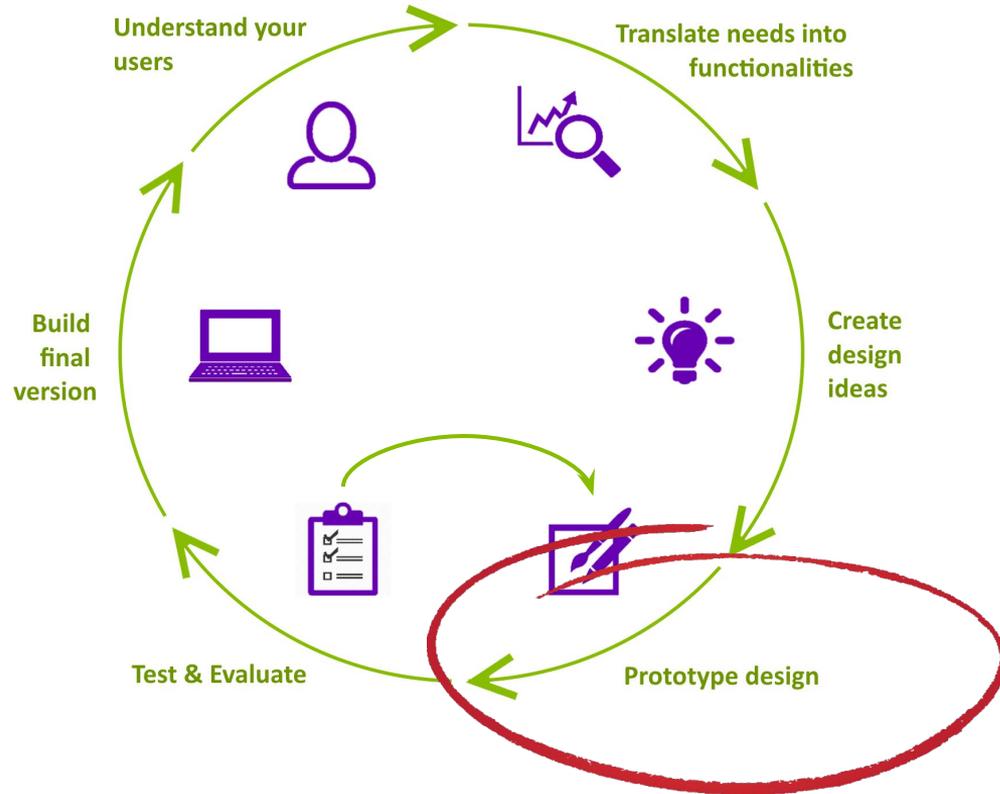


CS449/649: Human-Computer Interaction

Spring 2019

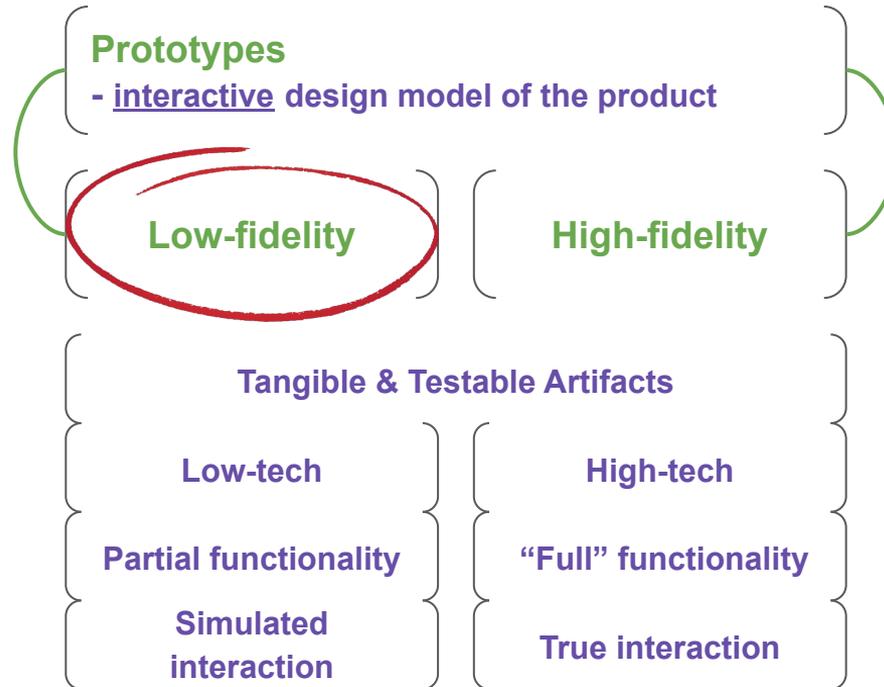
Lecture XIV

Anastasia Kuzminykh and Edward Lank





Prototype Design





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

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**

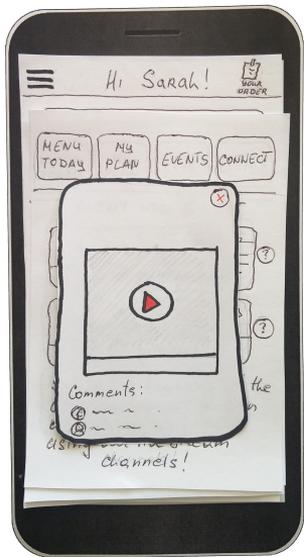
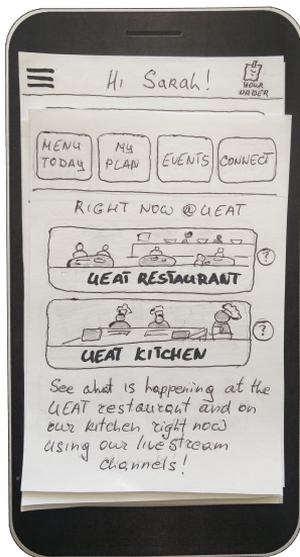
**Add ideas as
they come**

Work fast!

