

Design Patterns

Or, Why Reinvent the Wheel?

R. Scott Granneman & Jans Carton

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Last updated 2020-07-21

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Design-Patterns.txt](http://files.granneman.com/presentations/webdev/Design-Patterns.txt)

Architecture

The background of the cover is a photograph of Christopher Alexander. He is a middle-aged man with light brown hair, smiling broadly and pointing his right index finger directly at the viewer. He is wearing a light blue button-down shirt. In his left hand, he holds a bright yellow mug. Several pens and pencils are tucked into the breast pocket of his shirt. The magazine title 'residential architect' is overlaid on the top left of the image. The word 'residential' is in a small, light blue, sans-serif font, and 'architect' is in a much larger, bold, teal-colored sans-serif font. To the right of the title, there is a line of small text: 'A HANLEY-WOOD PUBLICATION / JUNE 2001'. On the right side of the cover, there is a text block about the 2001 Leadership Awards. At the bottom of the cover, there is a text block about the top firm and rising star, and the website address.

residential architect

A HANLEY-WOOD PUBLICATION / JUNE 2001

the 2001 leadership awards

christopher alexander
grabs the
hall of fame
award

top firm: mithun /
rising star: robert m. gurney

www.residentialarchitect.com

A Pattern Language

Towns · Buildings · Construction



Christopher Alexander

Sara Ishikawa · Murray Silverstein

WITH

Max Jacobson · Ingrid Fiksdahl-King

Shlomo Angel

1977

Design Pattern

“a formal way of documenting a solution to a design problem in a particular field of expertise.” —Wikipedia

“Each pattern describes a problem that occurs over and over again in our environment, and then describes the core of the solution to that problem” —Christopher Alexander

Revolving doors are good for moving people while still being energy efficient



Pattern Language

“An organized collection of design patterns that relate to a particular field” —Wikipedia

Why?

Re-use successful solutions

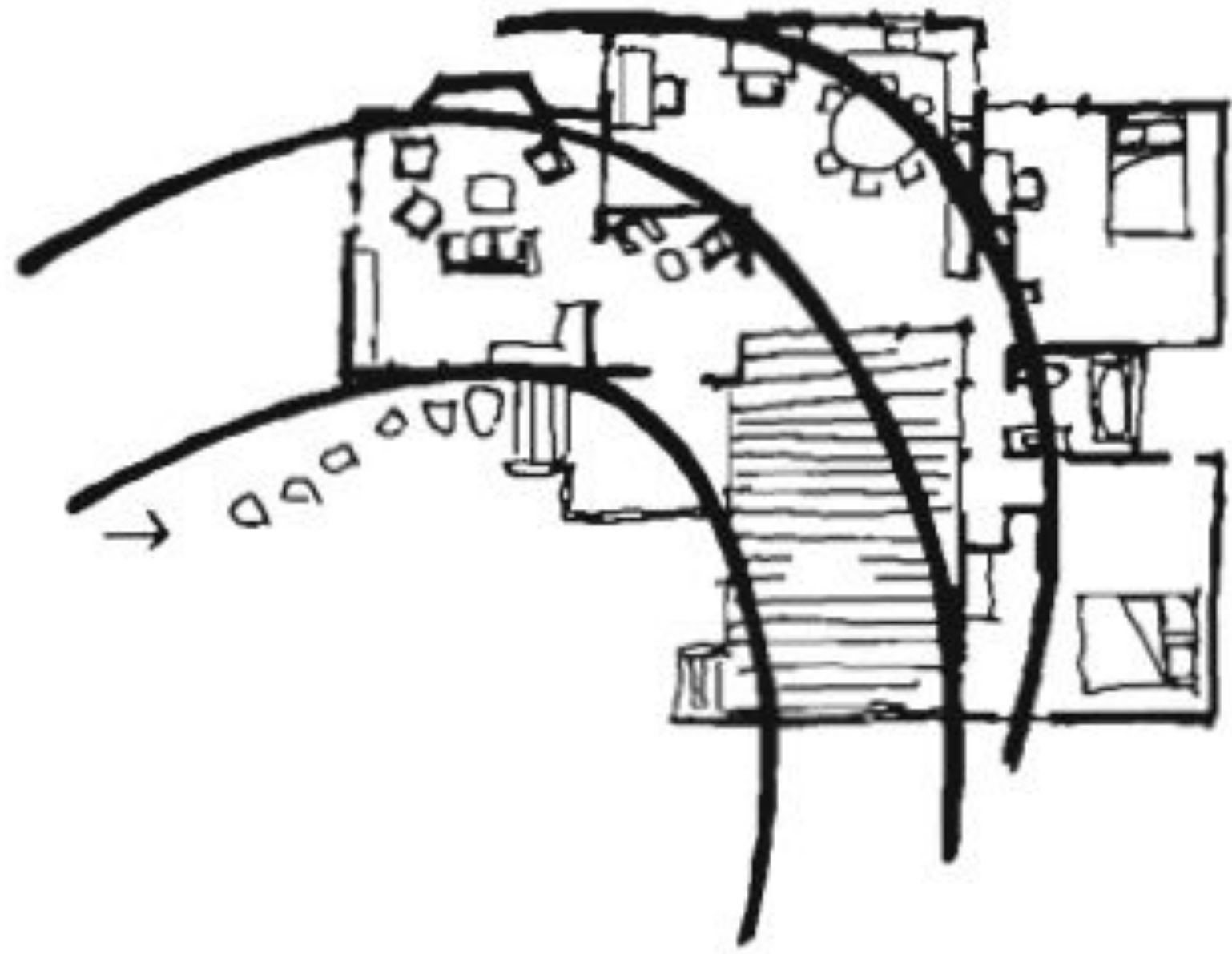
Think about what's done & why

Easier to encapsulate & transfer knowledge & experience

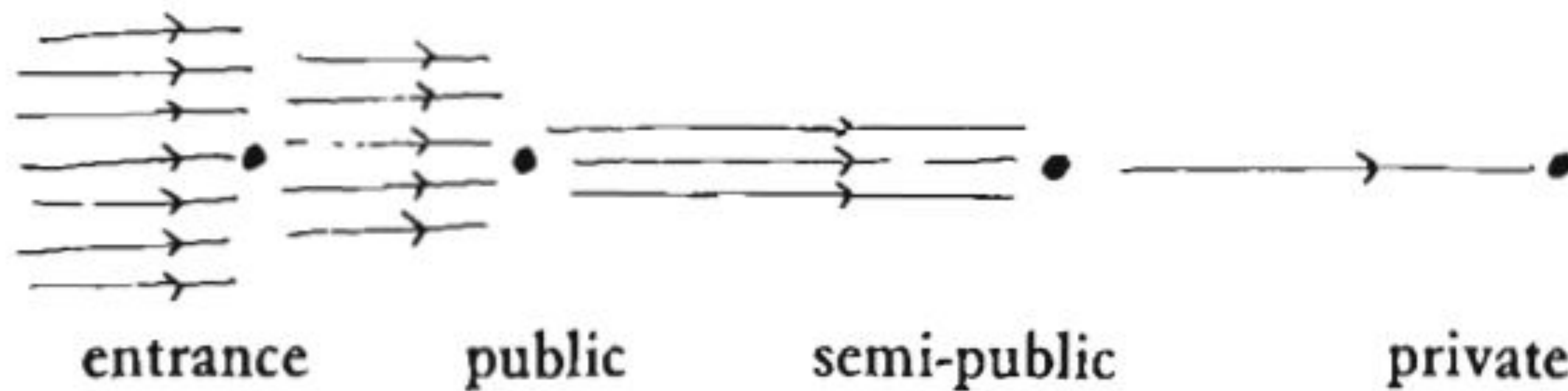
Pattern 127 from *A Pattern Language*: Intimacy Gradient

“Unless the spaces in a building are arranged in a sequence which corresponds to their degrees of privateness, the visits made by strangers, friends, guests, clients, family, will always be a little awkward.”

