



# Software Engineering

WEEK 02 LECTURE 02 B



# TODAY

## ■ Stack

## Holders

- Primary Users
- Secondary Users
- Tertiary Users



# **USER CONSIDERATIONS**



## STACK HOLDERS

- A **stakeholder** is anyone affected by or who has an effect on the success of the project, such as end-users, clients, managers of end-users, and system administrators.
- A successful project addresses the needs of all stakeholders.

## TYPES OF STAKE HOLDERS

- There are three types of stakeholders or users:
  - primary users
  - secondary users
  - tertiary users.

## TYPES OF STAKE HOLDERS

- **Primary users** are end-users, or the people who will use the product.
- **Secondary users** are those people who will occasionally use the product or use it through an intermediary.

## TYPES OF STAKE HOLDERS

- **Secondary users** may not be the target audience, but they could be related to the target audience in some way, such as parents of children who use a product designed for children.

## TYPES OF STAKE HOLDERS

- **Tertiary users** are those who are affected by the use of the product or make decisions about the product, such as clients and product owner.





# **USER INTERFACE**



## USER INTERFACE

- A product should be designed to be something users can navigate and want to use. This is primarily accomplished through good **user interface (UI)** design

## USER INTERFACE

- UI is what is seen when using the product, and it can encompass anything an end-user interacts with—features such as windows, buttons, scrollbars, checkboxes, and text boxes.

## USER INTERFACE

- Good UI design is important. If there are many similar products on the market, users will easily move on to another product if they do not like what they are currently using.

## USER INTERFACE

- An entire discipline known as **human computer interaction (HCI)** studies how end-users interact with technology products and now it is also popular with the name of **User Experience (UX)**

- This make popular term  
**UX/UI**

## CHALLENGES


- Users have an inability to express what they need
- Users are biased by previous experiences toward bad design and tend to like that one.
- Developers sometimes have trouble seeing through a user's point of view because of their advanced knowledge of technology

## USER INTERFACE

- Creating an intuitive, user-friendly interface is key to addressing many of these issues. A good strategy to consider is to design a product for both beginner users and expert users. In general, the design will then accommodate intermediate users as well.



### ■ Considering **User Limitations**

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- When designing software, it is also important to consider the numerous limitations users are faced with. These limitations are related to human limitations. They include

## HUMAN LIMITATIONS

- Perceptual or sensory limitations
- Physical limitations
- Cognitive or memory limitations
- Cultural limitations

## PERCEPTUAL OR SENSORY LIMITATIONS

- Caused by restrictions of the five senses. Color blindness is an example of a sensory limitation.

## PHYSICAL LIMITATIONS

- Affect how a user physically interacts with or uses a product. An example is left- or right-handedness.

## COGNITIVE OR MEMORY LIMITATIONS

- People can not remember so many things at once, so it is important to use visuals in design that are familiar or suggestive to help identification.

## CULTURAL LIMITATIONS

- Encompass how different cultural backgrounds of potential users can affect interpretation of design elements, such as symbols and icons, layout, multimedia, and translation needs.