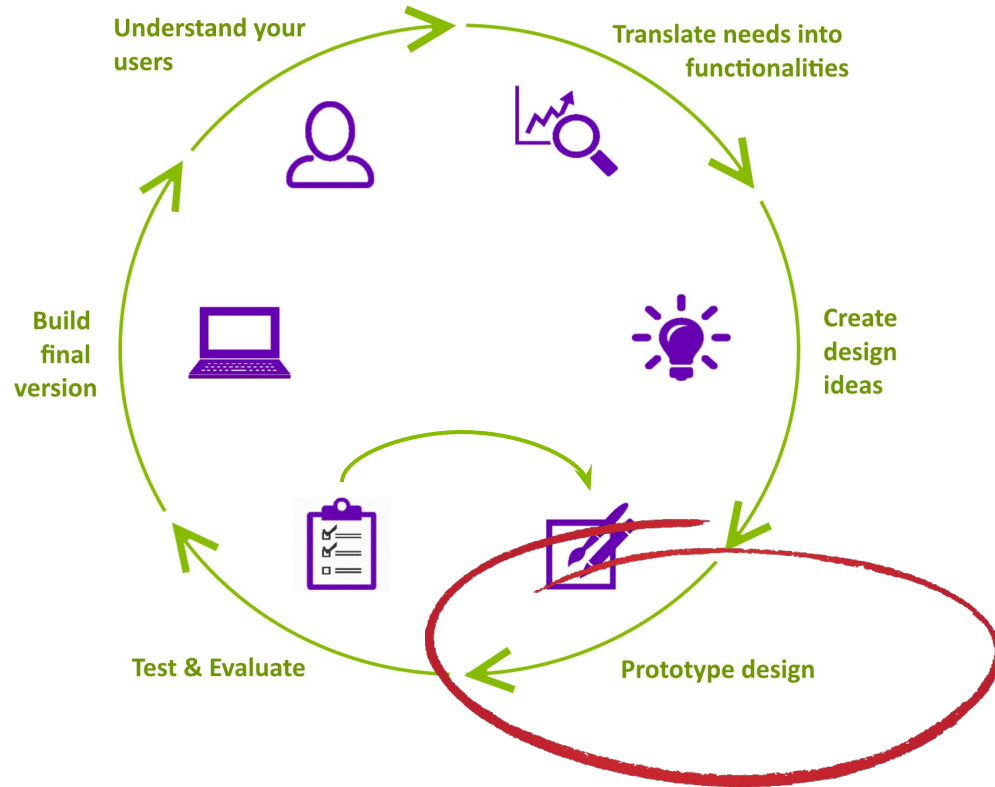


CS449/649: Human-Computer Interaction

Winter 2018

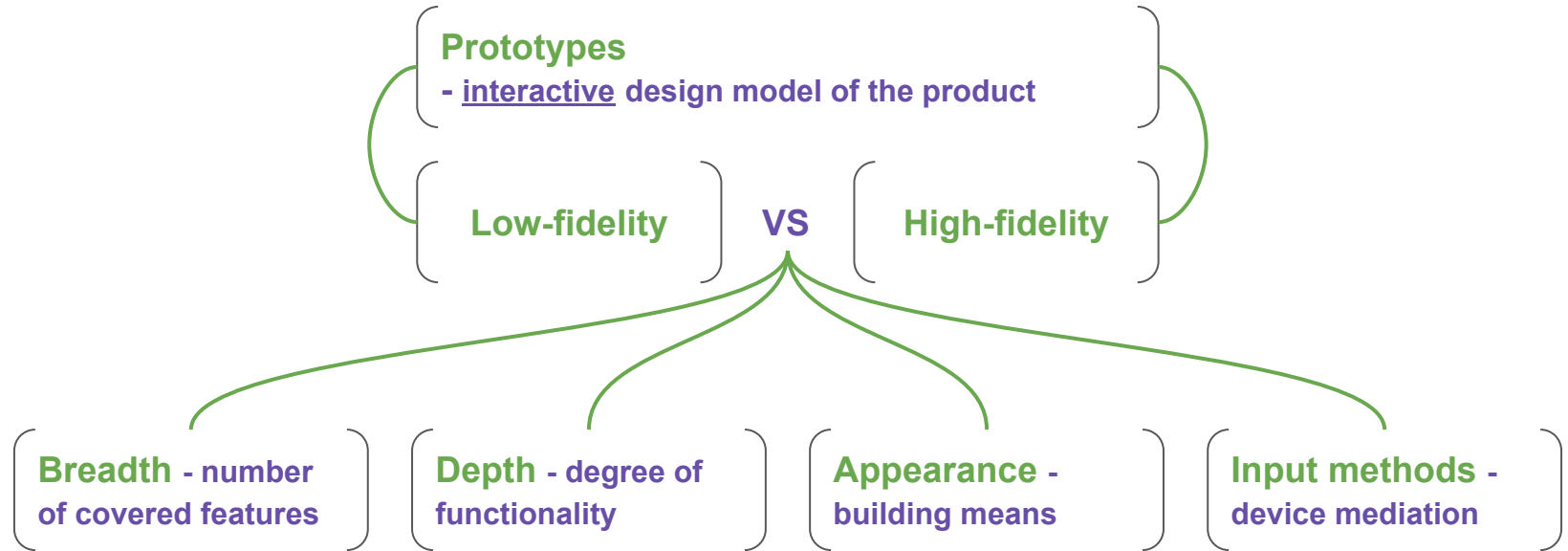
Lecture X

Anastasia Kuzminykh



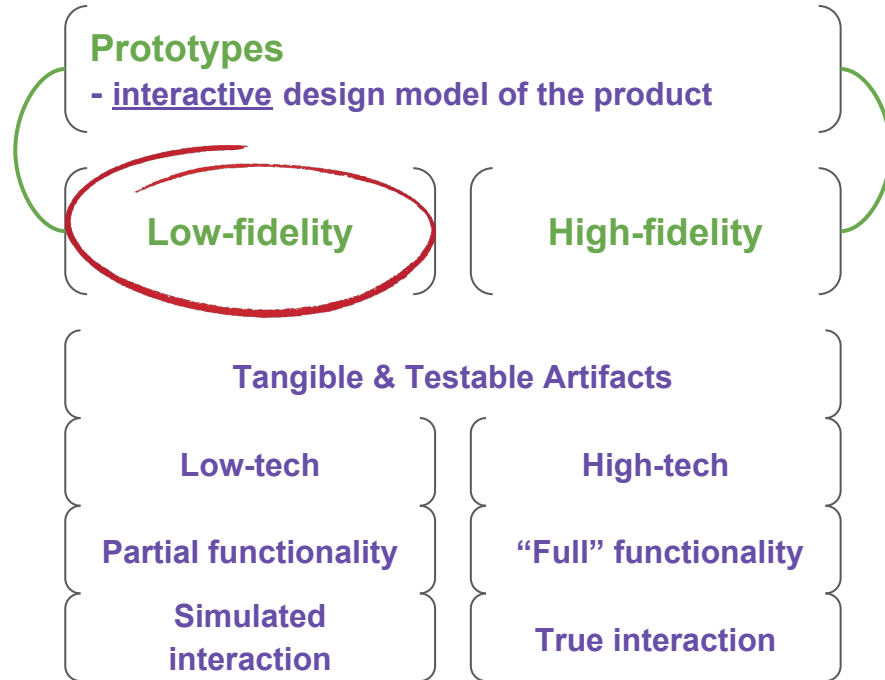


Prototype Design





Prototype Design





Prototype Design

Creating Paper Prototypes



[Flickr. CannedTuna](#)

One solid base

Separate sketches for each screen

Input related elements

Separate sketches for overlays

Sketches for changing elements

Simulate intended layout

Consistent style of elements

High level content where possible

Minimum colors

Should look and feel like a sketch



Prototype Design

Paper Prototyping Tips

Make it large

**Preprint
widgets**

**Add ideas as
they come**

Work fast!

