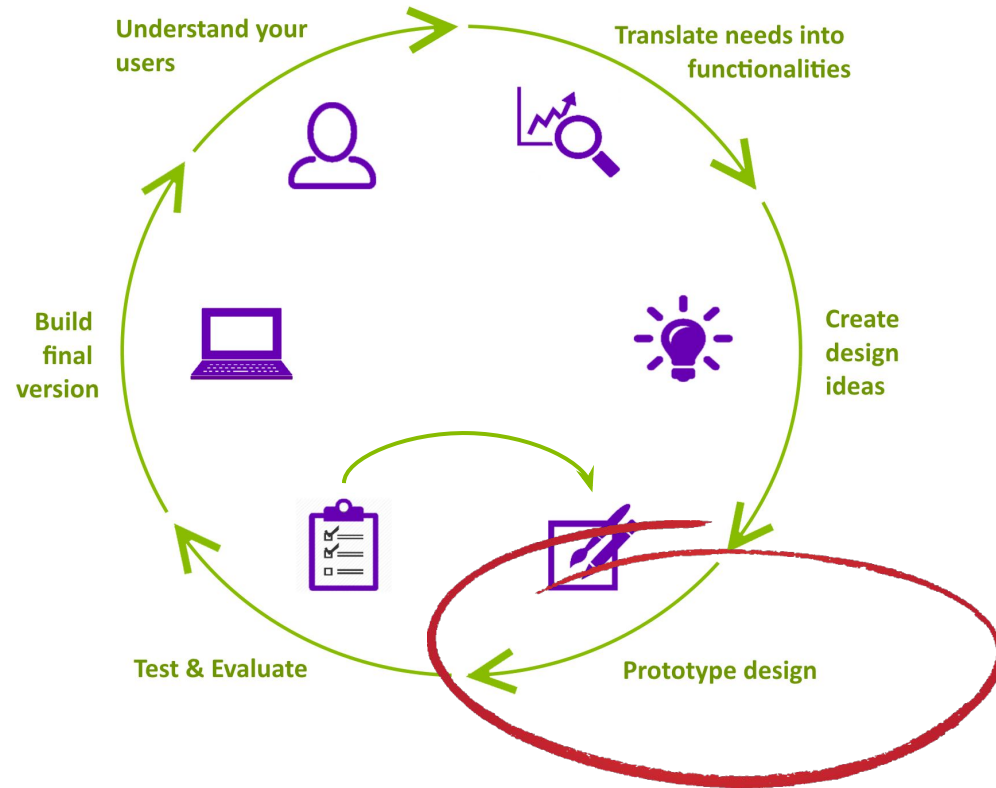
Parent-child hierarchies

Folksonomy

Practice of classification based on <u>non-hierarchical</u> relationship.

