

Build your React-based CRUD applications, without constraints.

refine.dev

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Build your React-based CRUD applications, without constraints.

An open source, headless web application framework developed with flexibility in mind.

205 online

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PRODUCT HUNT

#1 Product of the Day

awesome

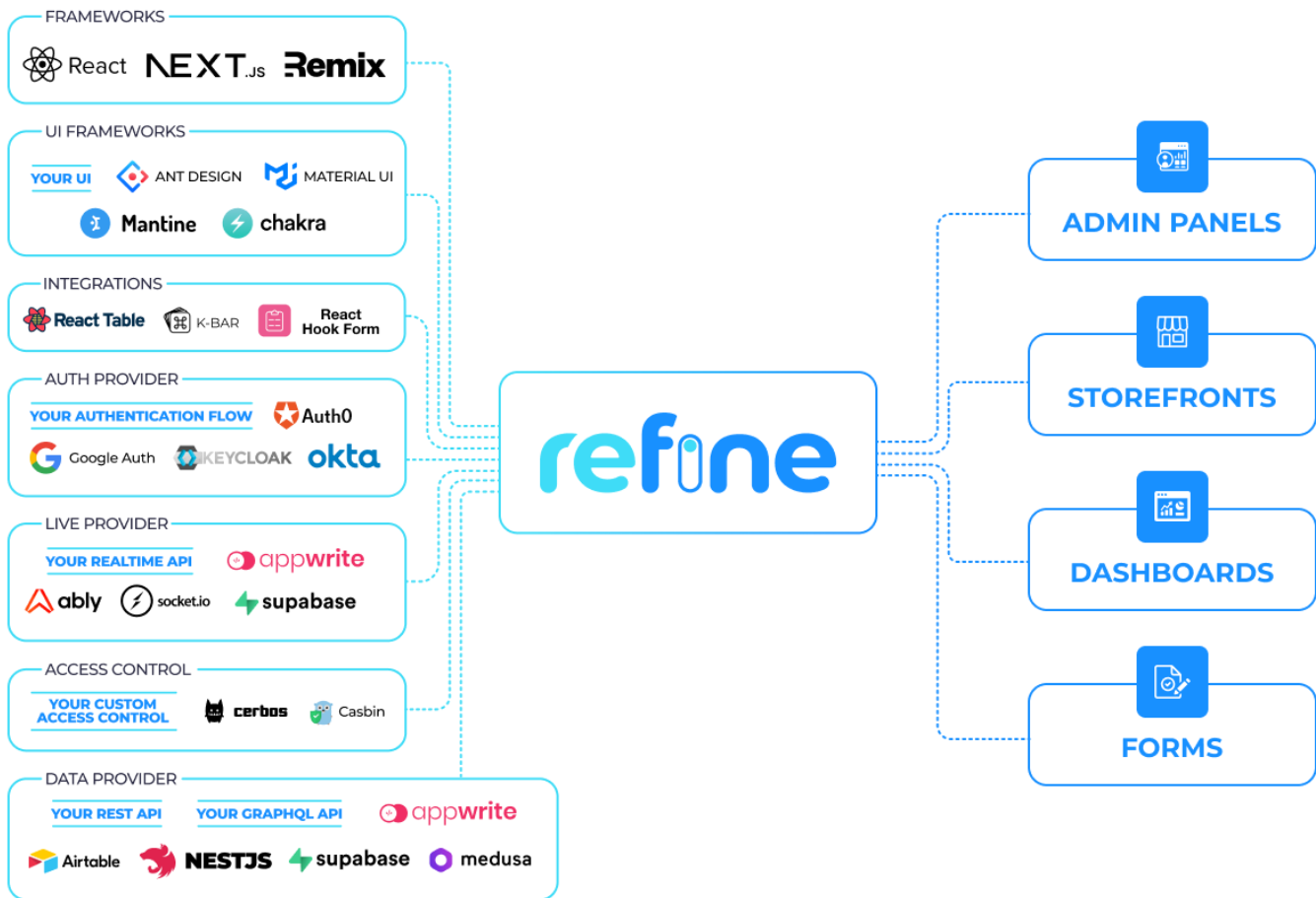
maintainability B

test coverage 87%

npm v4.3.0

commit activity 196/month

Contributor Covenant 2.0



## What is refine?

**refine** is a React-based framework for the rapid ✨ development of web applications. It eliminates repetitive tasks demanded by **CRUD** operations and provides industry standard solutions for critical parts like **authentication**, **access control**, **routing**, **networking**, **state management**, and **i18n**.

