# Design Patterns

A large number of examples drawn from:

http://ui-patterns.com/

## **Design Pattern**

- Similar to a recipe for how to handle common user interface design issues
- When facing a design problem it can be useful to look at several patterns and see if they help you solve the problem
- Pros
  - Good way to not reinvent the wheel
  - Learn from others' mistakes
- Cons
  - Only common things have patterns
  - Patterns are not one-size-fits-all, what works in one situation may not work in another

# Common elements of design patterns

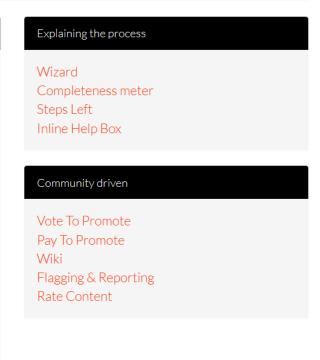
- Name
- Description
- Problem Statement
- Use When
- Solution
- Rationale
- Examples
- Comments

## List of different design patterns for helping the user enter input

## **Getting input**

Getting the user to input data is a task that should be tailored to the context of use.

#### Forms Password Strength Meter WYSIWYG Input Feedback Captcha Calendar Picker Structured Format Inplace Editor Fill in the Blanks Preview Settings Keyboard Shortcuts Expandable Input Undo Autosave Drag and drop Forgiving Format



## Structured Format (ui-patterns.com)

### **Problem summary**

The user needs to quickly enter data into the system but the format of the data must adhere to a predefined structure.

## Example



#### **Usage**

- Use when the more explicit form elements like select boxes, radio buttons, and checkboxes make entering data for everyday tasks a too complicated process
- Use when the time it takes to complete a task proportional exceeds the importance of the goal the user wants to accomplish.
- Use when the input you want to collect is a specific data type. For instance a zip code, a date or time, a phone number.
- Use when the expected user input follows a specific format which can readily be interpreted by a computer program.

## Structured Format (ui-patterns.com)

#### Solution

Represent input fields in a way that clearly guides or limits the user as to what input format to use.

An input field is presented with an accompanying label describing the input that is expected in the field. The label describes a specific structure the user must follow to input a valid value.

In some cases the user is presented with the possibility to use helping mechanisms such as a date selection calendar to fill out the input box in the correct way. When the user has done this multiple times, they slowly learn how the input is formatted, so that they can copy the same format on their own.

#### **Rationale**

Set clear expectations by ordering input fields in a Structured Format: clue users as to what kind of input is being requested. By chunking large input fields into smaller bits, data entry errors can be decreased dramatically. It is easier to transcribe or memorize a long number when it is broken up into chunks. Where the Structured Format is well suited for open-ended input.

Using a structured format in an input field saves time for the user, when they are required to fill out the same input field repeatedly as a part of a frequent task. The structured data pattern aids the user through streamlined and controlled inputs, which in turn speeds up data capturing tasks and reduces the garbage in, garbage out problem.

# **Getting input**

Flexible format

• Fill in the blank

Structured format





# UI Pattern card deck

- http://ui-patterns.com/
- Set of ideation cards used to help designers think through what kind of UI elements might be needed
- Helps designers think about all the options and how they match the needs



## **Questions?**