1. The design process involves following 4 stages.

A)Research
Research is the basic key step to design user experience.
Design team does their research work to explore how the outer world is working on such features.
Three purposes of this analysis:
(i) Understand market competition
(ii) Learn about your domain
(iii) Get inspirations and ideas from your competitors
Keep an eye on the latest UI trends, design principles and your existing user experience guidelines.
While doing research, start thinking about possible layouts and options to provide the desired experience.

B)Design
Now you have finalized layout and flow of the required interface with you, the next step is to work on final graphics.
Turn the initial mockups and wireframes to great-looking images with theme and styles applied to them.
Preparing and sharing of design specifications (principles, guidelines, colors, typography, iconography) to Development team is also part of this stage.

C)Evaluate
When product features are implemented, the end product is evaluated based on few factors:
- Whether the system is usable?
- Is it easy to use for end user?
- Is it flexible and easy to change?
- Does it provide the desired solution to user's problems?
- Does the product have the credibility that makes someone want to use it because of the experience it provides?

D) Implement
Since technical people participate in early stages of the process, they can start implementation while Design phase is in progress.
Development team builds back end functionality first and connects it with UI when they get design artifacts.
It is better that Design team involves in this step to help development phase.
While implementing, it is possible to raise the need of minor changes in design.

2 Almost any design cycle for a new project, service, product, or feature starts with a discovery phase. During this phase, we usually collaborate with business and other stakeholders to:

- research the landscape and gain insights about the current situation
- define our challenge and frame the right problem to solve
- collect insights and align on our first steps for the next phase

There are many standard UX Methods and Activities, and I know from the experience I have with my students that it's quite tricky for young designers to decide which would be the most appropriate to combine for each Design Phase.

3

Stakeholder Interviews

Stakeholder Interviews are a common UX practice that provides us, UX practitioners, with insights about business goals, technical and other constraints, and help you understand your stakeholders' current beliefs about the users.

Competitive Analysis

We conduct a competitive analysis by collecting and comparing data about competitors (products and companies).

We use this method to examine, understand, and evaluate our direct and indirect competitors' solutions, highlight products' strengths and weaknesses, and make informed decisions about our product and design strategy.

We usually apply this method during the discovery phase, but could also be introduced later in the design process.

User Interviews & Field Studies/ Contextual Inquiries

User Interviews is a qualitative research method that gives insights into users' attitudes, what they think about, a topic, website, app, service, or process. We may conduct User Interviews in a variety of situations and design phases. For example, in the discovery phase, we may conduct user interviews to inform personas, journey maps, features, and workflow ideas.

We may decide to conduct the interviews in combination with a Contextual Inquiry Study by supplementing observation with descriptions of tools, processes, bottlenecks, and how users perceive them.

Diary Studies

A Diary Study can be qualitative or quantitative, depending on the project's needs and the participants' amount. In general, we conduct diary studies with at least 10 participants to understand long-term user behavior and experiences.

The participants keep a diary and log specific information about the particular activities we study for a pre-defined period that can vary from a few days to even longer than a month.

4 Quantitative data is anything that can be counted or measured; it refers to numerical data. Qualitative data is descriptive, referring to things that can be observed but not measured—such as colors or emotions.

Quantitative data refers to any information that can be quantified. If it can be counted or measured, and given a numerical value, it's quantitative data. Quantitative data can tell you "how many," "how much," or "how often"—for example, how many people attended last week's webinar? How much revenue did the company make in 2019? How often does a certain customer group use online banking?
To analyze and make sense of quantitative data, you'll conduct statistical analyses.

Unlike quantitative data, qualitative data cannot be measured or counted. It's descriptive, expressed in terms of language rather than numerical values. Researchers will often turn to qualitative data to answer "Why?" or "How?" questions. For example, if your quantitative data tells you that a certain website visitor abandoned their shopping cart three times in one week, you'd probably want to investigate why—and this might involve collecting some form of qualitative data from the user. Perhaps you want to know how a user feels about a particular product; again, qualitative data can provide such insights. In this case, you're not just looking at numbers; you're asking the user to tell you, using language, why they did something or how they feel.
Qualitative data also refers to the words or labels used to describe certain characteristics or traits—for example, describing the sky as blue or labeling a particular ice cream flavor as vanilla.