“In a small shop the sequence might be: shop entrance, customer milling space, browsing area, sales counter, behind the counter, private place for workers.”



“In a house: gate, outdoor porch, entrance, sitting wall, common space and kitchen, private garden, bed alcoves.”



“Therefore: Lay out the spaces of a building so that they create a sequence which begins with the entrance and the most public parts of the building, then leads into the slightly more private areas, and finally to the most private domains.”



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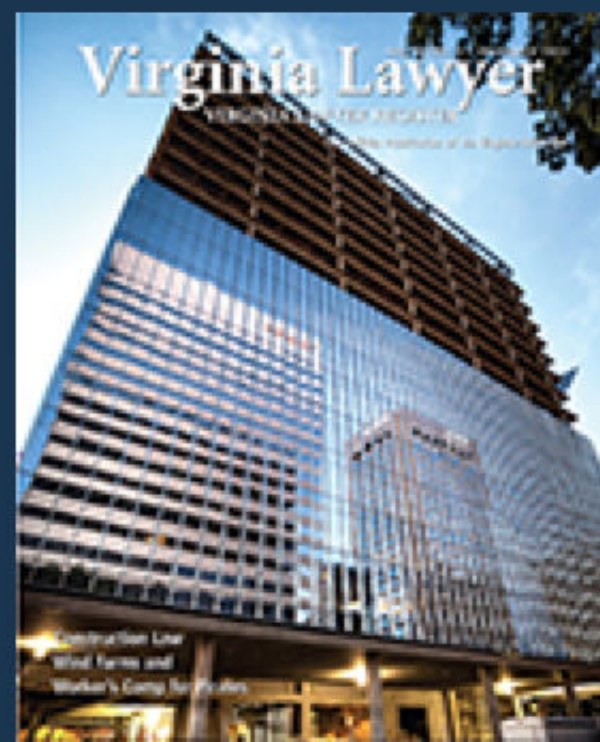
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Publications



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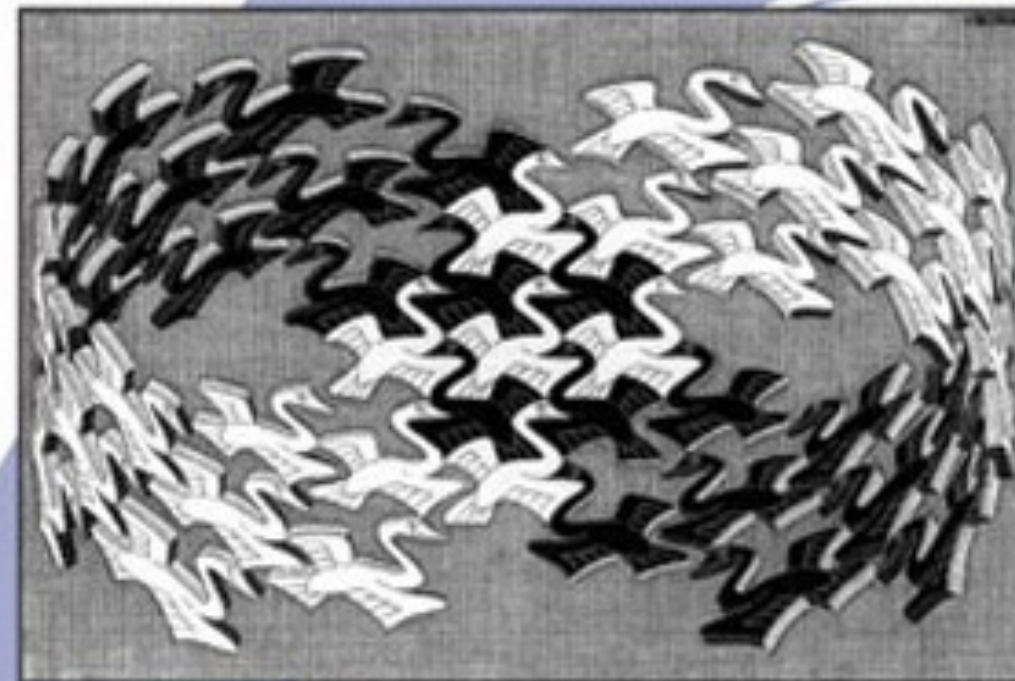


Computer Science

Design Patterns

Elements of Reusable Object-Oriented Software

Erich Gamma
Richard Helm
Ralph Johnson
John Vlissides



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Foreword by Grady Booch



ADDISON-WESLEY PROFESSIONAL COMPUTING SERIES

1995

Architectural Patterns for Enabling Application Security

Joseph Yoder

Department of Computer Science
University of Illinois at Urbana-Champaign
Urbana, IL 61801
j-yoder@uiuc.edu

Jeffrey Barcalow

Reuters Information Technology
1400 Kensington
Oak Brook, IL 60523
barcalow@xnet.com

