

SITEFARM

PATTERN LAB



Mark Miller

- **IET Professional Services, Web Development**
- **Full Stack Web Developer**
- **Specialize in Frontend, Drupal, and PHP**
- **Contact Me:**

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Slack: @markmill

Want to Follow Along?

→ **Demo**

<http://ucd-one-patternlab.s3-website-us-west-1.amazonaws.com/>

→ **Git Repo**

<https://bitbucket.org/ietwebdev/sitefarm-pattern-lab-one>

UCDAVIS

ONE DESIGN
TO RULE
THEM ALL



WHAT IS PATTERN LAB?



pattern lab

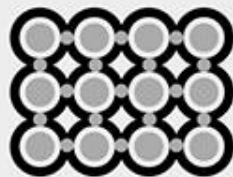
create atomic design systems



atoms



molecules



organisms



templates



pages

[↓ download](#)[👁 view on github](#)[🔗 view demo](#)

What is Pattern Lab?

- **Static site generator**
- **Library of components**
- **Viewport resizer**
- **Annotation tool**
- **Default Data via JSON**
- **Specific Page Data overrides via JSON**

February 3, 2015 | [UC Davis News](#) | [Science](#)
Story by Author Name, video and photos by Author Name



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RECENT JUSTICES

- Lorem ipsum dolor sit amet, consectetur adipiscing elit. (72 characters)
February 10, 2015
- Lorem ipsum dolor sit amet, consectetur adipiscing elit. (72 characters)
February 10, 2015
- Lorem ipsum dolor sit amet, consectetur adipiscing elit. (72 characters)
February 10, 2015

Top Stories

Lorem ipsum dolor sit amet.

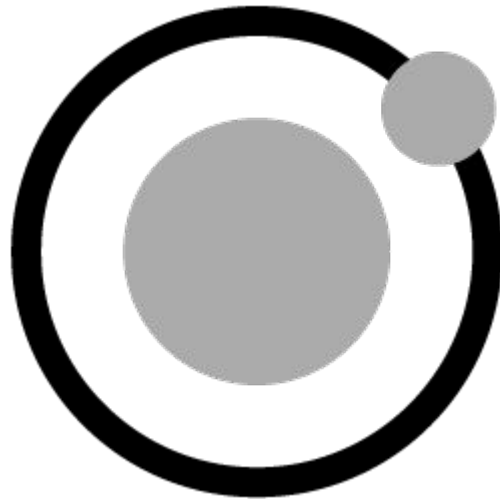
What is Pattern Lab?

“We’re not designing pages, we’re designing systems of components.”

