

| User model                   | Design model |  |  |  |
|------------------------------|--------------|--|--|--|
| User Interface Design Models |              |  |  |  |
| Implementation model         | Mental model |  |  |  |

| 1.Interface design            |  | 2.Interface construction        |  |  |
|-------------------------------|--|---------------------------------|--|--|
| User Interface Design Process |  |                                 |  |  |
| 3.Interface validation        |  | 4.Interface Analysis & Modeling |  |  |

### **Interface Analysis means understanding:**

1-end-users 2-the tasks 3- the content 4- the environment

Use-cases define basic interaction.

Task elaboration refines interactive tasks.

Object elaboration identifies interface objects.

Workflow analysis defines how a work process is completed when people are involved.

#### **Interface Design Steps:**

Define interface objects and actions / Define events / Depict each interface state / Indicate how the user interprets the state of the system.

#### **Design Issues:**

Response time, Help facilities, Error handling, Menu and command labeling, Application accessibility, Internationalization.

## **Effective Web and Mobile App Interfaces:**

Effective interfaces are visually apparent and forgiving & Effective interfaces don't concern the user with the inner workings of the system. Effective applications and services perform a maximum of work.

# **Interface Design Principles:**

Anticipation / Communication / Consistency / Controlled autonomy / Efficiency / Focus / Human interface objects / Latency reduction / Learnability / Readability / Track state / Maintain work product integrity / Visible navigation/ Fitt's Law "The time to acquire a target is a function of the distance to and size of the target"

<u>Aesthetic Design</u> Don't be afraid of white space / Organize layout elements / Group navigation, content, and function within the page / Consider resolution and browser window size...