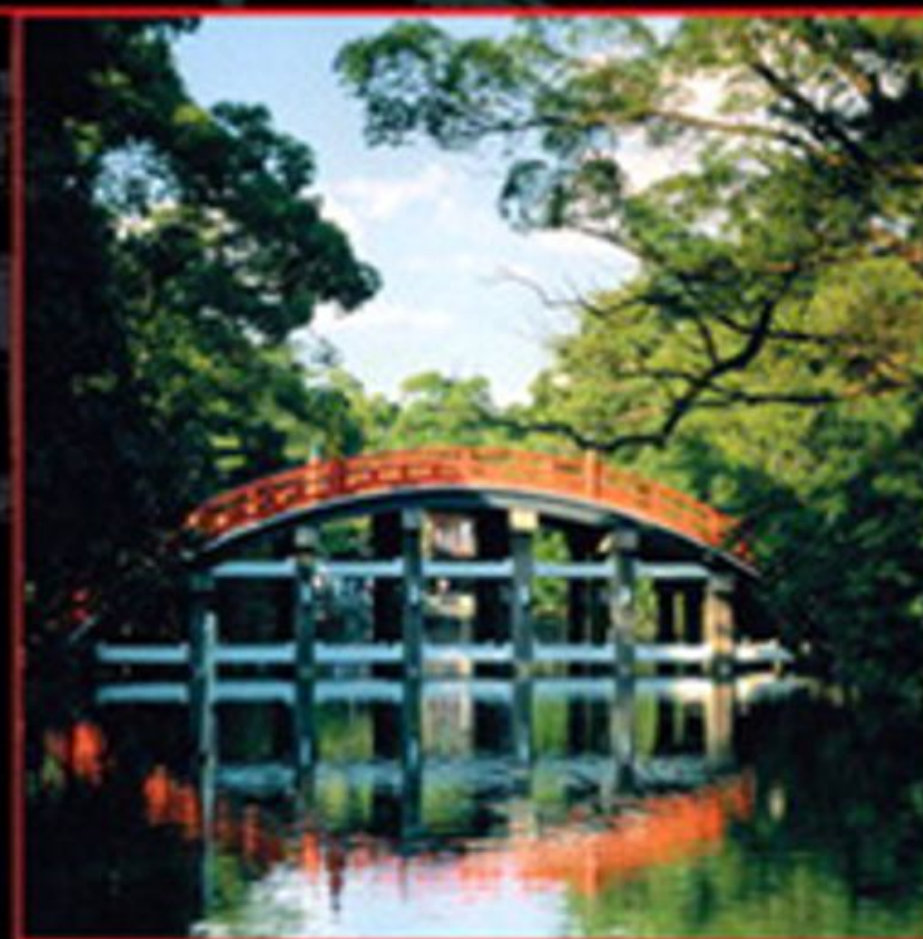
The Addison-Wesley Signature Series

ENTERPRISE INTEGRATION PATTERNS

DESIGNING, BUILDING, AND
DEPLOYING MESSAGING SOLUTIONS

GREGOR HOHPE
BOBBY WOOLF

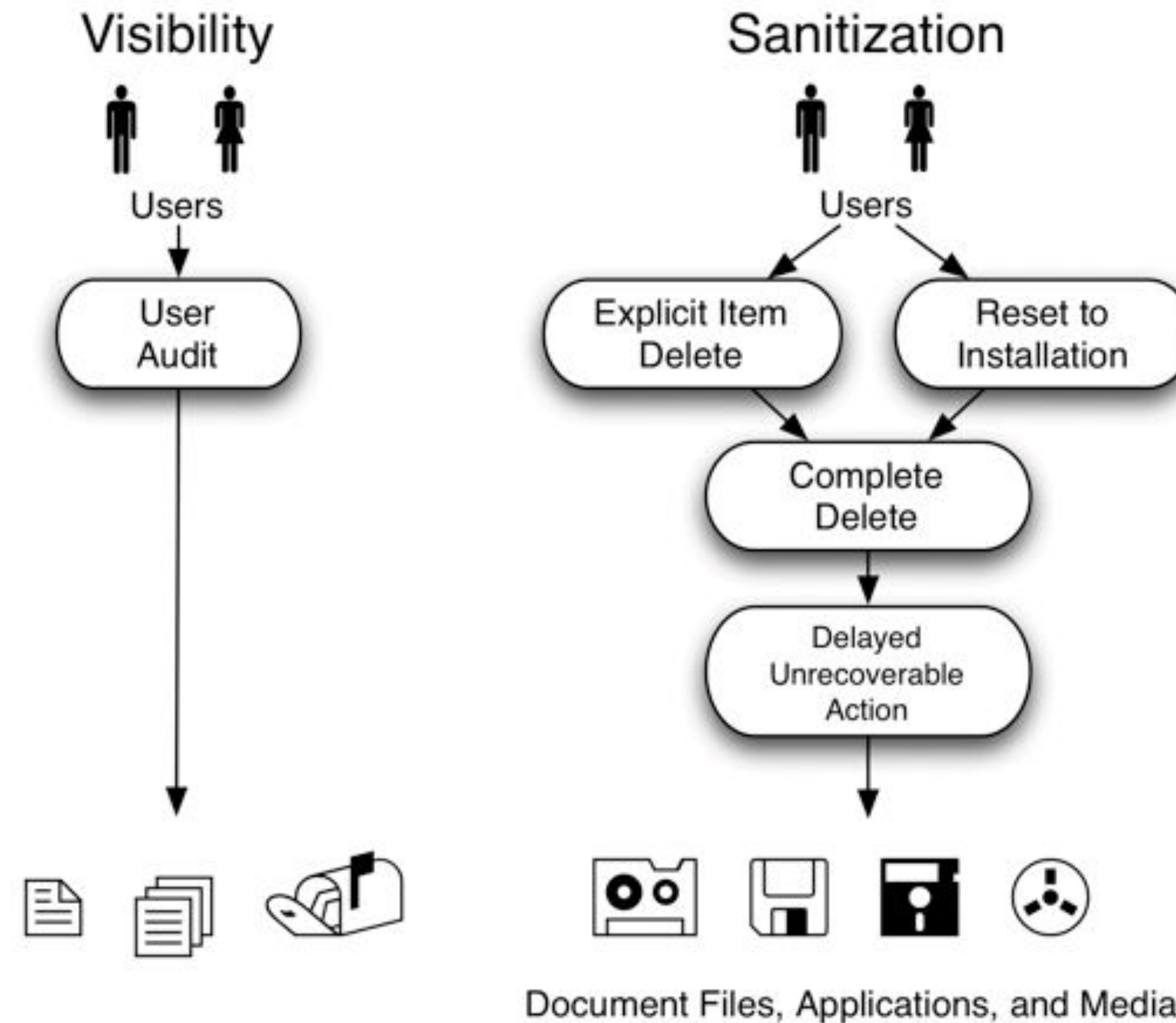
WITH CONTRIBUTIONS BY
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SEAN NEVILLE
MICHAEL J. RETTIG
JONATHAN SIMON



Forewords by John Crupi and Martin Fowler



Design Principles and Patterns for Computer Systems that are Simultaneously Secure and Usable



Simson L. Garfinkel, April 26, 2005

1-1-2006

Privacy Patterns for Online Interactions

Lorrie Faith Cranor
Carnegie Mellon University

Sasha Romanowsky
Carnegie Mellon University

Jason Hong
Carnegie Mellon University

Alessandro Acquisti
Carnegie Mellon University

Batya Friedman
University of Washington

Web Development

User Interface Design patterns

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User Interface Design patterns are recurring solutions that solve common design problems. Design patterns are standard reference points for the experienced user interface designer.



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Responsive Web Design Patterns

Contents

- The patterns
- Mostly Fluid
- Column drop
- Layout shifter
- ...



By [Pete LePage](#)

Pete is a Developer Advocate

Responsive web design patterns are quickly evolving, but there are a handful of established patterns that work

Software Design Patterns: Best Practices for Software Developers

COURSE BY:



C. H. Afzal



Beginner

27

Lessons

2

Playgrounds

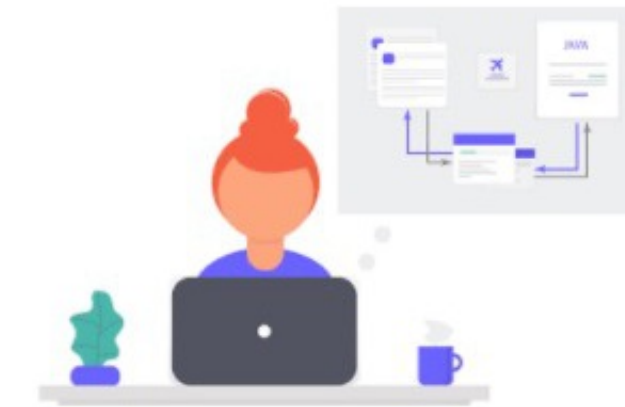
93

Code Snippets

31

Illustrations

Being good at problem-solving is one thing but to take your career to the next level, one must know how complex software projects are architected. Software design patterns provide templates and tricks used to design and solve recurring software problems and tasks. Applying time-tested patterns result in extensible, maintainable and flexible high-quality code, exhibiting superior craftsmanship of a software engineer. Being well-versed in knowledge of design patterns allows one to spot brittle and immature code from miles away. The course goes to great lengths to lay bare the esoteric concepts of various design patterns before the reader and is replete with real-world examples and sample code.