**Use verbal
description**

**Make it
monochrome**

**One sketch
per screen**





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

1. Identify testing goals

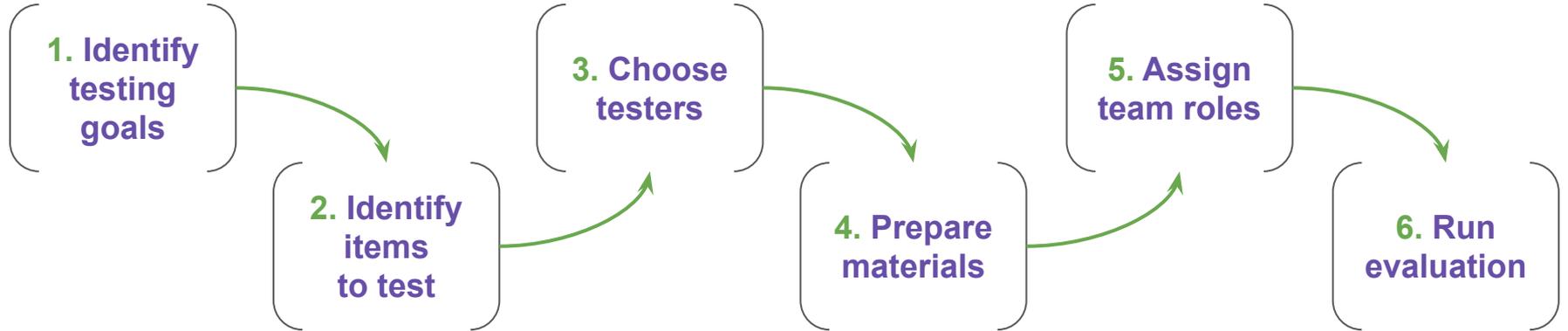
2. Identify items to test

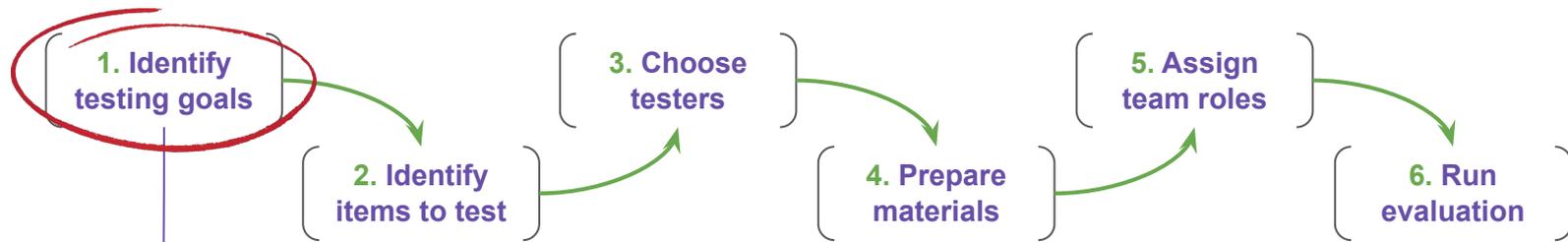
3. Choose testers

4. Prepare materials

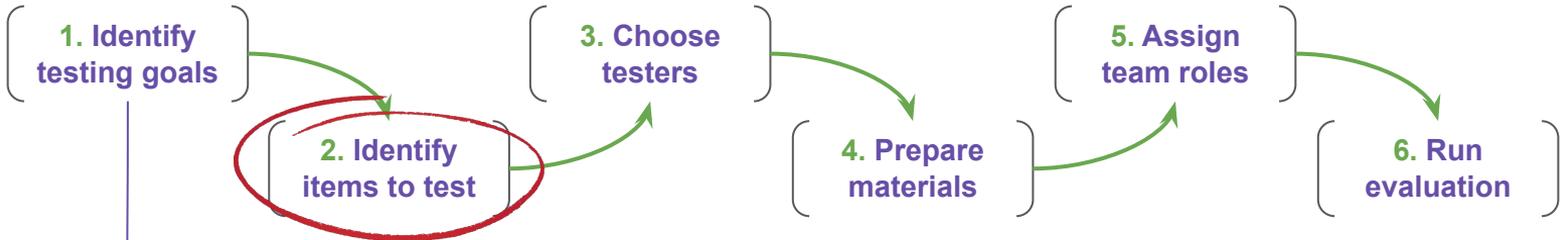
5. Assign team roles

6. Run evaluation





- What do you want to know?
- 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?

Bad Examples:



Please type in your username

Go to the menu, choose breakfast menu, find pancakes, click “Order”, type in your credit card information, click “Confirm”.

Go to your account using the icon in the top left corner, choose “Payment methods”, click “Change”.

Click the order status icon in the top right corner.

Good Examples:



Please log into the app

You are at the main page and want to order pancakes to pick up at the restaurant. How would you do that?

You want to change your default payment method. How would you do that?

You want to see what is the status of your order. How would you do that?

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?
- What aspects of UX are you evaluating?
- What aspects are the most risky?

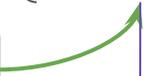
- Identify users group
- Identify user's level (novice, experienced, expert)
- ~5 testers is usually enough

