

STRUCTURING AND PROTOTYPING

L05:

Four components.

1. Functional specification
2. Interaction design
3. Information architecture
4. Use framing

1. Functional specifications

With stakeholder - (AS) based

Create functional Specification document for better communication.

and, refined abstract for initial design development

Helps reduce risk, cost, wasteful actions. (AS) and, M

It is a blueprint of the project. Describes the expected behaviour / functions of the system. (AS) and, M

Contents

- Stakeholders
- Document history
- Approvals
- Scope
- Risks / assumptions
- Solution
- Use cases
- Requirement specifications
- Non-functional requirements
- Error / exception handling

2. Interaction design

AKA IxD

It is the practice of designing interactive digital products.

Depicts how users interact with it.

Has 5 dimensions.

1. Words (1D) - Texts, buttons, labels

2. Visual (2D) - Images, typography, Icons (Not words)

3. Physical object (3D) - Medium of interaction (Spacing, physical env.)

4. Time (4D) - Animations, videos, sound

5. Behavior (5D) - Above 4 define interactions.

5Ds

Importance of ~~5Ds~~

Streamline

Digestible

Satisfactory

Clear and graphical framework

Hick's law

More Choices → Longer decision time.

IxD allows viewers to make simple decisions, decisions at a time

e.g. - Product categorising in e-commerce stores.

Fitt's law

Bigger an object \rightarrow faster it can be pointed out.

e.g. - Creation of buttons and menus

Miller's law

Avg. person can hold 7 in working memory.

e.g. - Reduce cognitive load / mental effort of remembering

Reduce clutter (Google meets design)

Turley's law

Minimalist and easy to navigate design.

Designers should move complexity as much as possible to the back stage

3. Information architecture (IA)

Science of structuring and organizing the contents of websites, web and mobile application etc.

Focuses on organizing information in a digital product.

e.g. - Flow

Determined by UX architect

Gestalt principles

Study visual perception of group of objects is relative to each other (Similarity, proximity, symmetry etc.)

- Law of proximity
- " " closure
- " " similarity
- " " common region
- " " continuity
- " " figure and ground
- " " symmetry
- " " common fate

Cognitive load

Amount of brainpower needed to interact.

Related to IA, it is the amount of information processed at a certain timeframe.

(AII) constraints on interaction

Mental models

Assumptions of users prior to interaction

IA has information where users expect it to be.

e.g. for contact info → page/link 'contact us'

- IA architects conduct user research in a user-centered design process
- User research
 - User interviews
 - Card sorting and tree testing
 - Usability testing
 - Contextual inquiries

4. Wireframing

Includes 4 main levels of visual outlines

1. Sketch
2. Wireframes
3. Mockups
4. Prototypes