- Stephen Hay

ATOMIC DESIGN METHODOLOGY

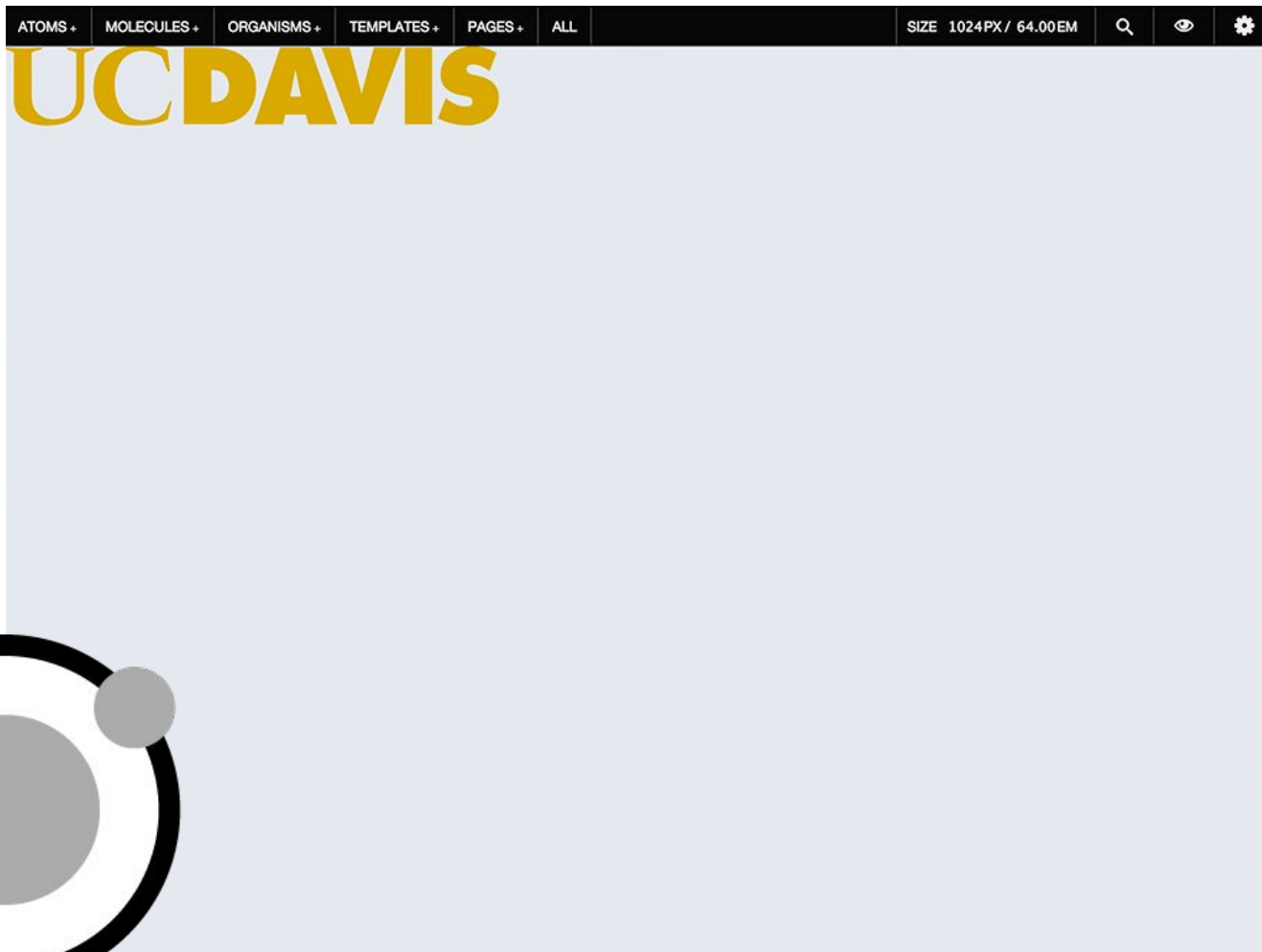
Atoms



- **Basic tags: labels, inputs, buttons**
- **Elements: color palette, fonts, image styles**

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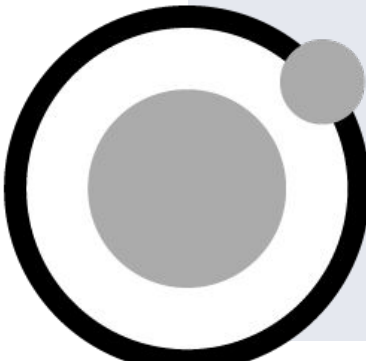
Atoms: Logo