**refine** is *headless by design*, thereby offering unlimited styling and customization options.

## What do you mean by "headless" ?

Instead of being a limited set of pre-styled components, **refine** is a collection of helper hooks, components, and providers. They are all decoupled from *UI components* and *business logic*, so that they never keep you from customizing your *UI* or coding your own flow.

**refine** seamlessly works with any **custom design** or **UI framework** that you favor. For convenience, it ships with ready-made integrations for [Ant Design System](#), [Material UI](#), [Mantine](#), and [Chakra UI](#).

## Use cases

**refine** shines on *data-intensive* ⚡ applications like **admin panels**, **dashboards** and **internal tools**. Thanks to the built-in **SSR support**, **refine** can also power *customer-facing* applications like **storefronts**.

You can take a look at some live examples that can be built using **refine** from scratch:

Complete Admin Panel 

Medium Clone 

SSR Storefront 

👉 Refer to most popular real use case examples

👉 More **refine** powered different usage scenarios can be found here

## Key Features

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⚙️ Zero-config, **one-minute setup** with a **single CLI command**

🔌 Connectors for **15+ backend services** including [REST API](#), [GraphQL](#), [NestJs CRUD](#), [Airtable](#), [Strapi](#), [Strapi v4](#), [Strapi GraphQL](#), [Supabase](#), [Hasura](#), [Appwrite](#), [Firebase](#), and [Directus](#).

🌐 **SSR support** with [Next.js](#) or [Remix](#)

🔍 Auto-generated **CRUD UIs** from **your API data structure**

⚙️ Perfect **state management & mutations** with [React Query](#)

