UX Design Techniques Paper Prototyping

- Paper Prototyping in the UCD Process
- Creating a Paper Prototype
- User Testing a Paper Prototype

"*Paper prototyping is great for exploring design possibilities. You can try as many as you want, and if they don't work for you it's fine, just throw them in the bin and start over. It opens your eyes on things you haven't thought of and gives you new design perspectives.*"

–Chaymae Lougmani, CEO & Co–founder at www.Snaget.io

What is Paper Prototyping?

To prototype successfully, designers have to revise quickly based on feedback gathered during testing sessions and use an appropriate prototyping approach.

Paper prototyping is a process where design teams creates **paper representation of digital products to help them realize concepts and test designs.** They draw sketches or adapt printed materials and use these low-fidelity screenshot samples to cheaply guide their designs and study users' reactions from early in projects. The **user can interact with these** and get an idea of the user flow.

The primary goal of paper prototyping is to map our **information architecture and visualize user flows**. They often spark discussions and can be used as a **first step to collaborate and communicate early ideas** to stakeholders.
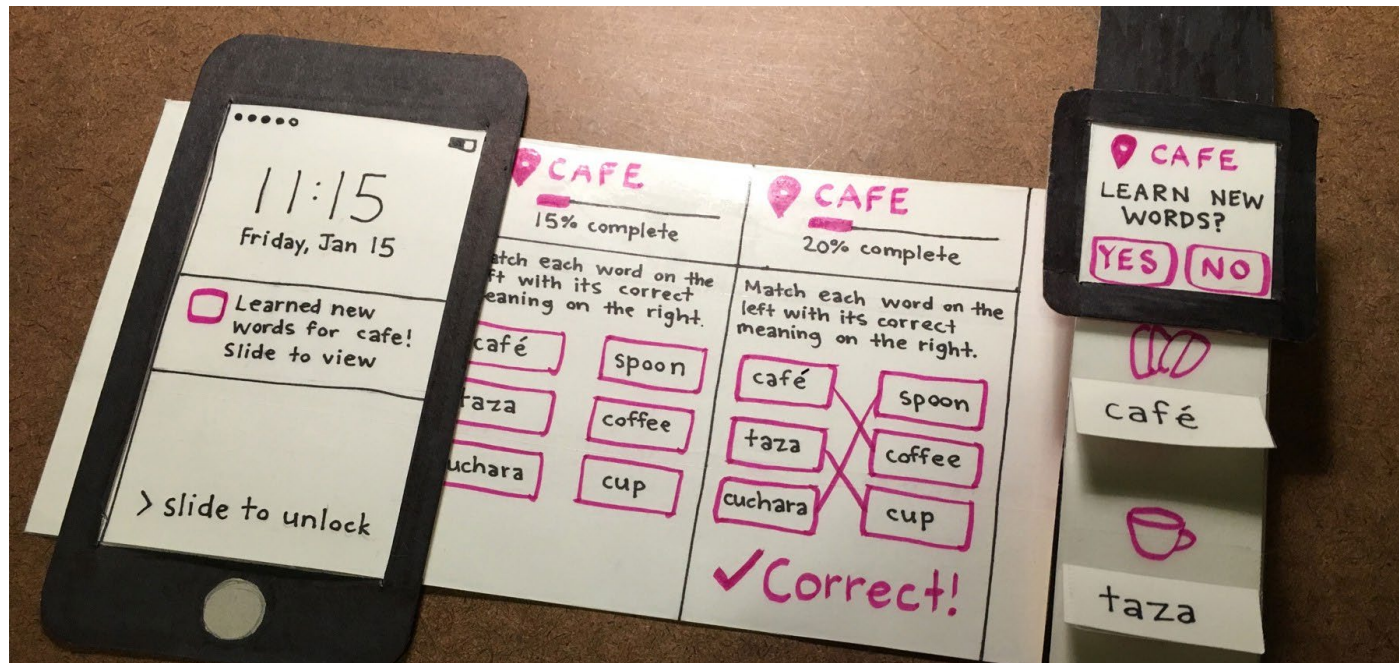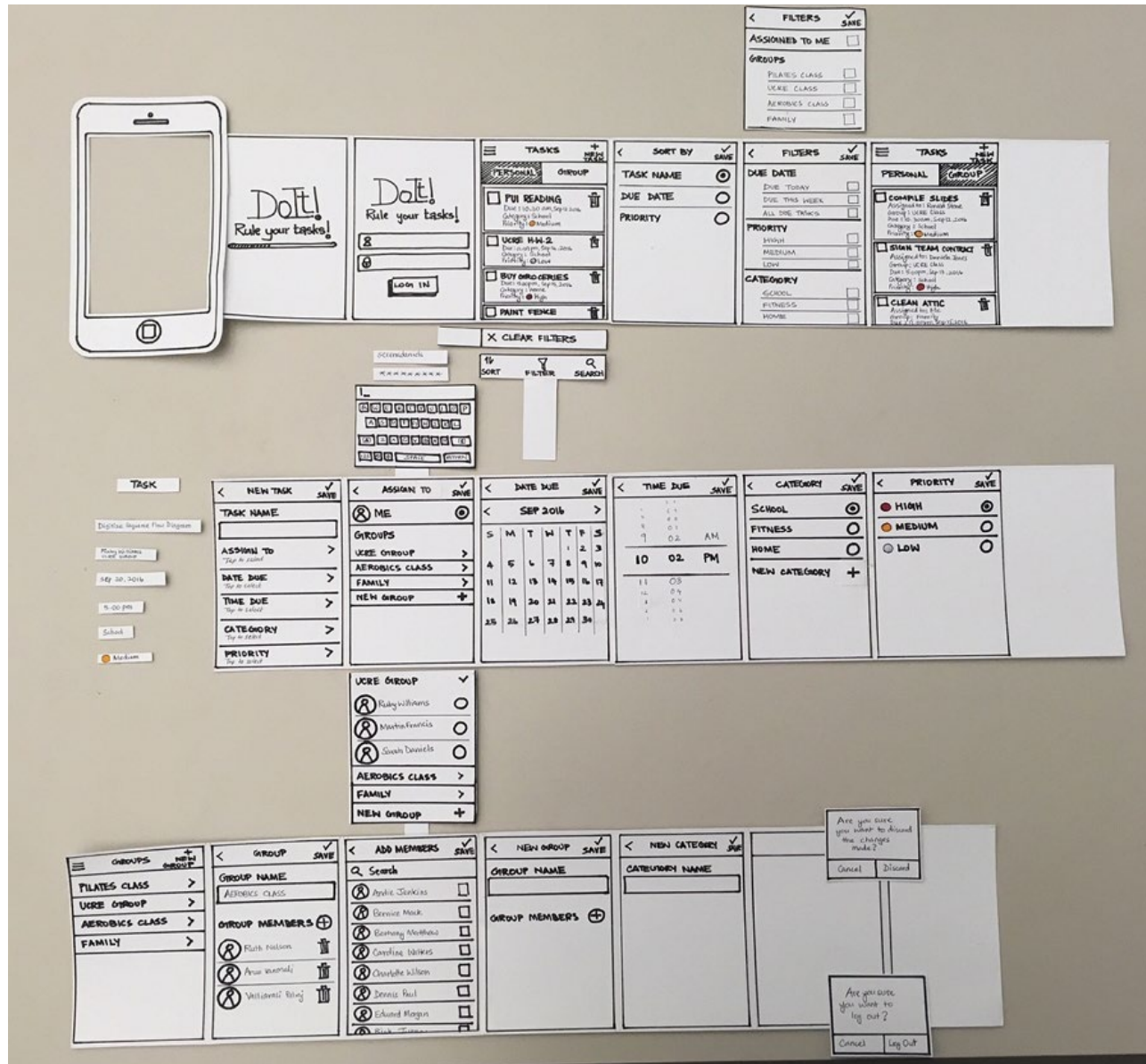
Why Paper Prototype?

