**Exam Questions 2021 – Powerpoint questions**

**Prototyping**

Protypes is something that designers can use to learn, discover, generate, and refine designs. It allows us to test ideas before development. It allows for something tangible for stakeholders to interact with and explore. The difference between Lo-Fi and Hi-Fi prototypes are the level of detail.

Lo-Fi: functionality and layout in focus, does not have to be appealing to the eye and very colourful. Keep it simple and inexpensive.

Sketches: very loose and basic.

Mockups: try to imitate the real thing by looks.

Wireframes: Detailed 2D layout, usually no colour.

Hi-Fi: more functionality and colour, and more appealing to the eye. This version can allow for more interactivity. This version is a lot closer the finished product.

**Participatory design**

Participation for democracy, better knowledge, better decisions. Makes implementation and rollout easier. Include users on the whole design process to tailor application to the user as much as possible. This will disclose many problems and errors early on and before deploying the design.

Design principles:

Future users should have a voice and say in design.

Future users should be able to contribute.

Future users should participate in the design process (co-design).

**DMB and UCD**

“Design Med Brukere” and “User Centred Design”. DMB is about designers learning from users and users learning from designers, while UCD is focused on the user and what designers can learn from users.

Main principles in DMB:

1. User that are meant to use the finished product should be able to influence the design of the finished product, and should be able to decide what choices are made
2. Users needs to know enough about technology to give decisions in design and needs to be taught and learn principles from designers to better give feedback. At the same time designers needs to learn from users to understand what activities they perform and why they do this.
3. Users needs to be able influence during the design process, and suggest changes, evaluate choices, and test functionality before changes are set in stone.

**Design principles**

Cognitive perception (how does the mind work?)

Visual perception:

Visual structures

Colour perception

Gestalt laws: Our brain creates detail by default

**Gestalt laws:**

1. Figure-ground: User instantly perceive objects as being in the foreground or the background.
2. Similarity: When objects appear to be similar to each other, we group them together and think that they have the same function.
3. Proximity: Objects that are close together appear to be more related than things that are far apart.
4. Common region: Related to proximity. Items located within the same closed region; we perceive them as being grouped together.
5. Continuity: Elements on a line or curve are perceived to be more related than elements not on the line or curve.
6. Closure: When we look at complex arrangement on sites, we tend to look for single, recognizable patterns.
7. Focal point: Whatever stand out visually will capture and hold the viewers attention.

**Memory / Attention**

Short-term: seconds

Long-term: minutes to years

Short-term we can hold about 7 (+-2) chunks of information, where some are lost and forgotten while some are moved to the long-term. In design, if you touch users’ feelings during their navigation or usage of the site, it is more likely to move the impressions from short-term to long-term.

Keep the user’s attention by having a task-based design, user can click and control (give him power) and decide the flow of interfaces and what comes next. Keep him informed on the task and show him where he is in the process, what he has done and what he has left to do.

**Accessibility**

Design for everyone. Your website or application should be made in such a way that anyone, no matter what disabilities or boundaries they have, they should be able to use your website like anyone else. Universal and inclusive design.

**WCAG**

Principles: POUR

P – Perceivable: Information is made available to users

O – Operable: Users can interact with and use the site as intended

U – Understandable: User can understand what he sees and can act on it, knowing what the outcome will be

R – Robust: Code must be robust enough to work on all platforms and on a wide variety of technologies (browsers, assistive technologies etc.)

**Ethics**

Dark patterns / Deceptive design: tricks used in websites and applications to do things you didn’t mean to, that might benefit the creator of the site. This can be buying something you didn’t want or signing up to a subscription.

Value sensitive design: you need to consider what value, both negative and positive, your product gives to all people, and not only the users in the target group. If you create a cell phone, a user calling someone using the phone is a direct stakeholder and you look at this type of user a lot during your design process, what he does and what he needs. But you should also look at everyone around this user. Indirect stakeholders would be people around him; will they be bothered by the ringtone or have to involuntarily listen to the conversation. Consider all users, both direct and indirect users.