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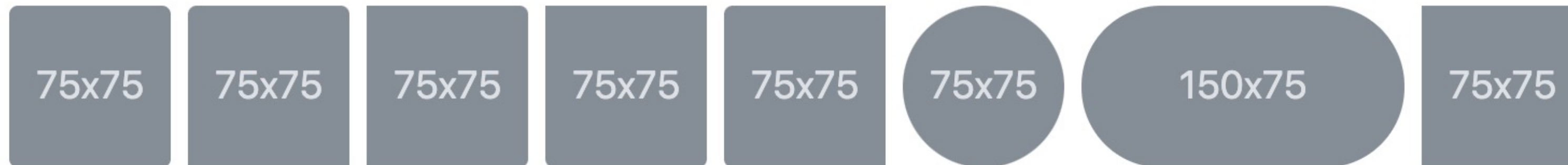
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Currently v4.1.1



Border-radius

Add classes to an element to easily round its corners.

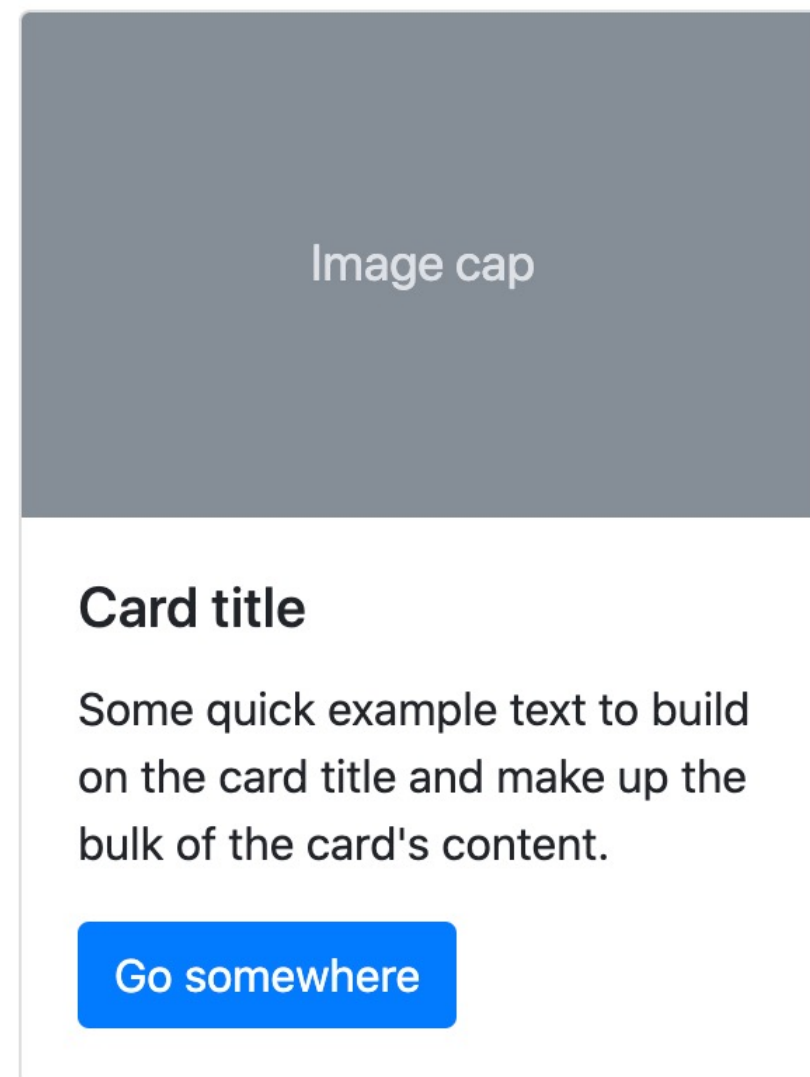


```
  
  
  
  
  
  
  

```

Copy

Bootstrap 4's classes for the common design pattern of rounded borders



```
<div class="card" style="width: 18rem;">
  
  <div class="card-body">
    <h5 class="card-title">Card title</h5>
    <p class="card-text">Some quick example text to build on the card title and make up the
    <a href="#" class="btn btn-primary">Go somewhere</a>
  </div>
</div>
```

Copy

Bootstrap 4's classes for the common design pattern of cards

Bootsnipp

Design elements, playground and code snippets for [Bootstrap](#) HTML/CSS/JS framework

What is this?

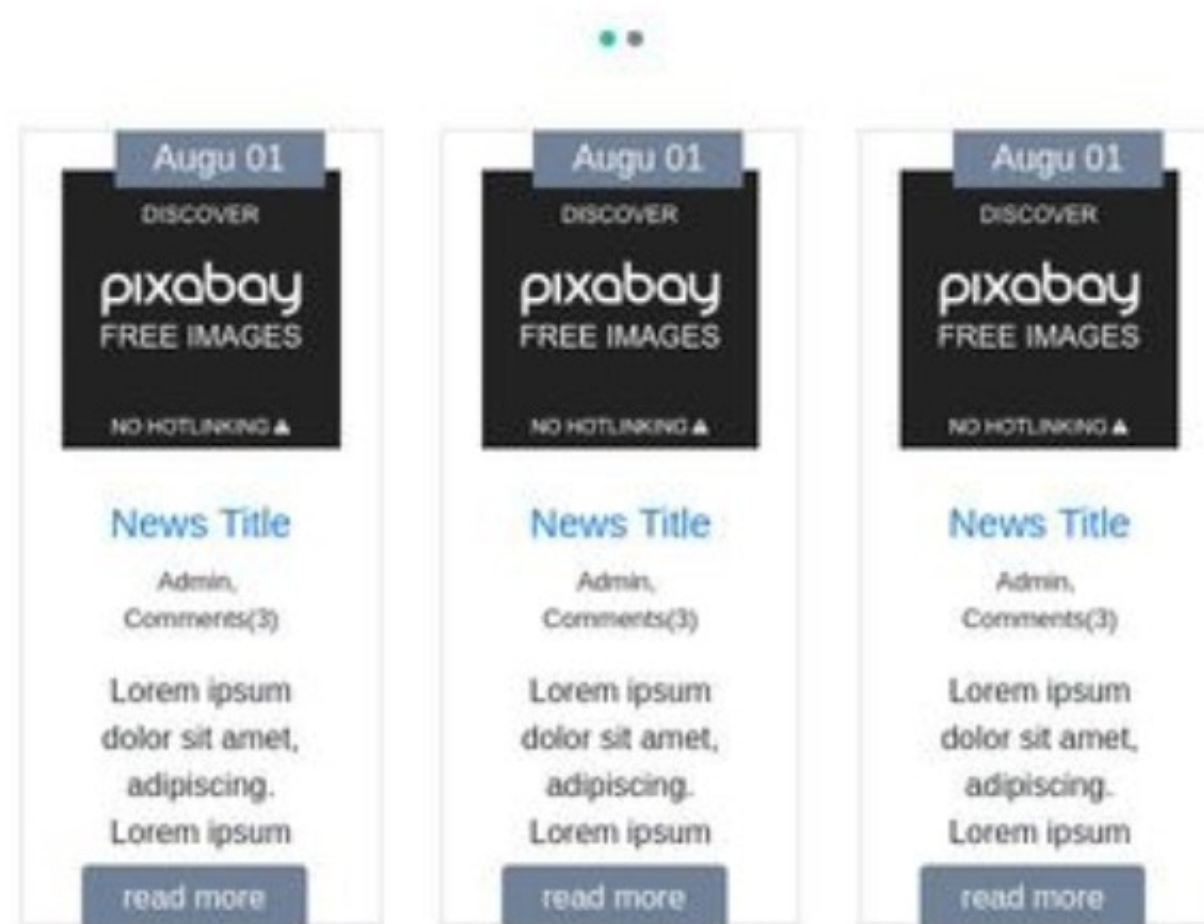
Bootsnipp is an element gallery for web designers and web developers, anybody using [Bootstrap](#) will find this website essential in their craft.

