

Atomic Design

A Simple and Short Guide to the Atomic Design System

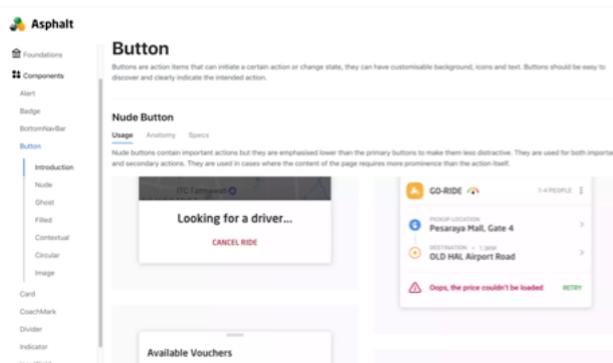
What is 'Design System'?

In short, a design system is a collection of components, that can be put together in different combinations to build numerous layouts.

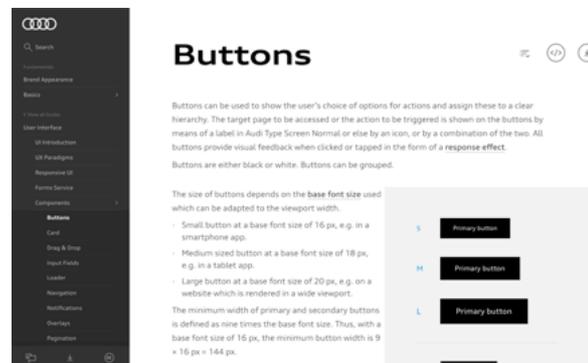
Design System is creating a library of design items such as buttons, inputs, forms, headers and etc. It's a way of organizing and managing the design ecosystem that helps with creating faster and more consistent layouts.

Design Systems are nothing new. They are widely used on UI/UX and front-end development projects. You may hear of its different names. Airbnb calls it 'Design Language', BBC calls it 'Global Experience Language', Apple calls it 'Human Interface Guidelines' so on and so forth... The industry is still circling around the preferred name but the underlying meaning of what they're saying is the same.

Having a design system has beneficial effects on internal teams and personal use. Since you are spending less time 'creating' components such as buttons and inputs, you have more time to fine-tune the design instead of putting these options together again and again...



Asphalt Design System



Audi Design System

You can check the below links to see the design systems of popular brands:

<https://asphalt.gojek.io/>

<https://atlassian.design/>

<https://www.ibm.com/design/language/>

<https://design.herokai.com/>

At first glance, it may seem like adding another layer of complexity to the design process. Designing each component from scratch and organizing it that everything works together? Seems like a lot of work, but not at all.

Design systems provide consistent, robust design patterns that can benefit the designer. As you have already created the most components already, work productivity increases as the layout designs get more complex. Managing the design is more fluent as you can simply change one thing from one place that affects the entire layout in an instance. Collaboration with Consistency works with ease as every designer has to use from the design system and you don't end up having 10 different buttons styles in the end.

Atomic Design

Now that we are clear on what is a Design System and why you have to use it, let's dive into one of the most popular and used Design System frameworks, Atomic Design.

Atomic Design is a way of organizing and managing your design ecosystem by categorizing components as Atoms, Molecules, Organisms, Templates and Pages. It's a relatively new way of design, and its popularity is increasing each and every day as brands big to small, are implementing this system to there products. It is one of the most robust and effective design system frameworks out there.

Atoms

In chemistry, atoms are the basic building blocks that cannot be broken down any further. In this design systems, atoms have a similar place. They are components that cannot be broken down any further. These are things like buttons, inputs forms, icons and text. They have no real 'function' when left alone but are the foundation blocks of the design system. In front-end development, you can say atoms are the basic HTML tags.