**Use verbal
description**

**Make it
monochrome**

**One sketch
per screen**



IDEO: An early prototype for the Gyrus ENT Diego, a surgical tool



Image by Victor Schade, source: [Creative Edge Products](#)



Understanding how to use a remote is made easier by a friend.
Photo Nicolas Zurcher



Create Design Ideas

Static representations of the product

Sketches

Wireframes

Mockups

Visualization



Prototype Design

Prototypes

- interactive design model of the product

Low-fidelity

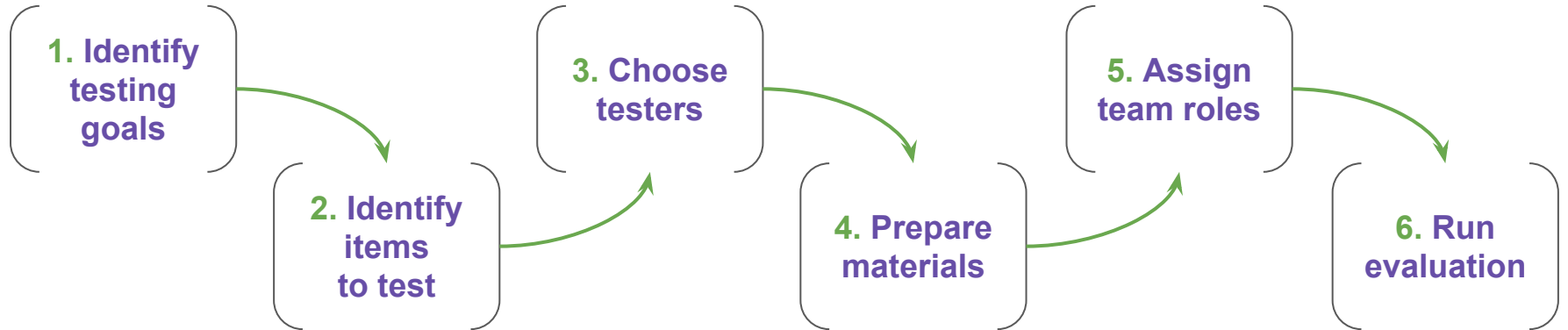
High-fidelity

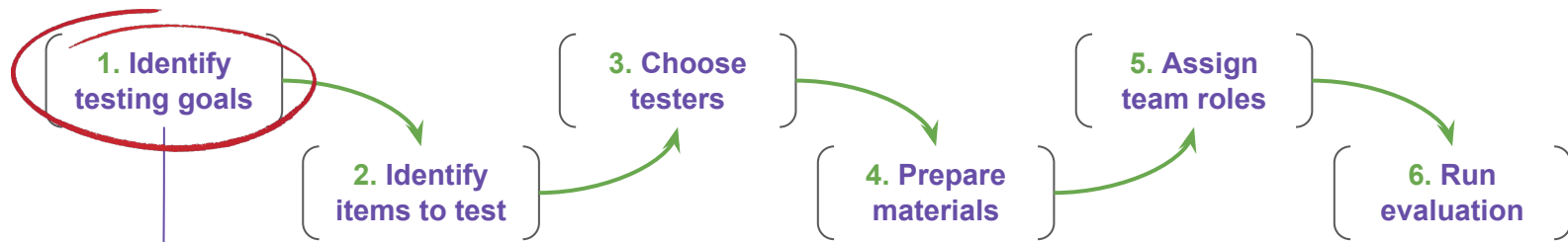
Testing and Evaluation



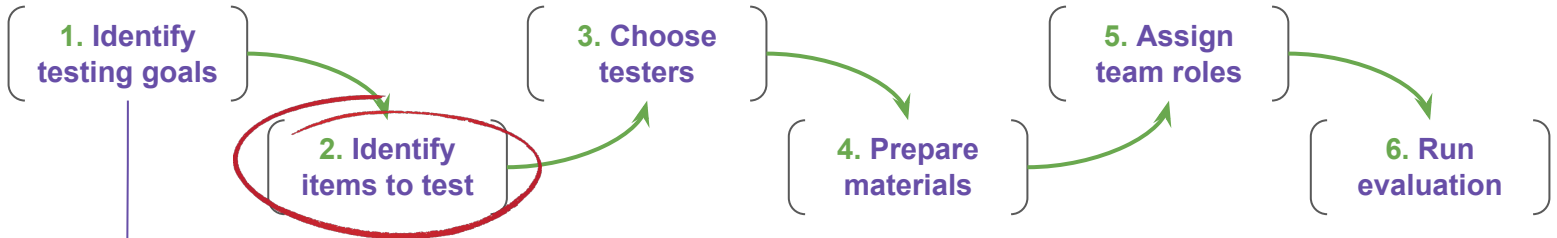
Prototype Design

Paper Prototyping Evaluation





- What do you want to know?
- What aspects of **UX** are you evaluating?
- What aspects are the most risky?



- What do you want to know?
- What aspects of **UX** are you evaluating?
- What aspects are the most risky?

- Which **components / features** are you testing?
- How “deep” do you test each feature?
- Which **tasks** you are evaluating?

1. Identify testing goals

2. Identify items to test

3. Choose testers

4. Prepare materials

5. Assign team roles

6. Run evaluation

- What do you want to know?
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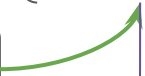
- Identify users group
- Identify user's level (novice, experienced, expert)
- ~5 testers is usually enough