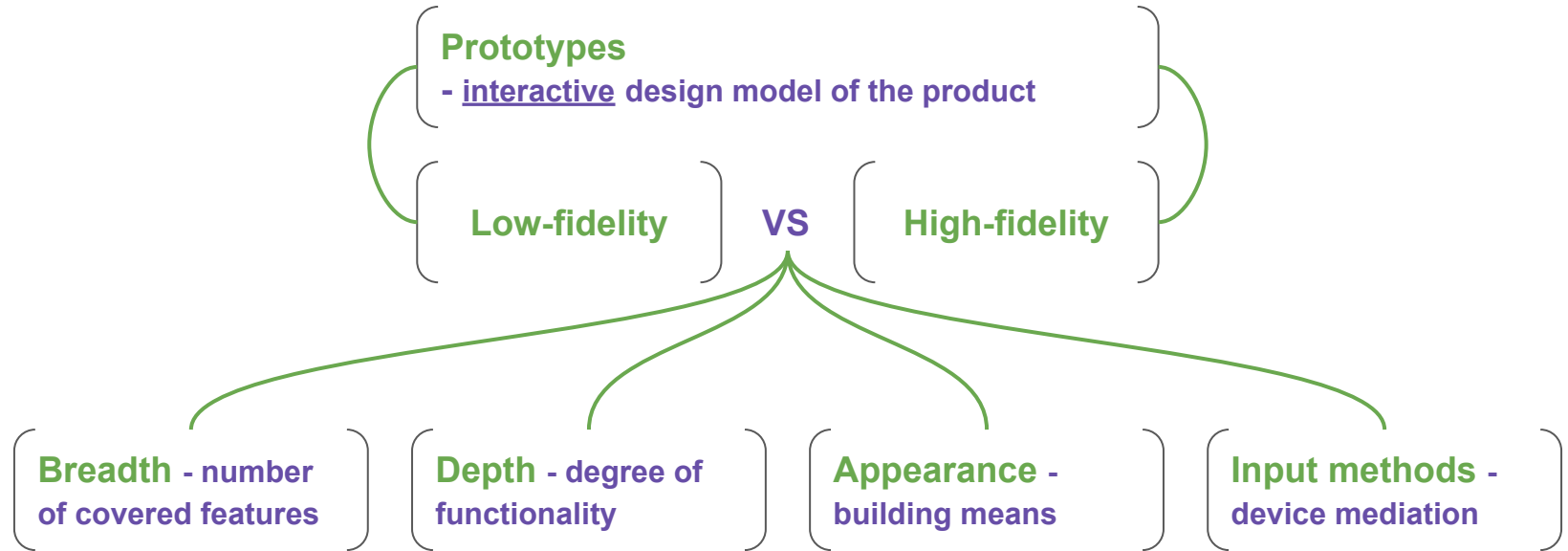Public tags and their frequencies

Domain Analytics Approach

Practice of classification based on <u>sociological - epistemological</u> view.

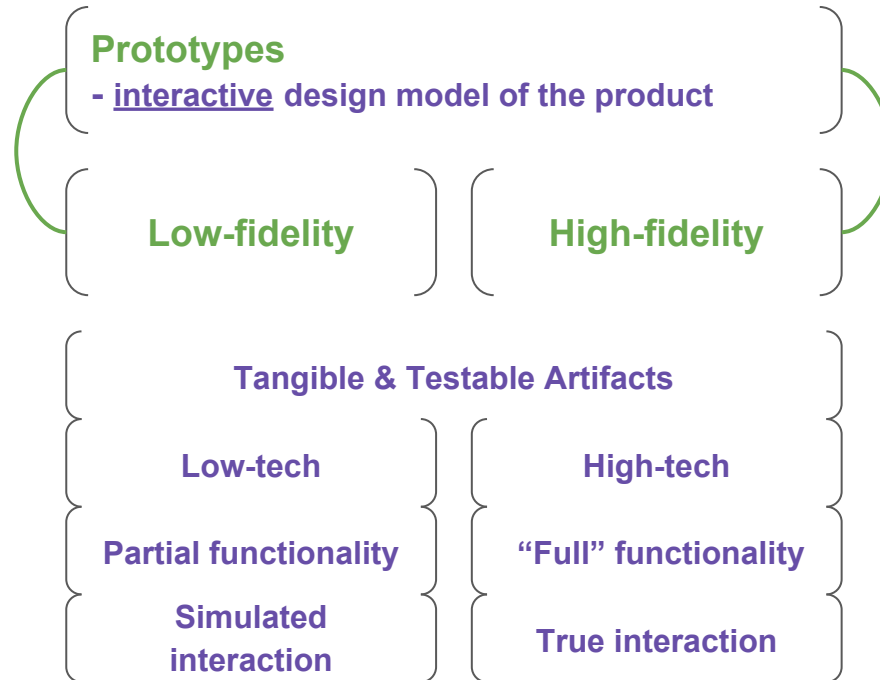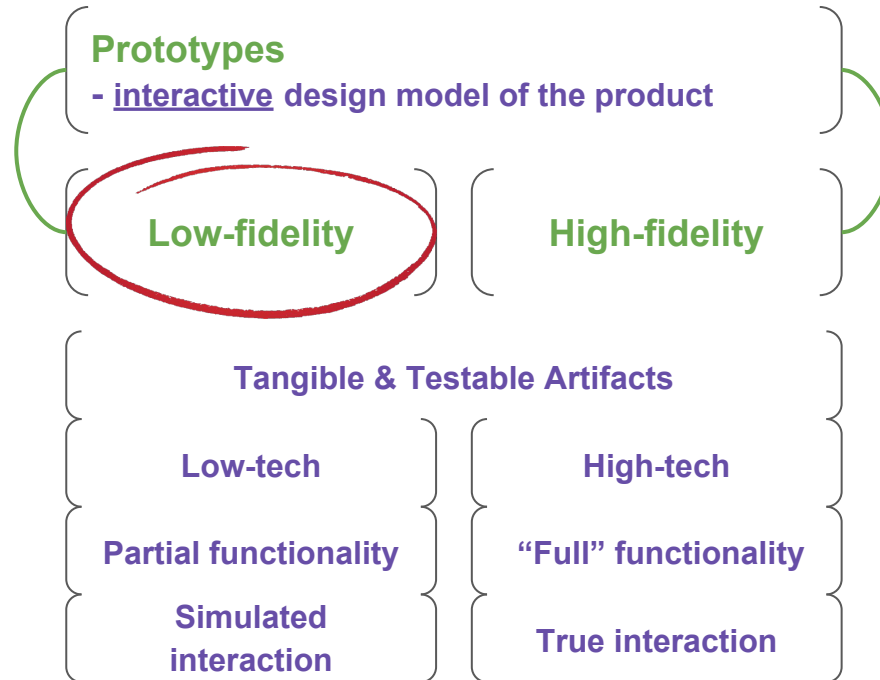Indexing is suited to fulfill a task by specific group