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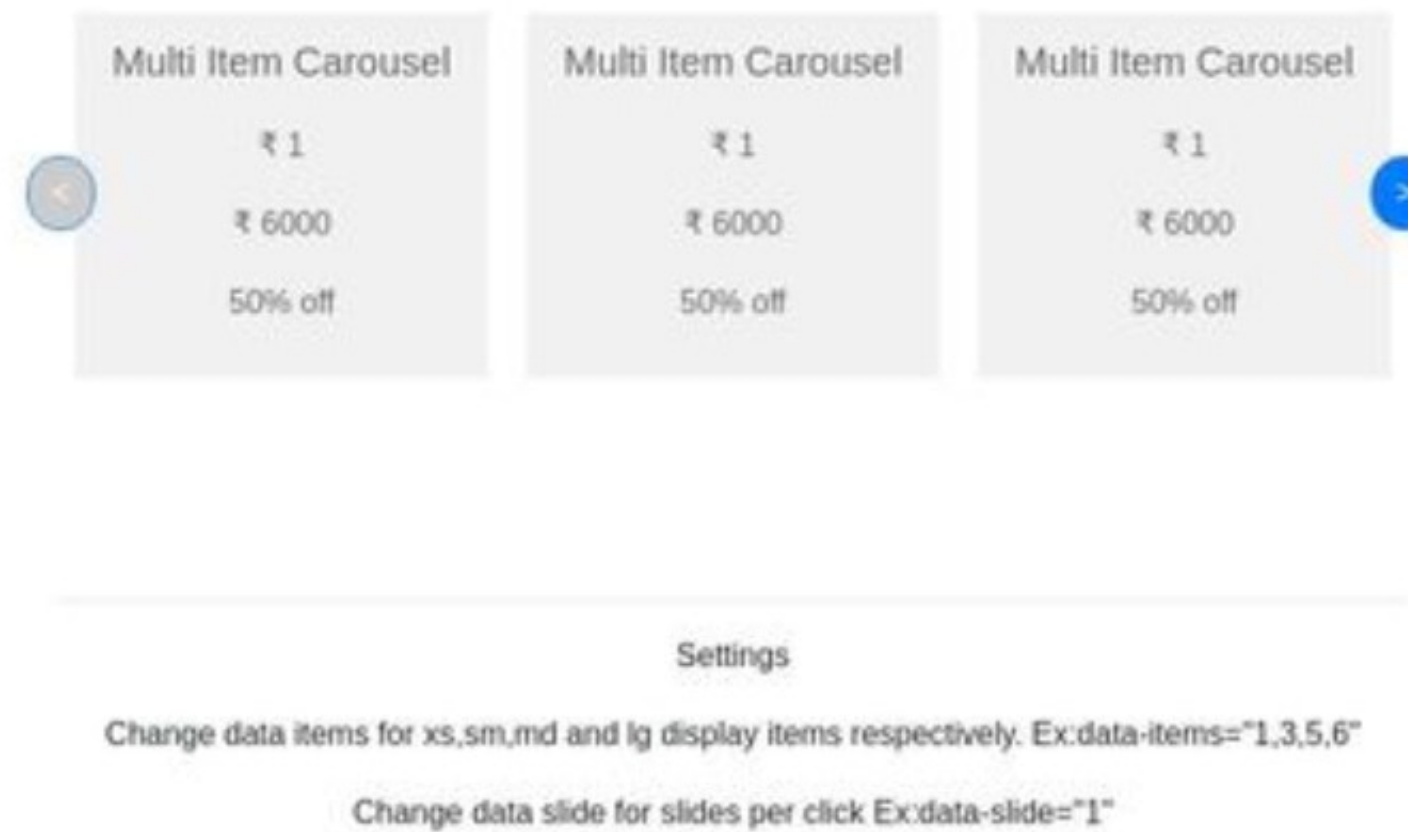
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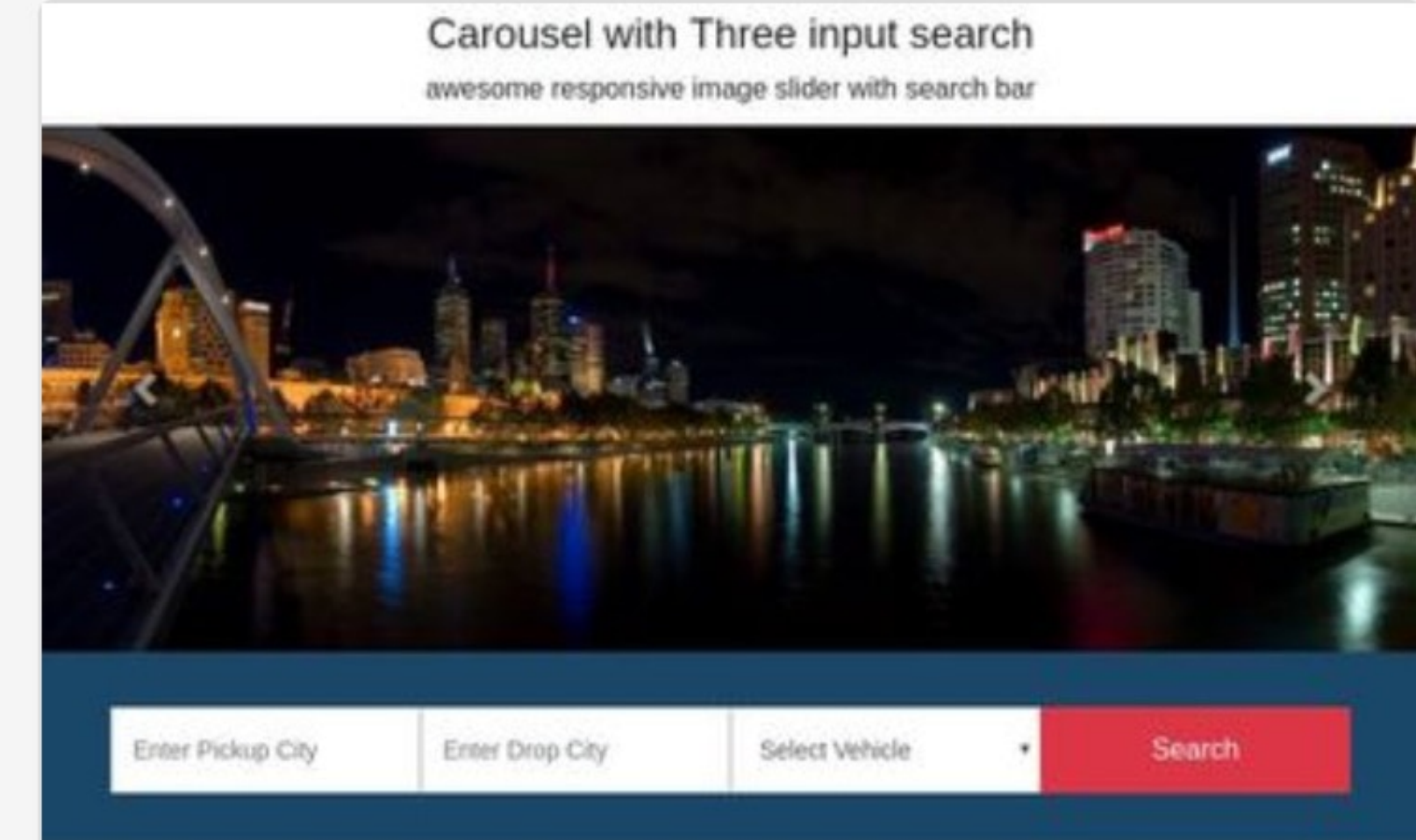
Bootstrap 4 Blog Carousel