Paper Prototypes are low-fidelity prototypes used in early stages of developing or designing a product. It has following benefits:

- **Quick iteration** (Focus is not on details and sketching is always quickest option)
- **Cheap** (Paper, stationary items, printed prototyping materials/kits are inexpensive and readily available everywhere
- **Anybody can sketch.**
- **Documentation:** Annotated hard-copy evidence of what works and what doesn't can be studied later on.
- **Team work:** Creativity increases the bond between team members and everyone can get involved in drawing, cutting and pasting.
- **Honest Feedback:** As it is low-fidelity people can comment more freely in opposition to criticizing a polished prototype (i.e. someone's "baby")
- **Useful throughout design Process:** It is flexible about revisions throughout development.

Limitations of Paper Prototype?

- **Lacks Realism**

- **Requires in-person testing**

- **Navigation and interaction is not much smooth for user to interact with**

Creating a Paper Prototype?
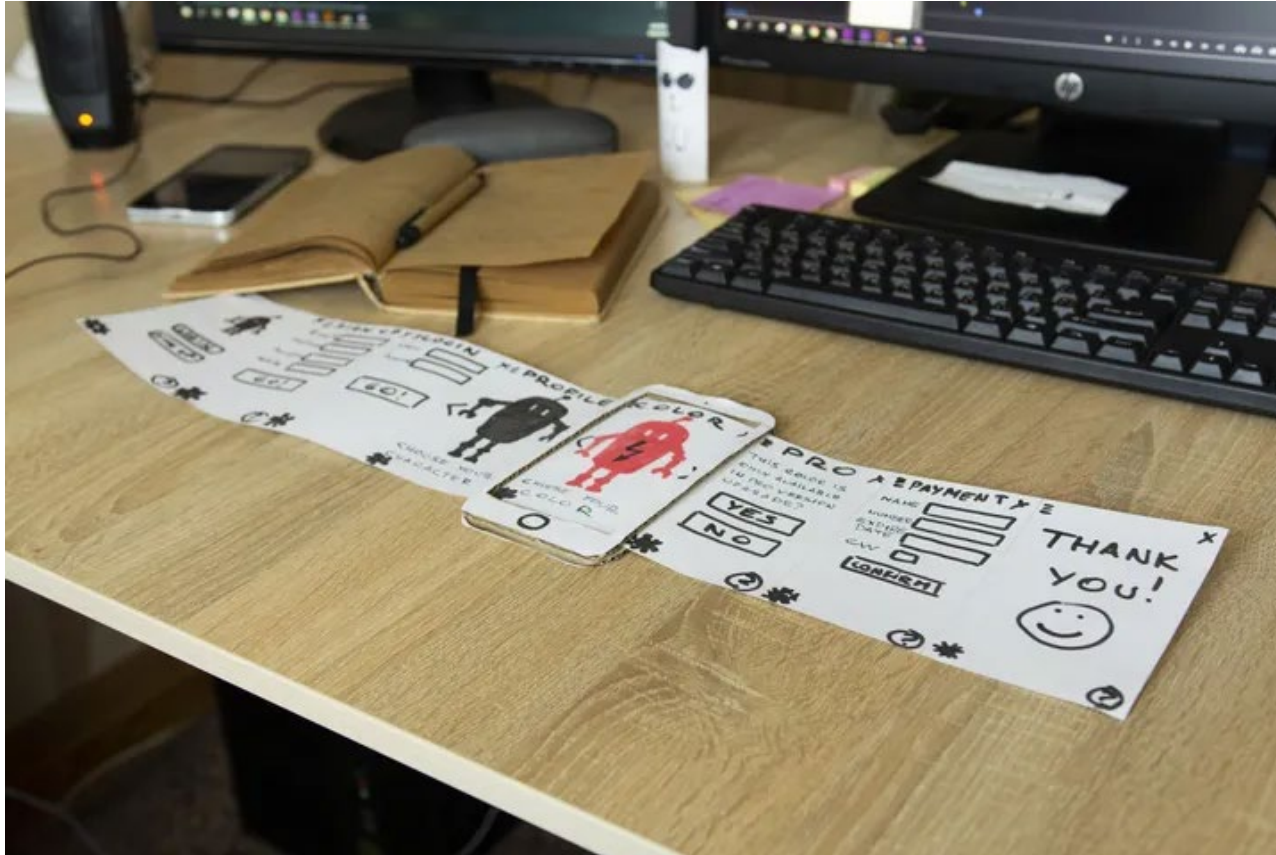
1. **Gather Stationery:** Pen, pencil, markers, paper, card, post-its, scissors, tape, glue, rulers, stencils. Graph papers can be used to help guide ideas and colored paper for representing UI elements like buttons.

2. **Start Building:** Get your ideas on paper, think about them concretely and later modify or improve them as required.

3. **Make one sketch per screen**

4. **Be quick**

5. **Focus on goal**

6. **Start with small screens first**

7. **Keep user's expectations in mind**

Tips:

1. **Don't get stuck** with first solution that comes in your mind
2. **Establish a clear purpose for each prototype.** Example, you can create a series of sketches to represent login process

3. **Use stencils**

4. **Don't focus on making paper prototype look pretty**

5. **Take photos of your sketch.** In case you lose it in a pile of papers or mistakenly throw it in trash, you can use digital copy of your sketch, also if you are using digital methods to share paper prototype with your colleagues, these photos can come in handy.