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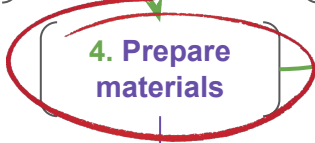
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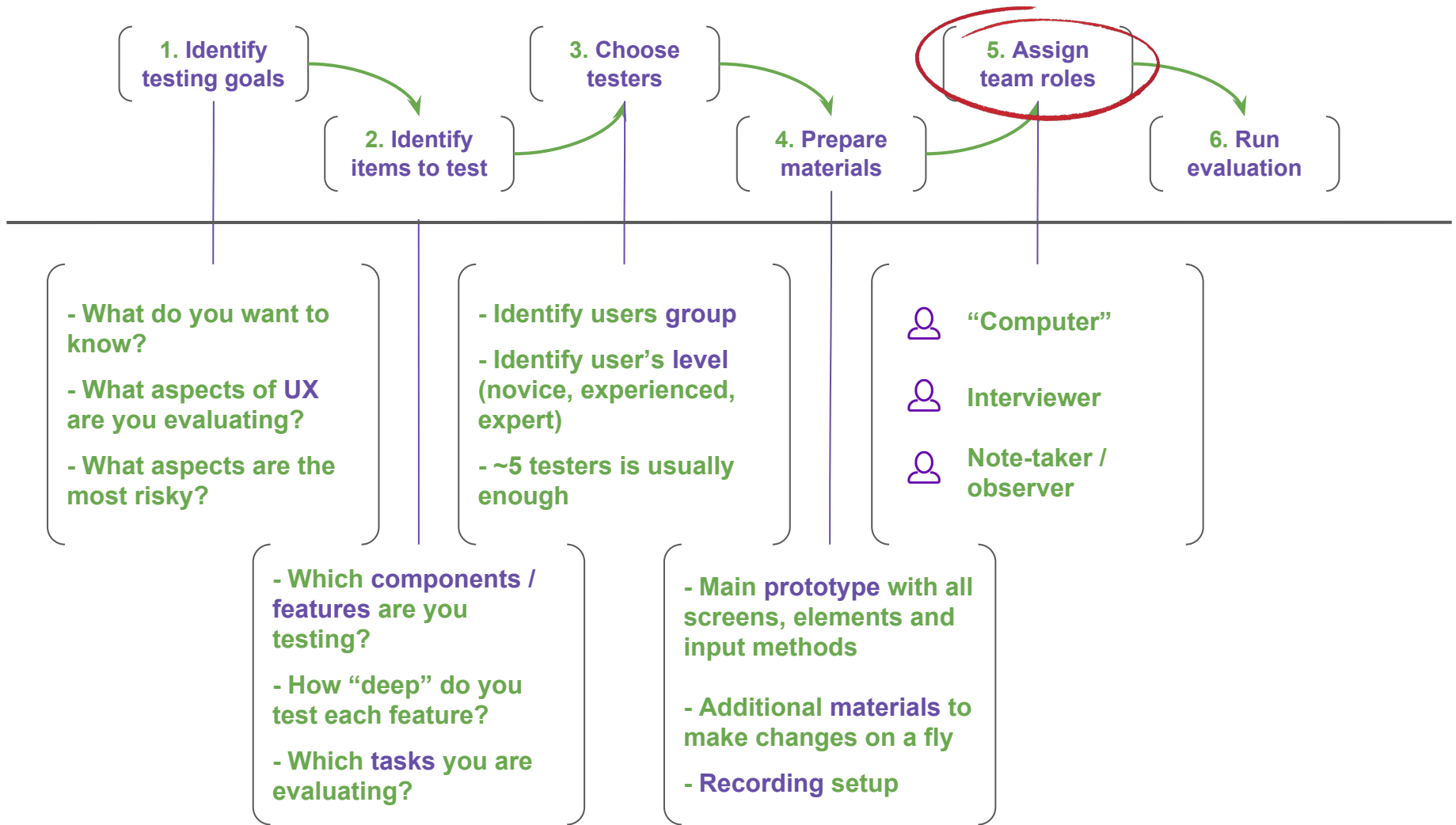
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- Which **components / features** are you testing?
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- **Main prototype** with all screens, elements and input methods
- **Additional materials** to make changes on a fly
- **Recording setup**





Prototype Design



John F. ("Jeff") Kelley

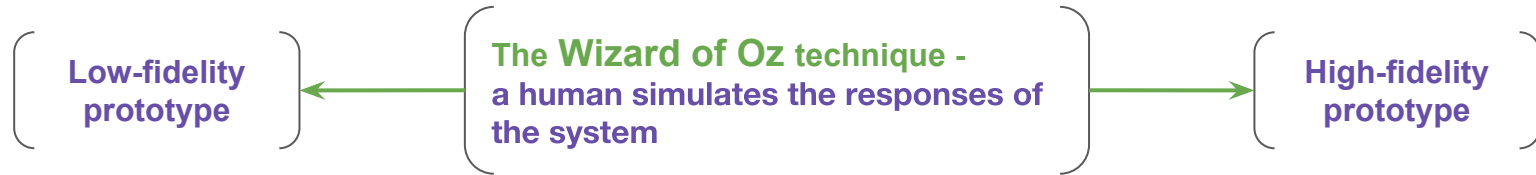
OZ = Offline Zero

Kelley, J. F. (1984).

An iterative design methodology for user-friendly natural-language office information applications.