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

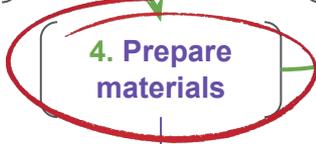
1. Identify testing goals



2. Identify items to test



3. Choose testers



5. Assign team roles



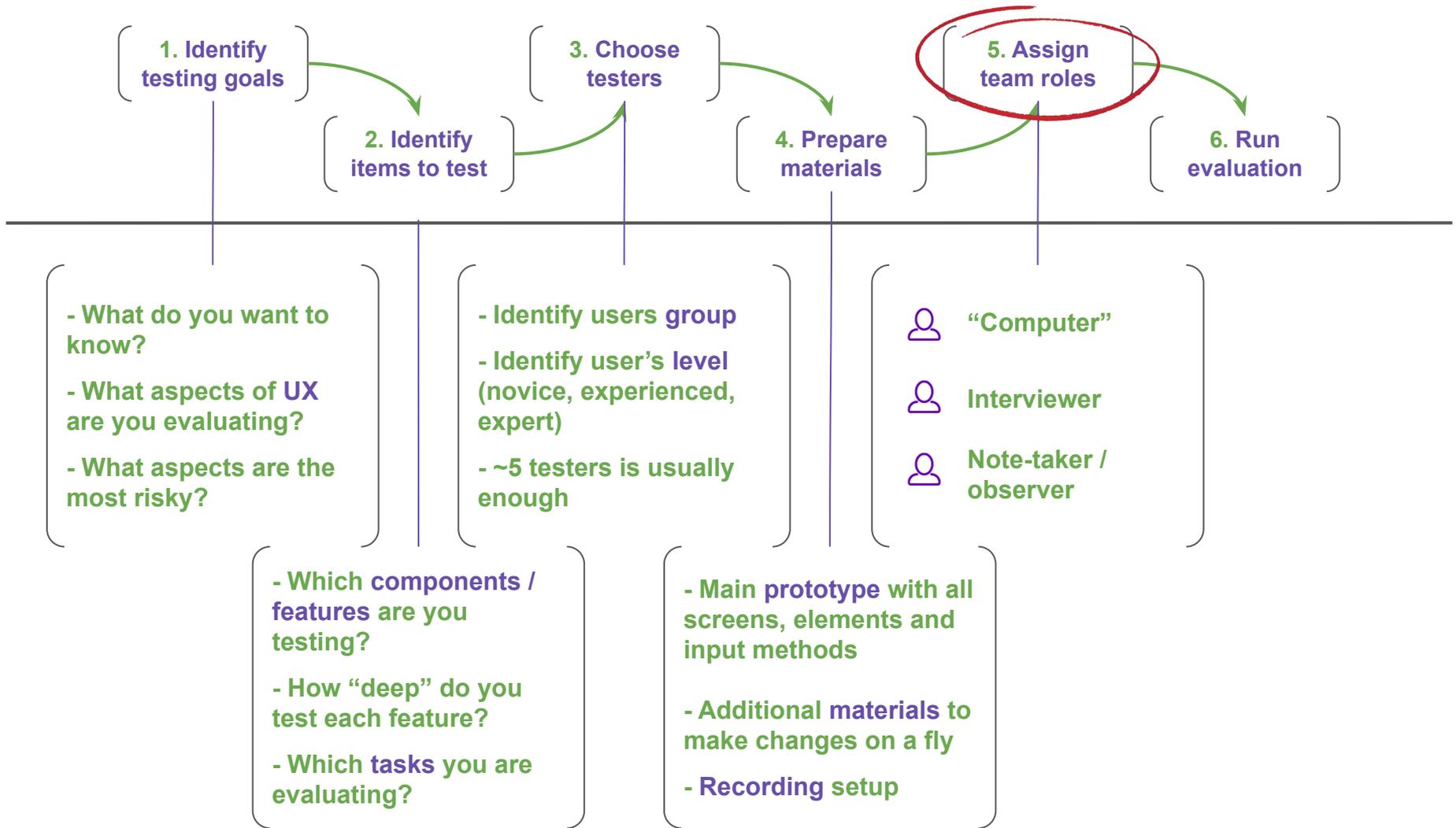
6. Run evaluation

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

- Identify users group
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- ~5 testers is usually enough