56 👍 4.1.1



Multi Item Carousel

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Carousel with Search

63 👍 4.1.1



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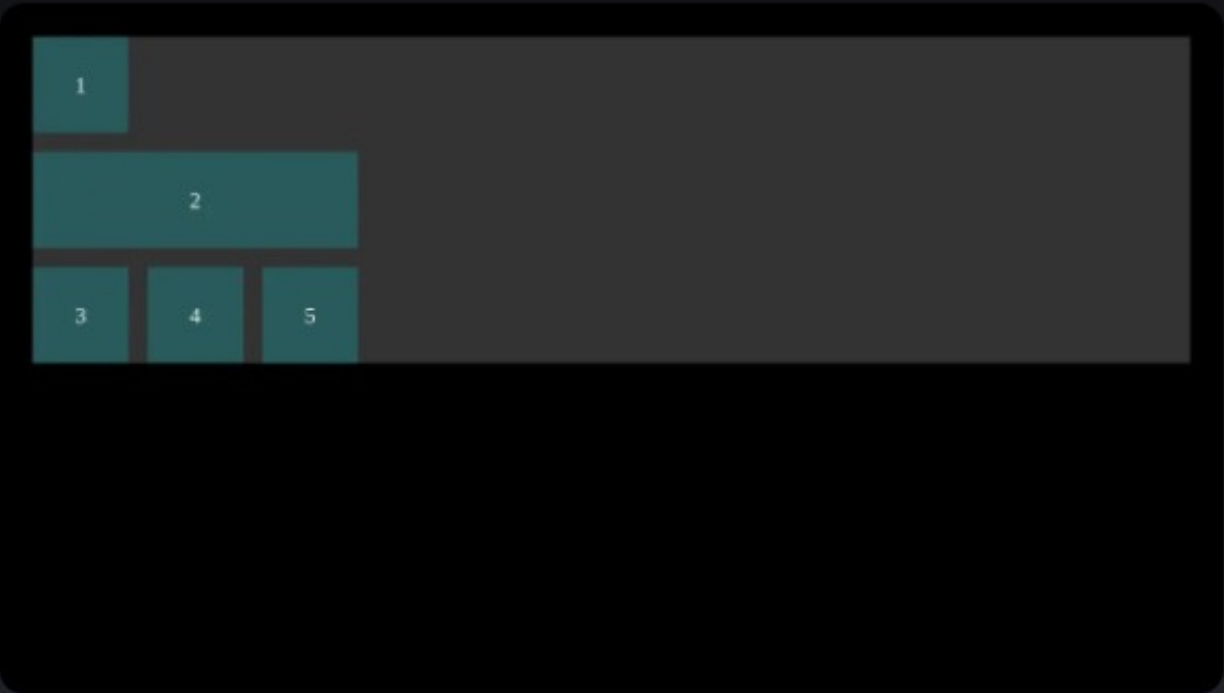


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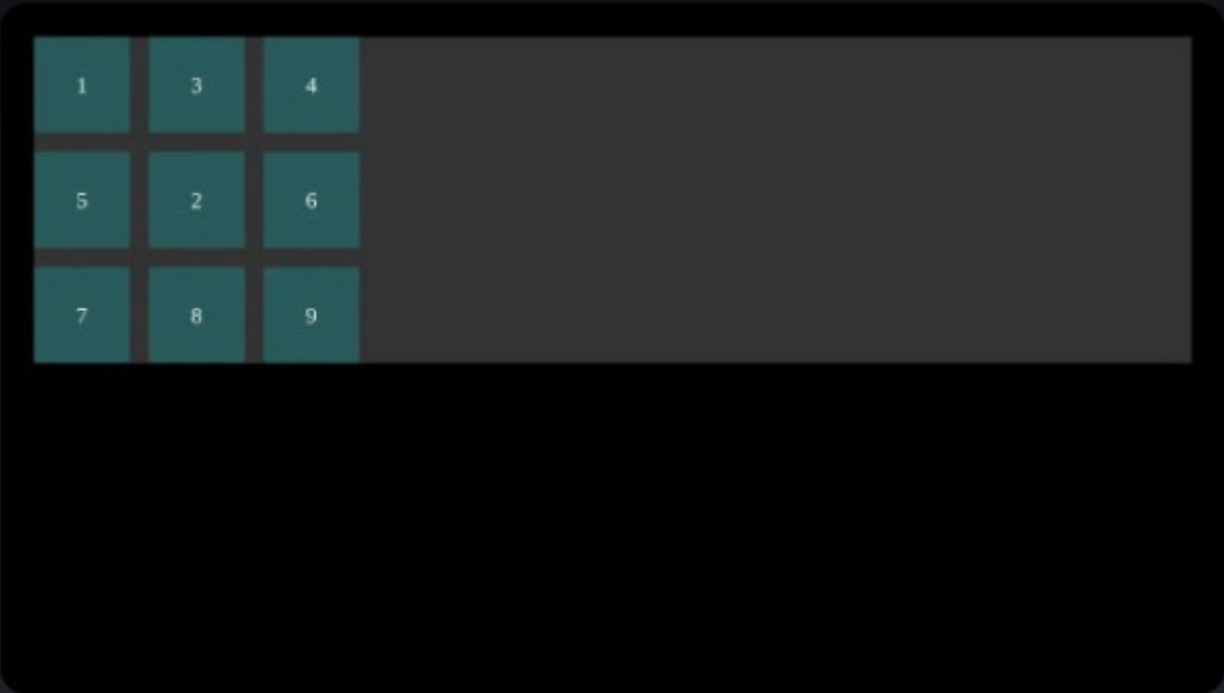
Showcase Popular Public Private Templates Forked Loved Tags



CSS Grid: grid-auto-flow p...