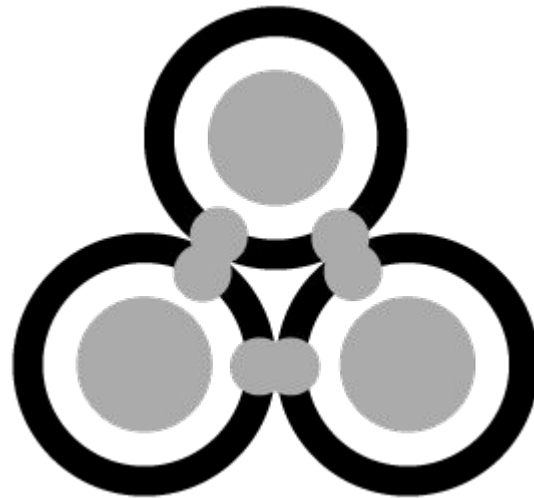
Atoms: List

ATOMS + MOLECULES + ORGANISMS + TEMPLATES + PAGES + ALL SIZE 1024PX / 64.00EM 🔍 👁 ⚙

- › This is a list item in an unordered list
- › An unordered list is a list in which the sequence of items is not important. Sometimes, an unordered list is a bulleted list. And this is a long list item in an unordered list that can wrap onto a new line.
- › Lists can be nested inside of each other
 - This is a nested list item, that contains a nested list
 - This is a nested list item
 - This is another nested list item in an unordered list
 - This is another nested list item in an unordered list
- › This is the last list item



Molecules



- **Groups of atoms and other elements that function together as a unit**
- **Ex: Search Form - made from label, input, & button**