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

- **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

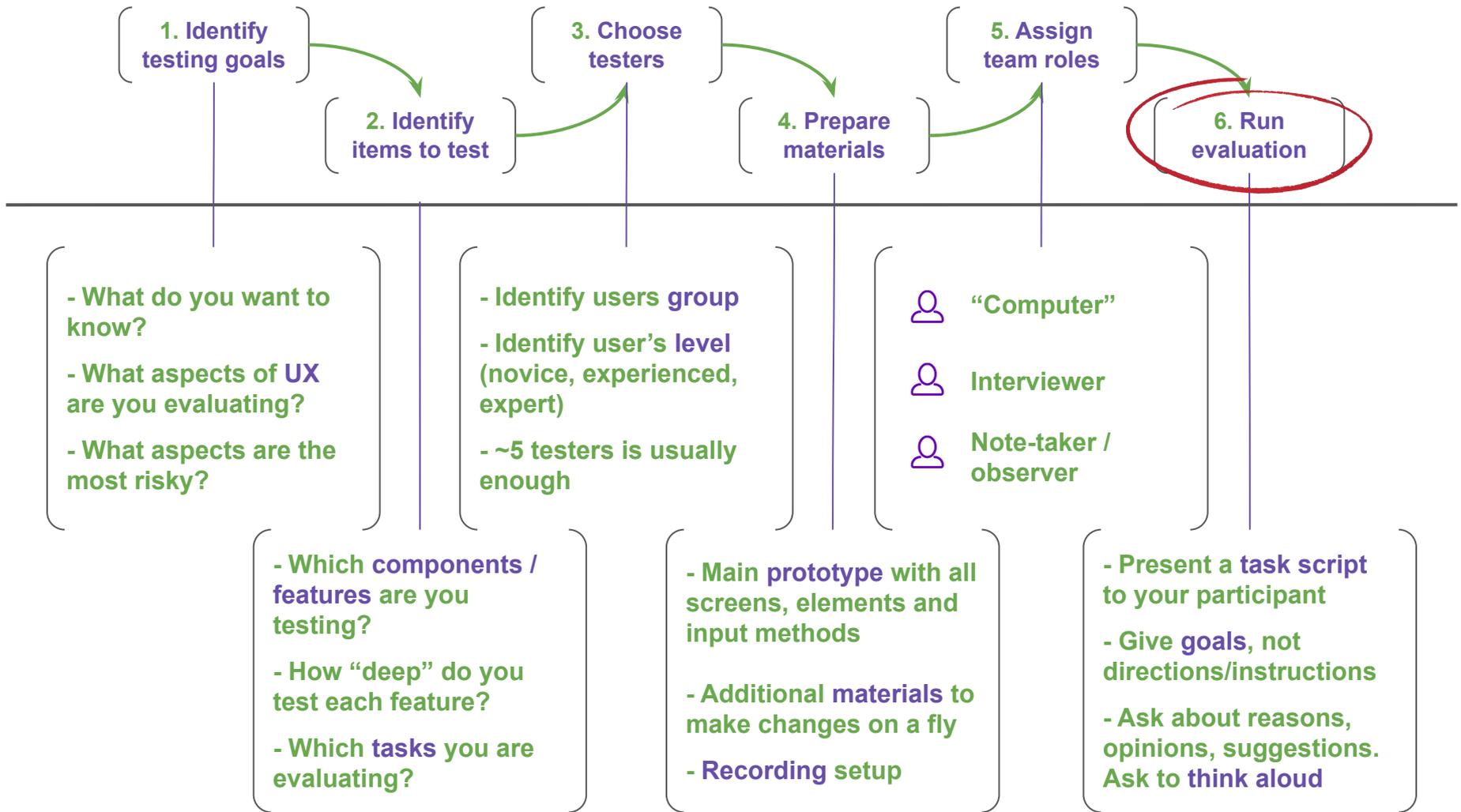
OZ = Offline Zero

Kelley, J. F. (1984).

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

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