CSS Grid: grid-auto-flow a...



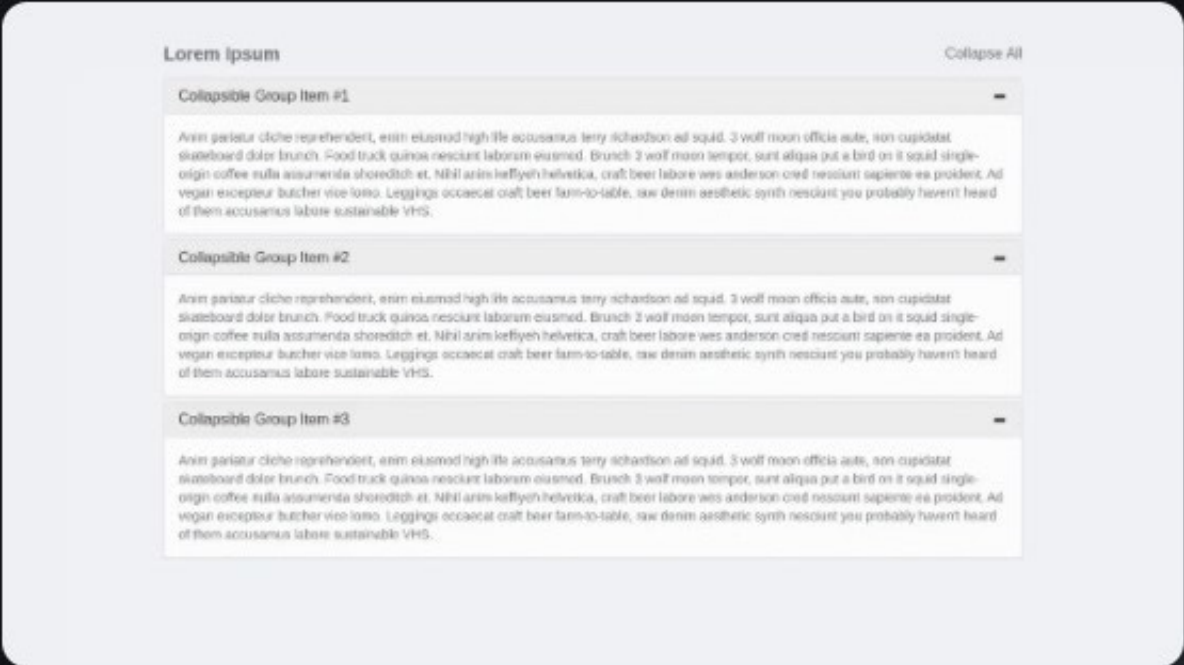
CSS Grid: mix of explicit & ...





BY

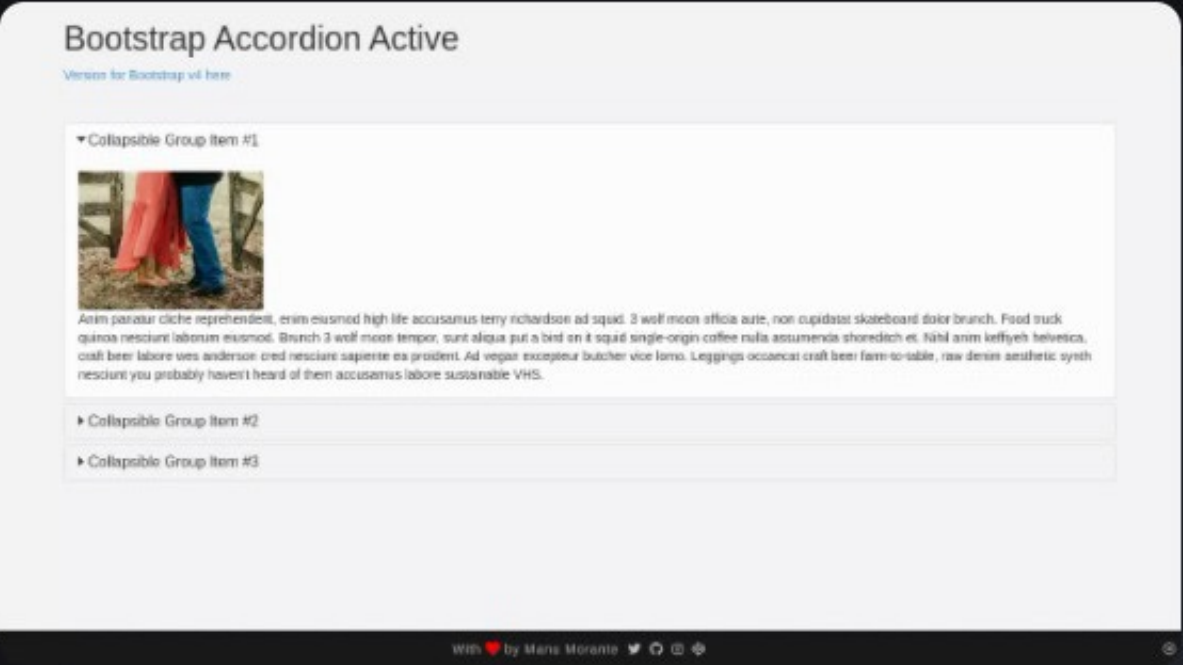
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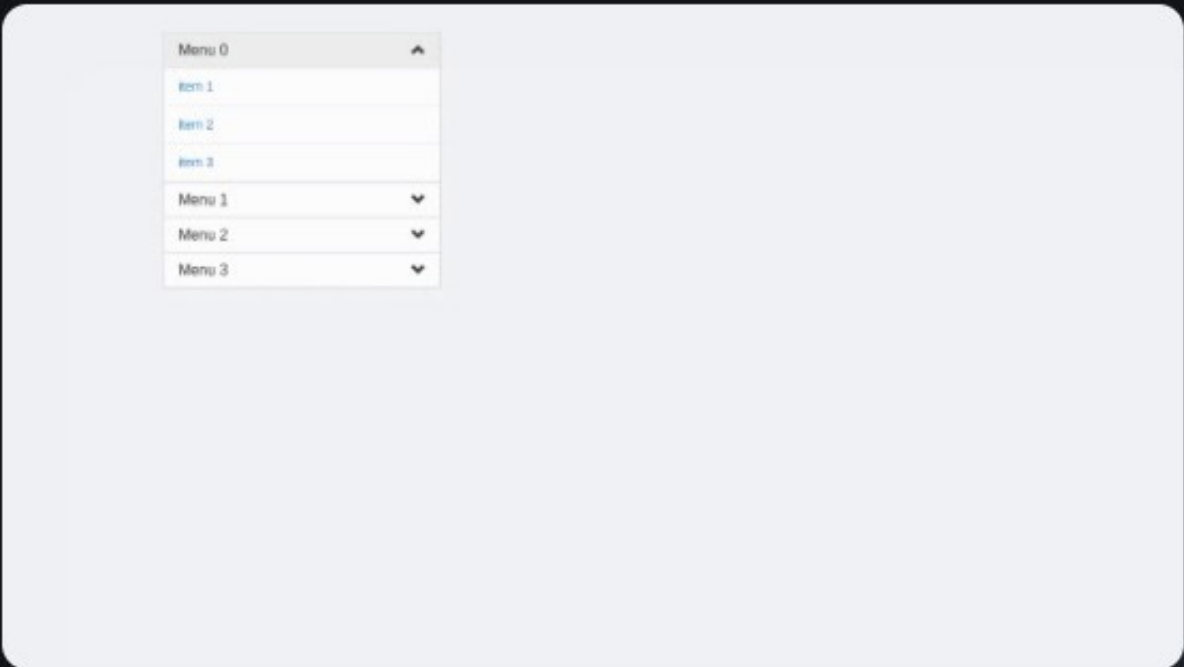
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Andreas Eracleous