6. **Make sketching a team sport**
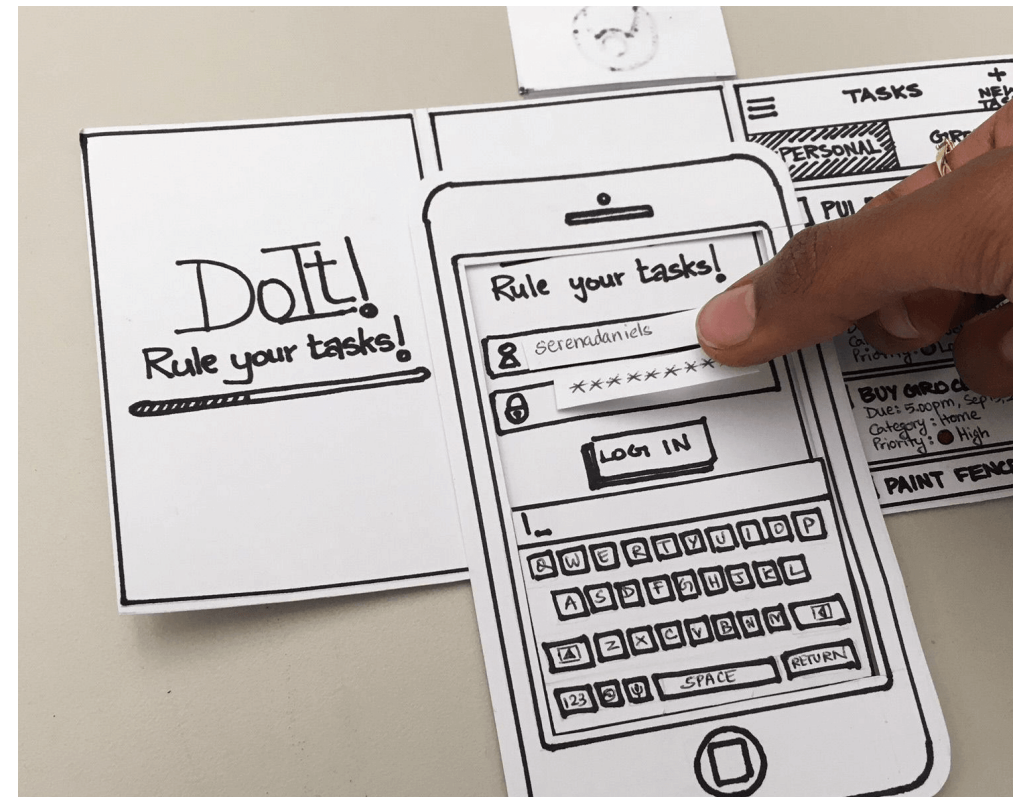
User Testing in a Paper Prototype.

User testing is a technique used in user-centered design to evaluate a proposed solution or product by testing it with real or potential users. Usually in-person user testing is done in case of paper prototypes. Basic rules of User Testing:

- **Have a clear goal**

- **Test early, test often**

- **Let test participants contribute ideas**

- **Have a moderator and a recorder.** Moderator is responsible for keeping the session on track. Recorder is responsible for recording notes, quotes and observations.

- **Test with the right people**

- **Be neutral when presenting the ideas.** Be open-minded to criticism and suggestions.

Some common User-testing methods:

- **Facilitator and 'Human-computer' roles:**
  If you plan to conduct testing sessions with a paper prototype, you'll need two roles for each testing session:
  - Facilitator (presenter). A person that instructs test participants and interacts with them.
  - 'Human computer.' This person remains silent during the session and is in charge of changing screens or screen states, whenever the test participant interacts with a prototype. This role is extremely important — the effectiveness of testing often depends on how good the person playing the computer is at responding to a participant's actions.

Avoid combining the roles of facilitator and 'human computer.' It's a quite common problem when presenter who acts as a 'human computer' miss some vital information from test participants.

- **Create Context for Testing**

When showing someone a paper prototype to test participants, you need to be sure that they understand the context of the design. That's why it so important to clearly explain the testing scenario and how the paper prototype works.
Here are a few fundamental questions that you need to answer before starting a session:
- •Why did you create this prototype?
- •What do you want to achieve with this testing session?
- •What information do you want to receive from test participants?

- **Test with at Least 5 Different Users**
  Follow standard usability test best practices — test with at least 5 different users and record the test sessions for further analysis.

Next...
Introduction of UX Multidevice Design