Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent for all people regardless of age, size, ability and disability.

Supermarkets, Bathrooms, Buses.

User Capabilities

* Vision
* Hearing
* Thinking
* Communication
* Locomotion
* Reach & Stretch
* Dexterity

**Cognitive Walkthrough**

The cognitive walkthrough is a formalised way of imagining people’s thoughts and actions when they use an interface for the first time. Usually walkthroughs are conducted by a designer without user presence.

Limitations – Based on Assumptions of user behaviour and thought process.

Without involving real users in the walkthrough, it is difficult to accurately predict user reactions

Advantages

1. Enables detailed evaluation of user problems without user being present.
2. Conducted at any stage of product development i.e flexible.
3. Can be conducted prior to working prototype being available

Disadvantages

1. Time consuming and laborious, especially with complex tasks
2. Based on assumptions
3. Narrow focus and may miss potential problems.

**Task Analysis**

Study of what user is required to do in terms of actions and cognitive processes to achieve the system goal. Useful for redesigning tool.

*Goal* can be defined as something the user wants to achieve. Set of tasks required to reach goal.

*Task* is the series of activities required to achieve goal. Structured set of activities. Involves problem solving and sub tasking.

*Action* are tasks which require no problem solving.

**Persona**

A model of a user that focuses on individual goals when using the system.

Resembles potential users. Examines user’s behaviour, goals and motives in a fictional description of a single individual.