Molecules: Main Menu

ATOMS+ MOLECULES+ ORGANISMS+ TEMPLATES+ PAGES+ ALL SIZE 1024PX / 64.00EM 🔍 👁 ⚙

ABOUT US

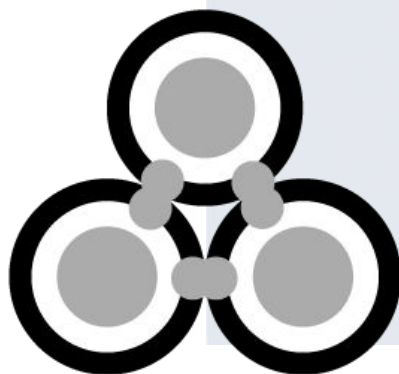
ADMISSIONS

ACADEMICS

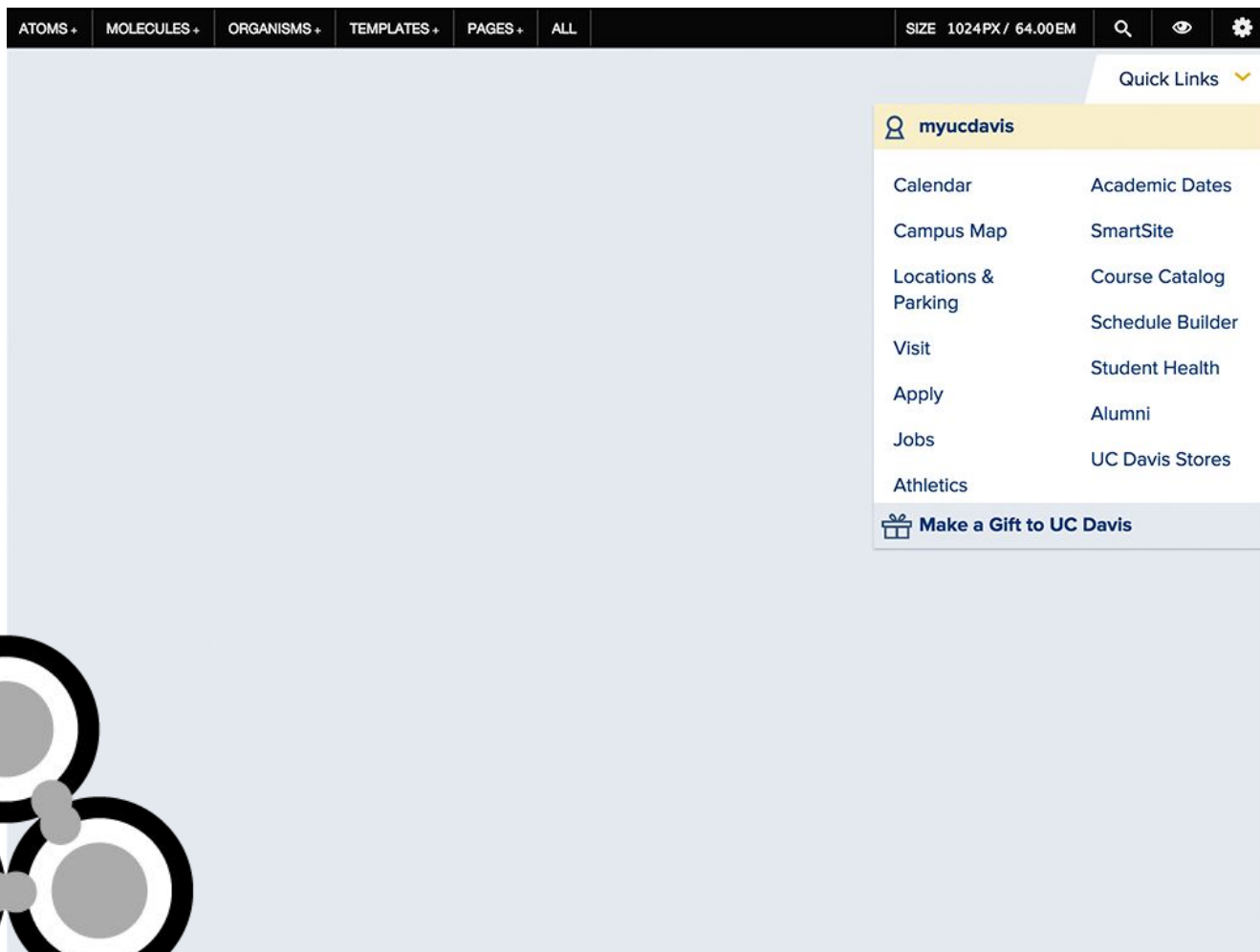
RESEARCH

CAMPUS LIFE

NEWS

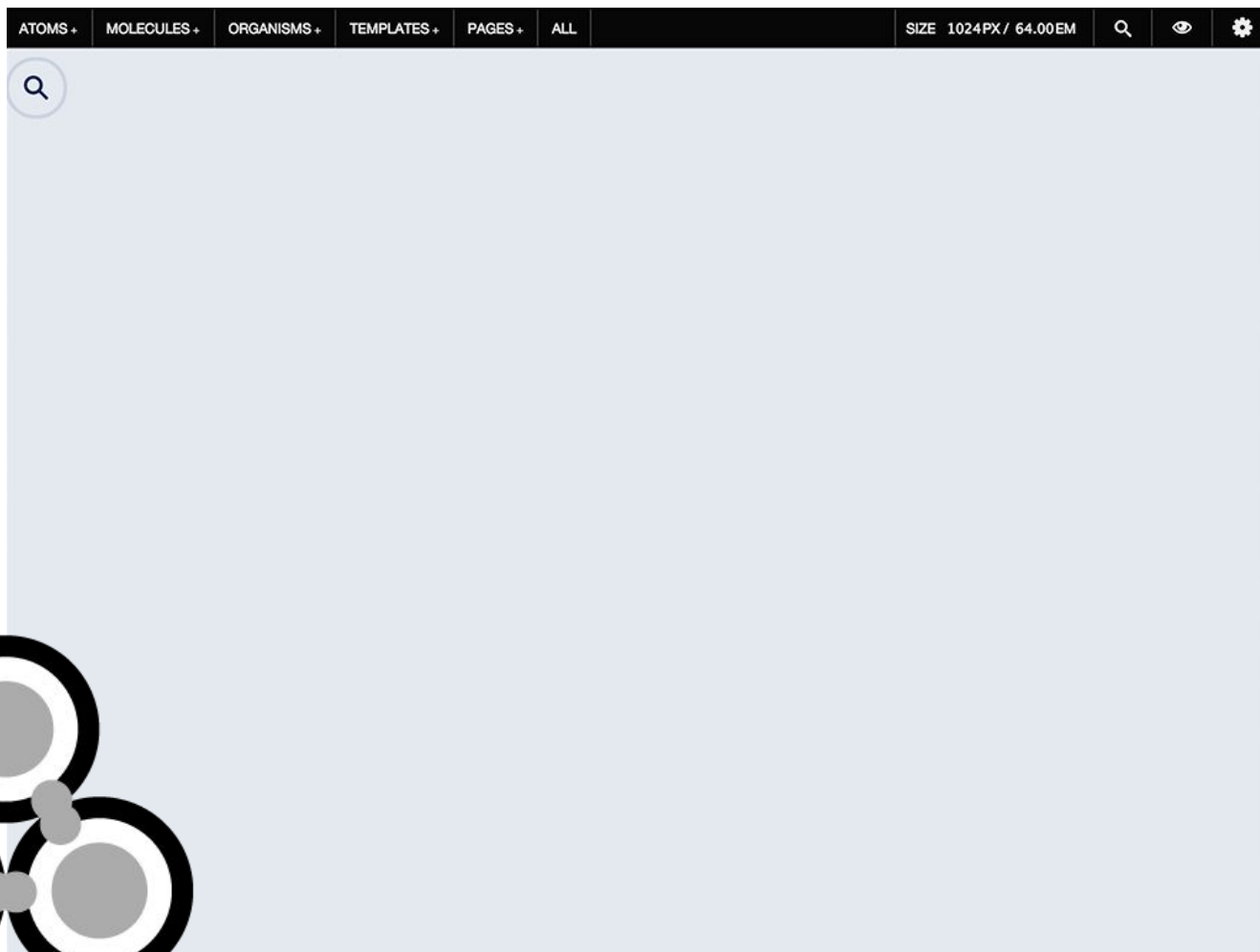


Molecules: Quick Links

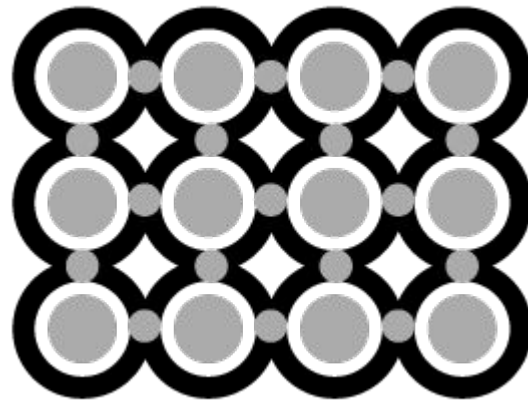


The screenshot displays a web application interface with a dark navigation bar at the top. The navigation bar contains several menu items: ATOMS+, MOLECULES+, ORGANISMS+, TEMPLATES+, PAGES+, and ALL. On the right side of the navigation bar, there is a 'SIZE 1024PX / 64.00EM' indicator, a search icon, an eye icon, and a settings gear icon. Below the navigation bar, the main content area is light gray. On the right side of the main content area, there is a 'Quick Links' dropdown menu. The dropdown menu is open, showing a list of links under the heading 'myucdavis'. The links are arranged in two columns: Calendar, Campus Map, Locations & Parking, Visit, Apply, Jobs, and Athletics in the left column; and Academic Dates, SmartSite, Course Catalog, Schedule Builder, Student Health, Alumni, and UC Davis Stores in the right column. At the bottom of the dropdown menu, there is a link with a gift icon: 'Make a Gift to UC Davis'. In the bottom left corner of the image, there is a stylized graphic of three overlapping circles, each with a thick black border and a gray center, connected by small gray circles.

