

Lecture - 2

"Multimodal systems are subset of Multimedia systems."

Domains of multimodal systems :

- 1) Active I/P mode = majority of applications based on this
- 2) Passive I/P mode
- 3) Virtual Environment = mostly used in gaming applications

1) Active I/P mode = user intentionally gives information to the system.

Ex : Command, gesture

Ex : A Dialog system with different input modes.

Ex : Unlock a phone with a happy emotion face.

Fixed Input = to give desired O/P

2) Passive I/P mode = All kinds of information that user do not produce intentionally. No fixed pattern at input end.

Ex : Emotions, gazing at something

Ex : Depending on emotions, a classroom can be "boring" or "interesting", real time feedback on classroom. Depending on feedback, professor enhances its skill. This application depends on "facial expression of students".

NOTE : Expressions can be provided intentionally then it cannot be passive I/P mode.

3) Virtual Environment = user can behave naturally to perform a task. A person playing tennis virtually can be an example of virtual environment.

" Users can use all kinds of information, behave naturally as he/she in natural environment and system would be able to analyse all this information and act accordingly. "

NOTE : " It's not necessary one type of multimodal systems, there can be multiple multimodal systems working together or parallely " .