Prototype Design



John F. ("Jeff") Kelley

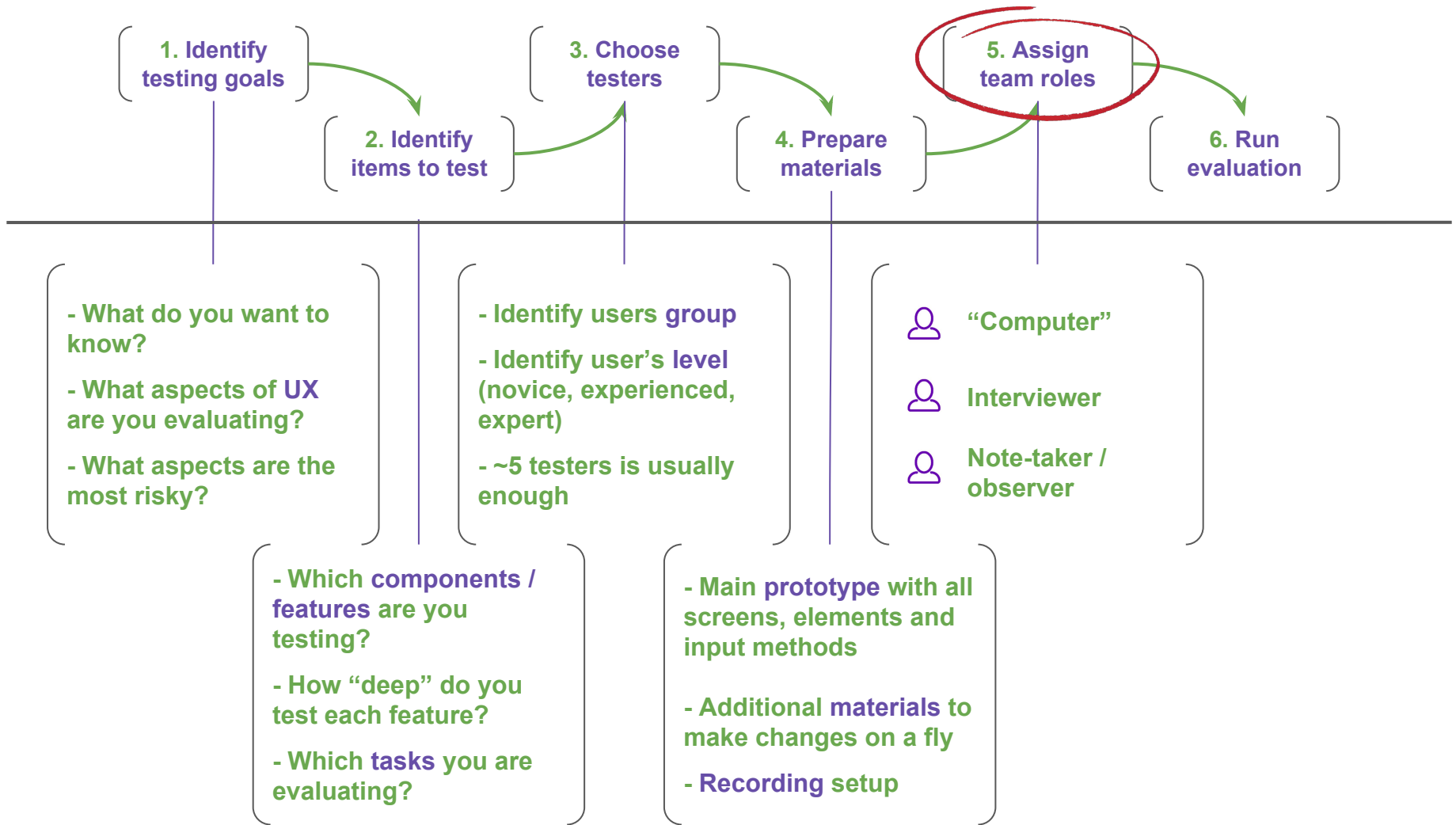
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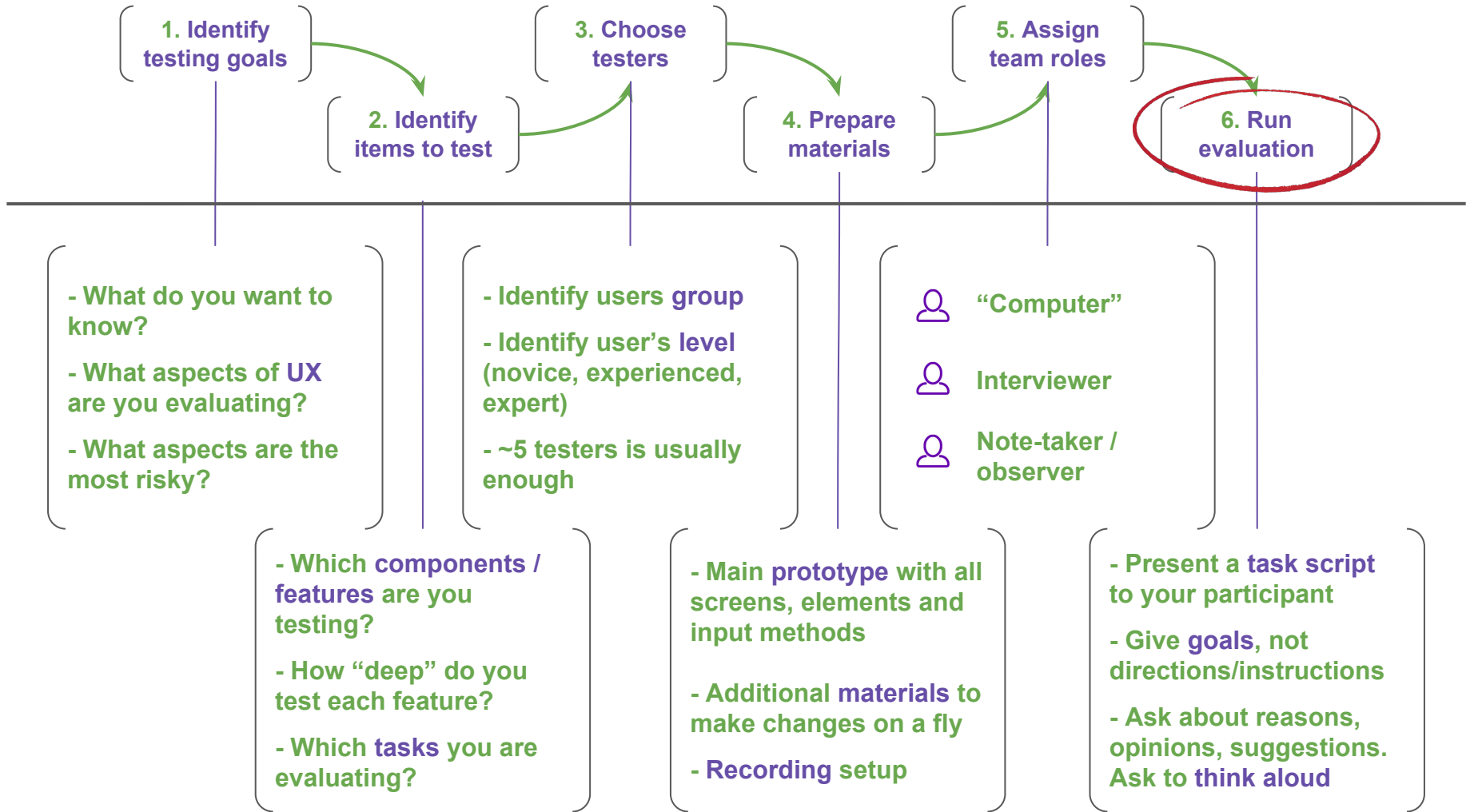
Kelley, J. F. (1984).

An iterative design methodology for user-friendly natural-language office information applications.

You need:

- Detailed **test plan** with test scenarios
- **Script of instructions** for the facilitator, wizard, participants
- **Procedure** for the wizard to properly respond to input from a participant
- The "wizard"







Prototype Design

Paper Prototyping Evaluation