Understand your users

Translate needs into functionalities

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Prototype design

Test & Evaluate

Build final version

Prototype Design

Prototypes
- <u>interactive</u> design model of the product

Low-fidelity **VS** **High-fidelity**

Breadth - number of covered features

Depth - degree of functionality

Appearance - building means

Input methods - device mediation

Prototype Design

Prototypes
- <u>interactive</u> design model of the product

Low-fidelity

High-fidelity

Tangible & Testable Artifacts

Low-tech

High-tech

Partial functionality

"Full" functionality

Simulated interaction

True interaction

Prototype Design

Prototypes
- <u>interactive</u> design model of the product

Low-fidelity **High-fidelity**

Tangible & Testable Artifacts

Low-tech	High-tech
Partial functionality	"Full" functionality
Simulated interaction	True interaction

Prototype Design

Paper Prototypes

Interactive

Lo-fi appearance / input

Hi-fi depth / breadth
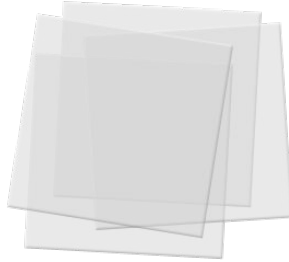
Simulation of a back-end

Early feedback

Experiment with alternatives

Big picture focus

Prototype Design

Paper Prototyping Tools
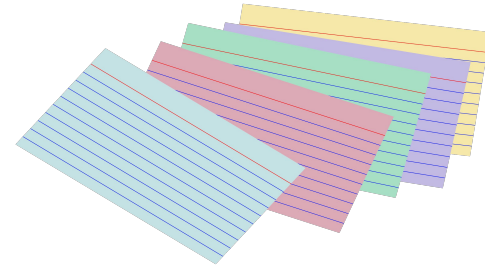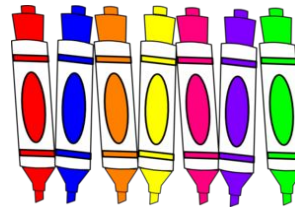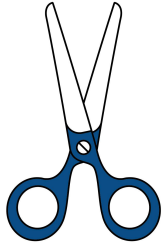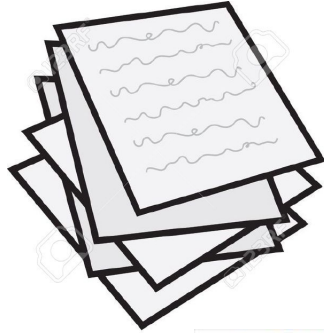
[Flickr. CannedTuna](https://www.flickr.com/)

Prototype Design

Paper Prototyping Tips

Make it large

Preprint widgets

Work fast!

Add ideas as they come

Use audio description

Make it monochrome

One sketch per screen