Molecules: Search Popup Button



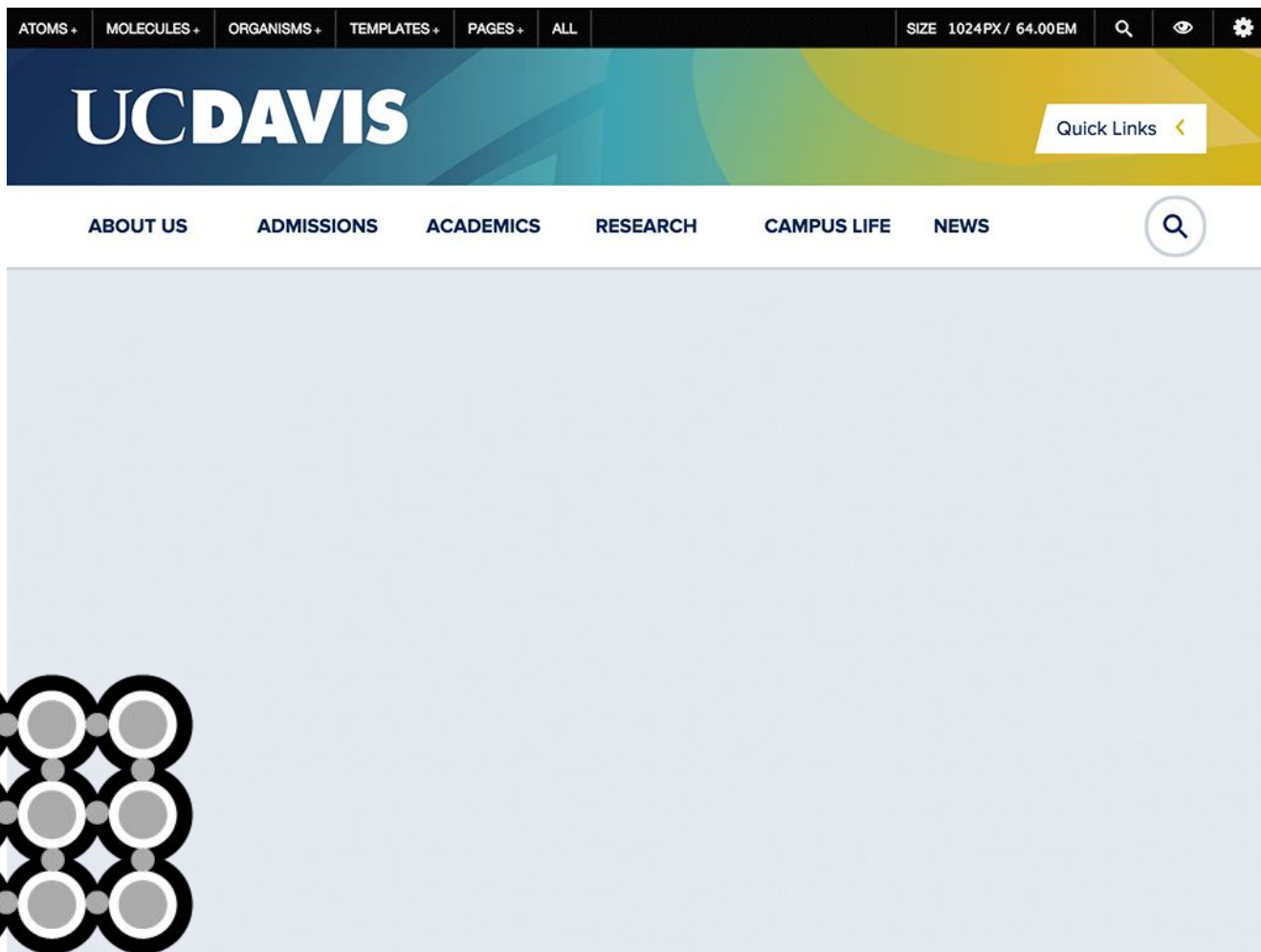
Organisms



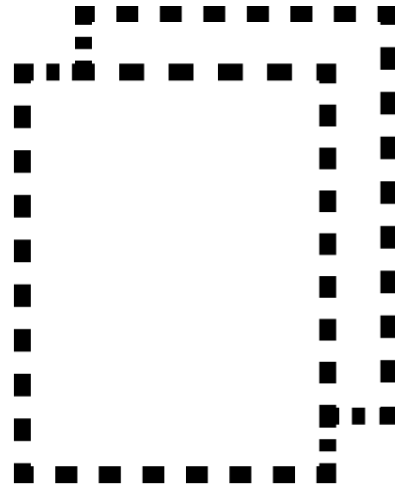
- **Groups of Molecules to form distinct section of an interface**
- **Ex. Header, Footer, News Feed**

