Module-2 Section 2.3

Obstacles: Behavioural design, dark patterns…

Human characteristics in design

Obstacles And Pitfalls in development path:

1. Nobody ever gets it right the first time.

2. Development is chock-full of surprises.

3. Good design requires living in a sea of changes.

4. Making contracts to ignore change will never eliminate the need for change.

5. Even if you have made the best system humanly possible, people will still make mistakes when using it.

6. You must have behavioral design goals like performance design goals.
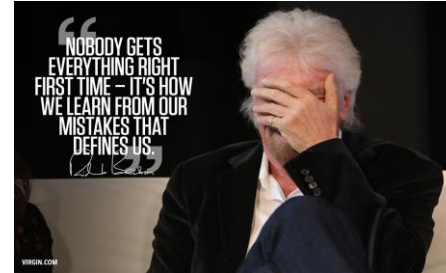
Behavioural Design???

- Behavioural Design:
  - Combine psychology, design, technology and creative methods to find out why people do the things they do and to figure out through experimentation how to activate them to change their behaviour.
  - https://suebehaviouraldesign.com/what-is-behavioural-design/

- Dark pattern:
  - Is a user interface that has been carefully crafted to trick users into doing things, such as buying insurance with their purchase or singing up for recurring bills.
  - https://darkpatterns.org/types-of-dark-pattern.html

Human Characteristics in Design???

- Perception
- Memory
- Sensory Storage
  - Sensory Adaptation and Habitutation
- Visual Acuity
  - Capacity of eye to resolve details
- Foveal and Peripheral vision
  - Focus on directly on something or surronding
- Information processing
- Mental models
  - Internal representation of a person's current understanding of something
- Movement control
  - Time to acquire a target is a function of the distance to and size of the target.
- Learning
  - Process of encoding in long-term memory information
- Skill
  - Performance of actions or movements in correct time sequence with adequate precision
- Individual Differences
  - Feeling, Motor ability, intellectual, learning ability, speed and so on.

Human Characteristics In Design

- Knowledge Experience
- Psychological Characteristics
- Job/Task/Need
- Physical Characteristics

Age	Young, middle aged, or elderly.
Gender	Male or female.
Handedness	Left, right, or ambidextrous.
Disabilities	Blind, defective vision, deafness, motor handicap.

Computer Literacy	Highly technical or experienced, moderate computer experience, or none.
System Experience	High, moderate, or low knowledge of a particular system and its methods of interaction.
Application Experience	High, moderate, or low knowledge of similar systems.
Task Experience	Level of knowledge of job and job tasks.
Other Systems Use	Frequent or infrequent use of other systems in doing job.
Education	High school, college, or advanced degree.
Reading Level	Less than 5th grade, 5th–12th, more than 12th grade.
Typing Skill	Expert (135 WPM), skilled (90 WPM), good (55 WPM), average (40 WPM), or "hunt and peck" (10 WPM).
Native Language or Culture	English, another, or several.

Type of System Use	Mandatory or discretionary use of the system.
Frequency of Use	Continual, frequent, occasional, or once-in-a-lifetime use of system.
Task or Need Importance	High, moderate, or low importance of the task being performed.
Task Structure	Repetitiveness or predictability of tasks being automated, high, moderate, or low.
Social Interactions	Verbal communication with another person required or not required.
Primary Training	Extensive or formal training, self-training through manuals, or no training.
Turnover Rate	High, moderate, or low turnover rate for jobholders.
Job Category	Executive, manager, professional, secretary, clerk.
Lifestyle	For Web e-commerce systems, includes hobbies, recreational pursuits, and economic status.

Attitude	Positive, neutral, or negative feeling toward job or system.
Motivation	Low, moderate, or high due to interest or fear.
Patience	Patience or impatience expected in accomplishing goal.
Expectations	Kinds and reasonableness.
Stress Level	High, some, or no stress generally resulting from task performance.
Cognitive Style	Verbal or spatial, analytic or intuitive, concrete or abstract.