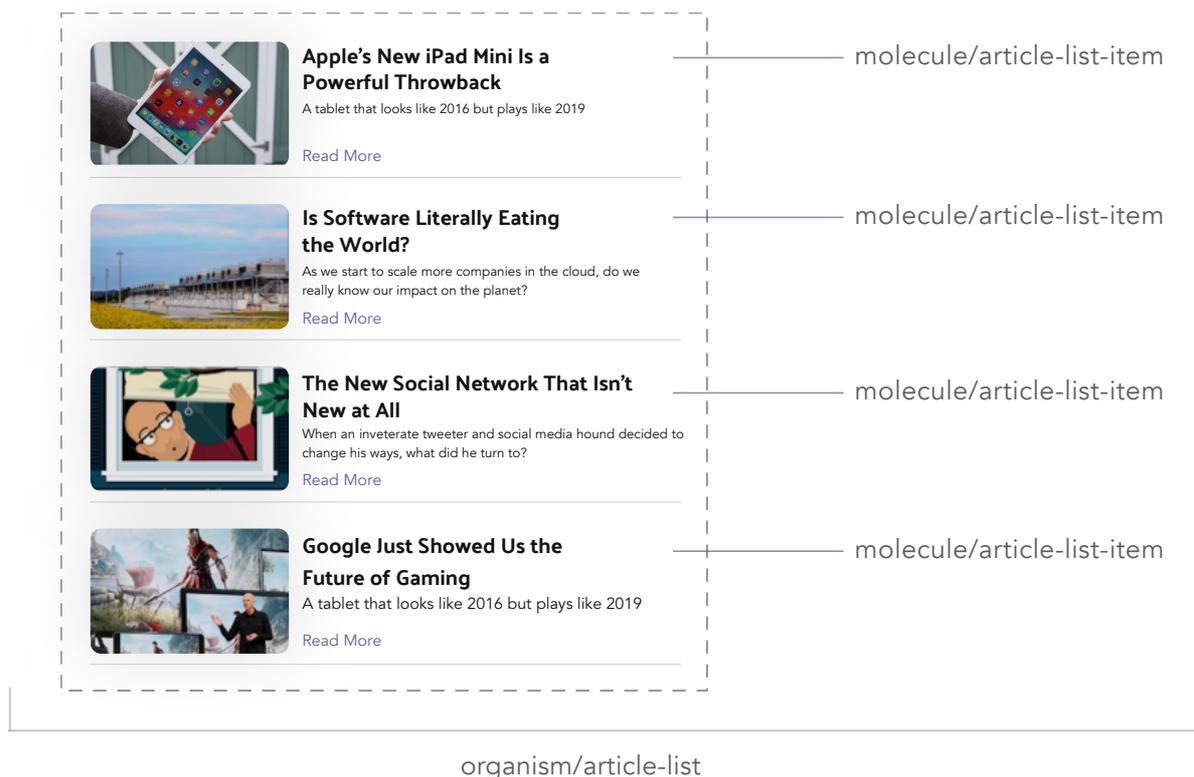
Molecules

Molecules are a group of atoms used together that makes a complete function. For example, let's think of a news article layout. On the top, you have a 'header' which has: a background image, a header text, a short body text, a button to share it and another one to save it. These small atoms come together and form the whole molecule, that has only one function.



Organisms

Organisms are relatively more complex interface items and have multiple atoms or molecules in it. For example, this can be a news feed section. This 'section' can have small previews of multiple articles as a list. Each 'list-item' is a molecule. Combining them together creates an organism.



Templates & Pages

Templates are essentially pages without real content. They combine organisms and molecules to form a proper layout. While pages are the template with real content in it. For example, an Instagram post has a template: account information on the top, post below it, action buttons below that and finally the content. But the contents of these molecules change for each post published by the user.

This is essentially what atomic design is. Frameworks like atomic design allow us to focus our thinking and be explicit in what we create. It ensures our designs are consistent and manageable. Atomic design allows designers to think critically about each component of design on its own and as a part of a larger whole. In building this way, we create simple, standalone, reusable components. These make our lives and lives of developers working on the project easier.

If you feel daunted or think that it's 'extra complexity with no real value', we encourage you to just give it a try. We thought the same when we first encountered atomic design, but when you get used to the system and play around with it for a while, everything just clicks together and the whole design process get's much more robust, easy and efficient.