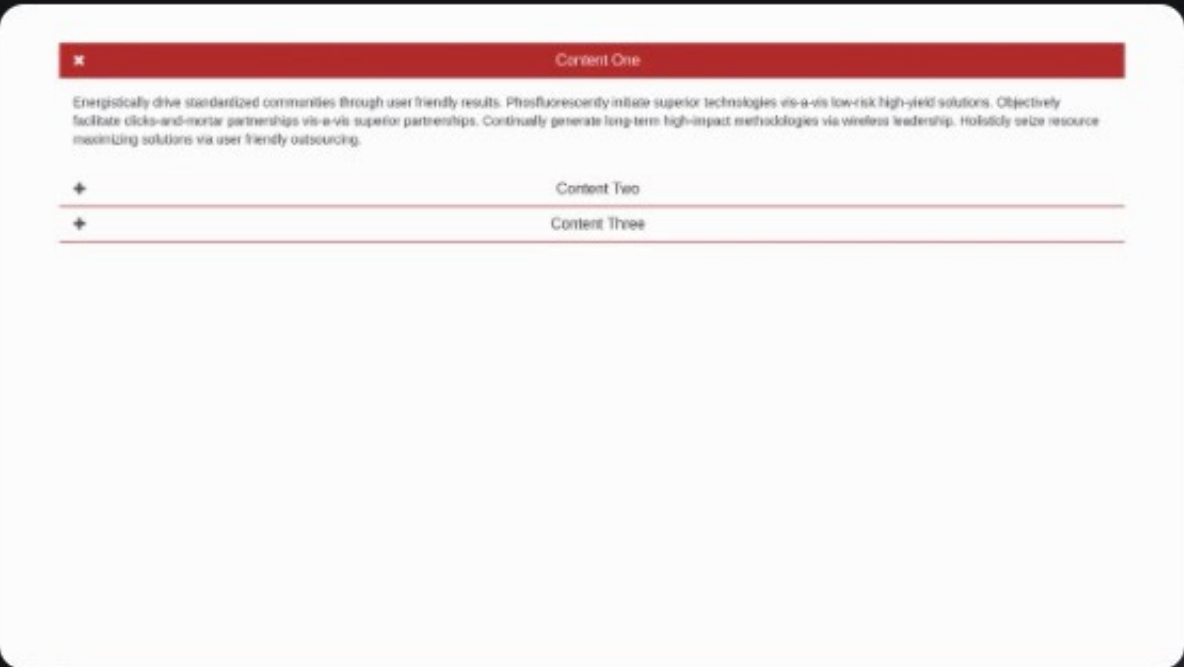
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Shahen Algoo



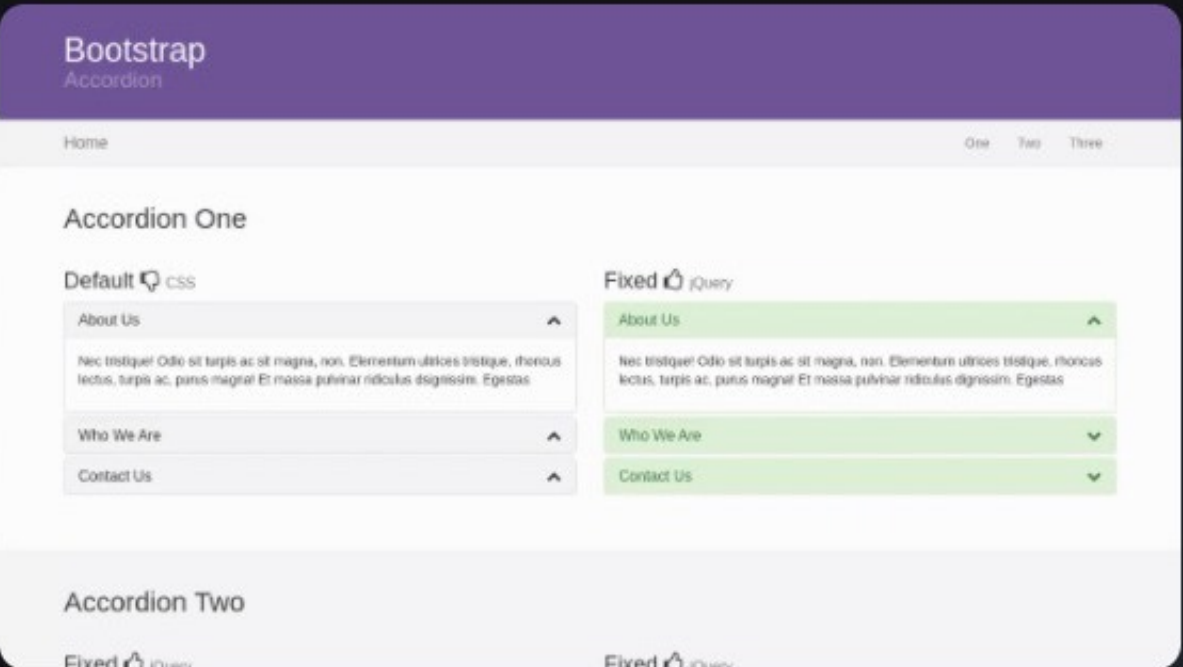
Bootstrap Accordi...
Manu Morante



Bootstrap Accordi...



Simple Bootstrap



Bootstrap - Accord

Thank you!

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Design Patterns

Or, Why Reinvent the Wheel?

R. Scott Granneman & Jans Carton

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Changelog

2020-07-21 1.8: Updated Bootstrap screenshots & added some new ones

Changelog

2020-07-20 1.7: Updated screenshots in *Web Development*; updated theme to Granneman 1.6; minor fixes; added new book & cites to everything in *Computer Science*

2019-07-22 1.6: Changed theme to Granneman 1.5

2016-01-21 1.5: Added revolving door as a design pattern

Changelog

2015-06-08 1.4: Changed theme to Georgia Pro

2015-01-16 1.3: Added Bootstrap at CodePen; added website example of intimacy gradient

2015-01-15 1.2: Added more Bootstrap sites

2014-08-09 1.1: Moved to new theme

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