Module 6
Design principles

Introduction

Design principles are high-level guidelines which, if followed, can help us create high quality software. It's important to have a thorough understanding of these principles and use them as reference points in your designs. If adhered to, they will increase the probability that your designs and software will be successful.

This module will enable you to harness the power of design principles when it comes to designing software products. You'll understand that design principles are proven solutions to common problems across many different design principles including advertising, architecture and software design. You'll understand how the design principles of perceivability and predictability help to make the purpose and function of a product clear.

You'll also learn about affordances and how these can help communicate how a product works. You'll also understand how adhering to conventions in design can increase usability - that the principles of constraints, feedback and forgiveness allow users to flow through software more effectively. This reduces effort and errors. And you'll also be introduced to the powerful logic of Hick's Law and Fitts's Law.

The recommended reading for this module is Universal Principles of Design, a beautiful book well worth adding to your UX library.

Topics covered include:

- Affordances
- Perceivable
- Predictability
- Conventions
- Feedback
- Constraints
- Forgiveness
- Hick's Law
- Fitts's Law
- Progressive disclosure

Recommended reading

Universal Principles of Design
Lidwell, Holden and Butler
@UPODbook

Additional resources

- Determining your design principles
- Design principles behind great products
- Universal principles of User Experience Design
- Why creatives should never forget Dieter Rams 10 commandments

Note taking

Principles and patterns

Reference points to improve designs
↳ Design patterns.

Perceivable

Figure out interface easily
↳ what does product do
↳ what do I need to do
↳ what should I do first.

Don't rely on training
Conforms to common design standards.

Actual perceivability is key
↳ no trial and error.

Predictable

Let user know what to expect or what they'll get.

Risk - Reward Calculation.
- Do users don't want to guess.

Tell users
- what they need to do
- how long it will take
- what they'll get
- What happens next.

Affordances

- Make it obvious what needs to happen.
- Simple affordances should not need instructions.
- assist learnability

Conventions

- Save time by doing thing the way they're usually done.
- Don't expect users to re-learn

Feedback

Immediate feedback helps the flow.

Confirm actions

Clarify what comes next.

Constraints

- Limit options to keep you on the right track.
- Focus.
- Displays only relevant options
- Constraints help user and business.

Forgiveness

- Strong affordances
- Undo actions
- Confirmations
- Warning
- Help.

Hick's law

More options make things longer to do.

Don't let users labour over multitude of decisions

Emphasize decisions that are better

Improves flows.

Fitts's law

Bigger targets are easier to hit.

Big chunky buttons as CTA.

Progressive disclosure

Don't overwhelm users

↳ Give necessary options when necessary.

Reduce clutter

Helps user make decisions

Smoothens the flow.