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Organisms: Header

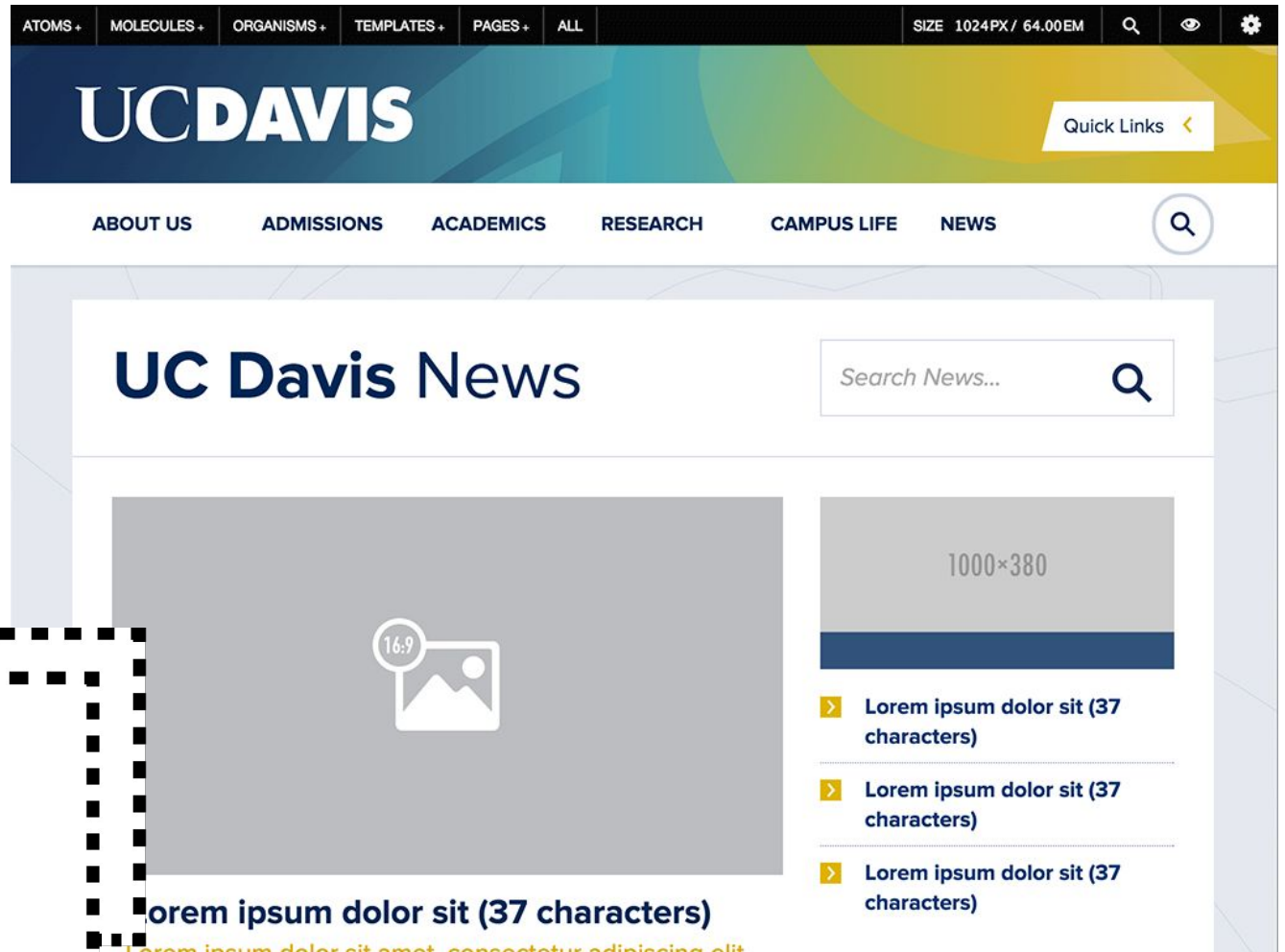


Templates

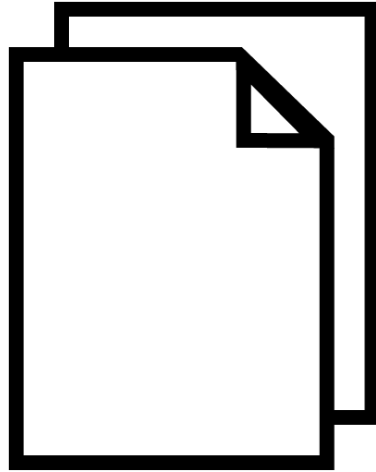


- Comprised of Organisms to form Page-level objects
- Lo Fidelity Wireframes

Templates: News



Pages



- **Specific instances of Templates**
- **Contain real content**
- **Hi Fidelity**

Pages: News

ATOMS+ MOLECULES+ ORGANISMS+ TEMPLATES+ PAGES+ ALL

SIZE 1024PX / 64.00EM

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Quick Links <

ABOUT US ADMISSIONS ACADEMICS RESEARCH CAMPUS LIFE NEWS

UC Davis Home > News

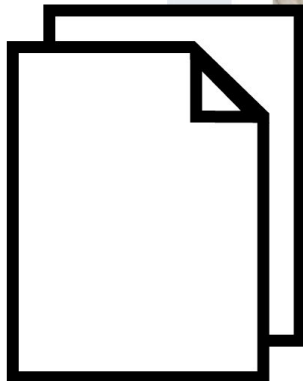
UC Davis News

Search News...



Keep Tahoe blue? Less algae, not clarity, key factor for blueness

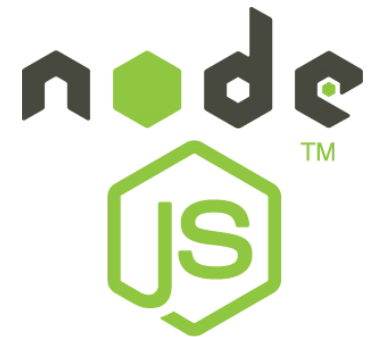
> Almonds contribute little to carbon emissions, study finds



STARTING PATTERN LAB

Technology Stack

- Build requires PHP and Node.js
- NPM to manage development assets
- Bower to manage browser assets
- Gulp to run tasks and builds
- Sass to write CSS





Gulp

- **\$ gulp** - builds site and launches browsersync to watch files and reload
- **\$ gulp help** - list of available tasks
- **\$ gulp compile** - builds site, js, sass, etc
- **\$ gulp validate** - Lints sass and js

- **\$ gulp newsite** - uses starterkit to start export
- **\$ gulp themesync** - exports to external site

Getting Started

- **Clone Git Repo**
- **Read the README.md**
- **\$ npm install --global gulp bower**
- **\$ npm install && bower install**
- **\$ gulp**

INTEGRATING WITH YOUR SITE

Inject Directly into Site

- Place Pattern Lab directly into your site
- Ex. /my_theme/pattern_lab
- `<link rel="stylesheet" href="/my_theme/pattern_lab/public/css/style.css">`
- `<script src="/my_theme/pattern_lab/public/js/scripts.js"></script>`

Export Styles into an External Site

- Create a gulp-config--custom.yml file
- Edit the config and add a destination
- \$ gulp newsite
- Bring in new changes from Pattern Lab:
- \$ gulp themesync
- This is more brittle but allows total control

Tips

- Read the README in each directory
- gulp-config.yml is the master control
- overrides with gulp-config--custom.yml
- Learn Sass & OOCSS, .l-*, .o-*, .u-*
- BEM (block, element, modifier)
 - .block
 - .block__element
 - .block--modifier
- Use singularity for custom layouts/grids
- Make your markup match mustache files