🗑️ **Advanced routing** with any router library of your choice

🔑 Providers for seamless **authentication** and **access control** flows

⚡ Out-of-the-box support for **live / real-time applications**

📄 Easy **audit logs & document versioning**

💬 Support for any **i18n** framework

🏗️ Future-proof, **robust architecture**

⌚ Built-in CLI with time-saving features

✅ Full **test coverage**

## Quick Start

---

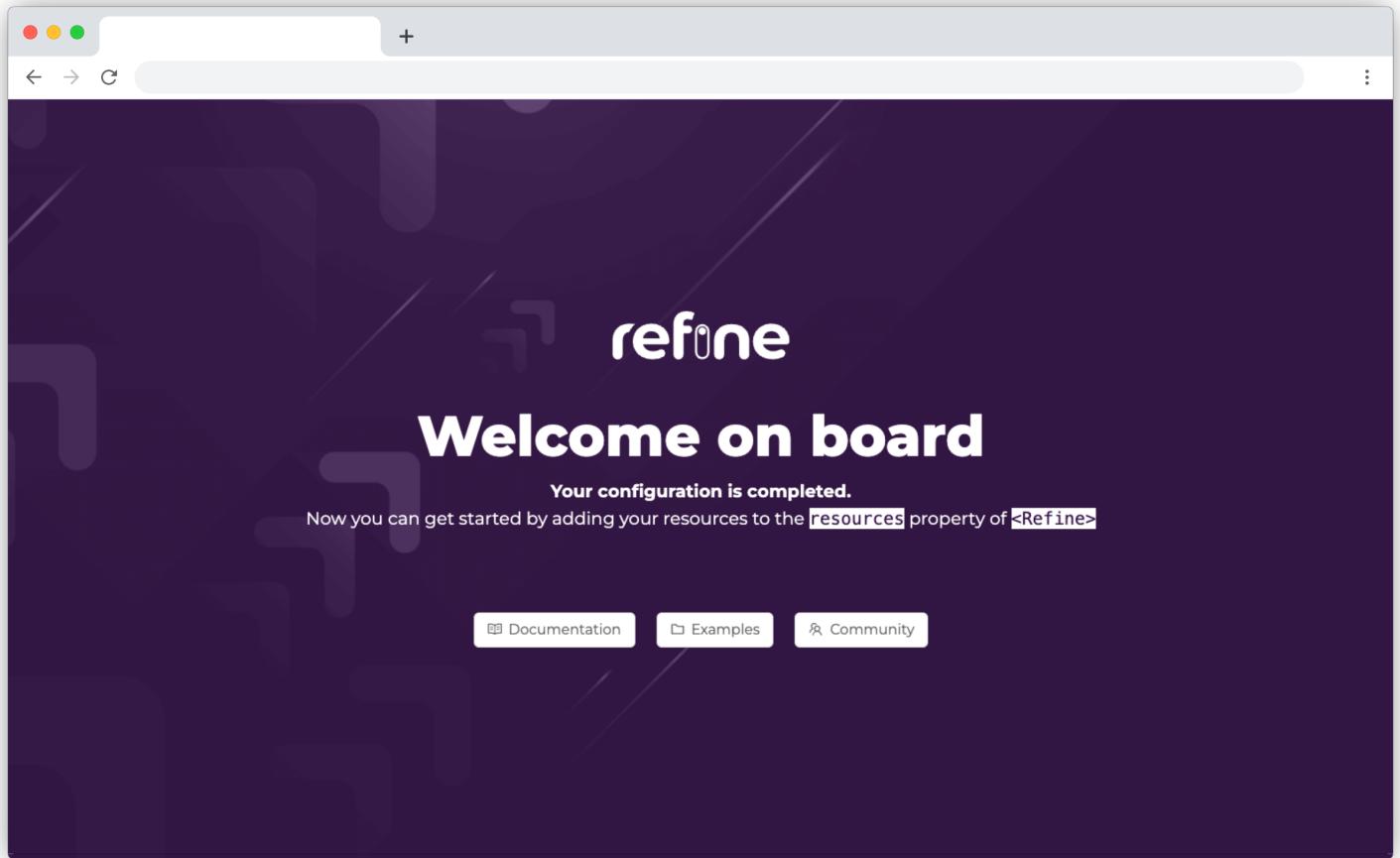
The fastest way to get started with **refine** is by using the `create refine-app` project starter tool. Run the following command to create a new **refine** project configured with [Ant Design System](#) as the default UI framework:

```
npm create refine-app@latest -- -o refine-antd
```

Once the setup is complete, navigate to the project folder and start your project with:

```
npm run dev
```

Your **refine** application will be accessible at <http://localhost:3000>:



Let's consume a public fake REST API and add two resources (*posts*, *categories*) to our project. Replace the contents of `src/App.tsx` with the following code:

```
import { Refine } from "@refinedev/core";
import { Layout, notificationProvider, ErrorComponent } from "@refinedev/antd";
import routerProvider, { NavigateToResource } from "@refinedev/react-router-v6";
import dataProvider from "@refinedev/simple-rest";

import { BrowserRouter, Routes, Route, Outlet } from "react-router-dom";

import { AntdInferencer } from "@refinedev/inferencer/antd";

import "@refinedev/antd/dist/reset.css";

const App: React.FC = () => {
  return (
    <BrowserRouter>
      <Refine
        routerProvider={routerProvider}
        dataProvider={dataProvider("https://api.fake-rest.refine.dev")}
        notificationProvider={notificationProvider}
        resources={[
          {
            name: 'posts',
            list: "/posts",
            show: "/posts/show/:id",
            create: "/posts/create",
            edit: "/posts/edit/:id",
            meta: { canDelete: true },
          }
        ]}
      />
    </BrowserRouter>
  );
};
```

```

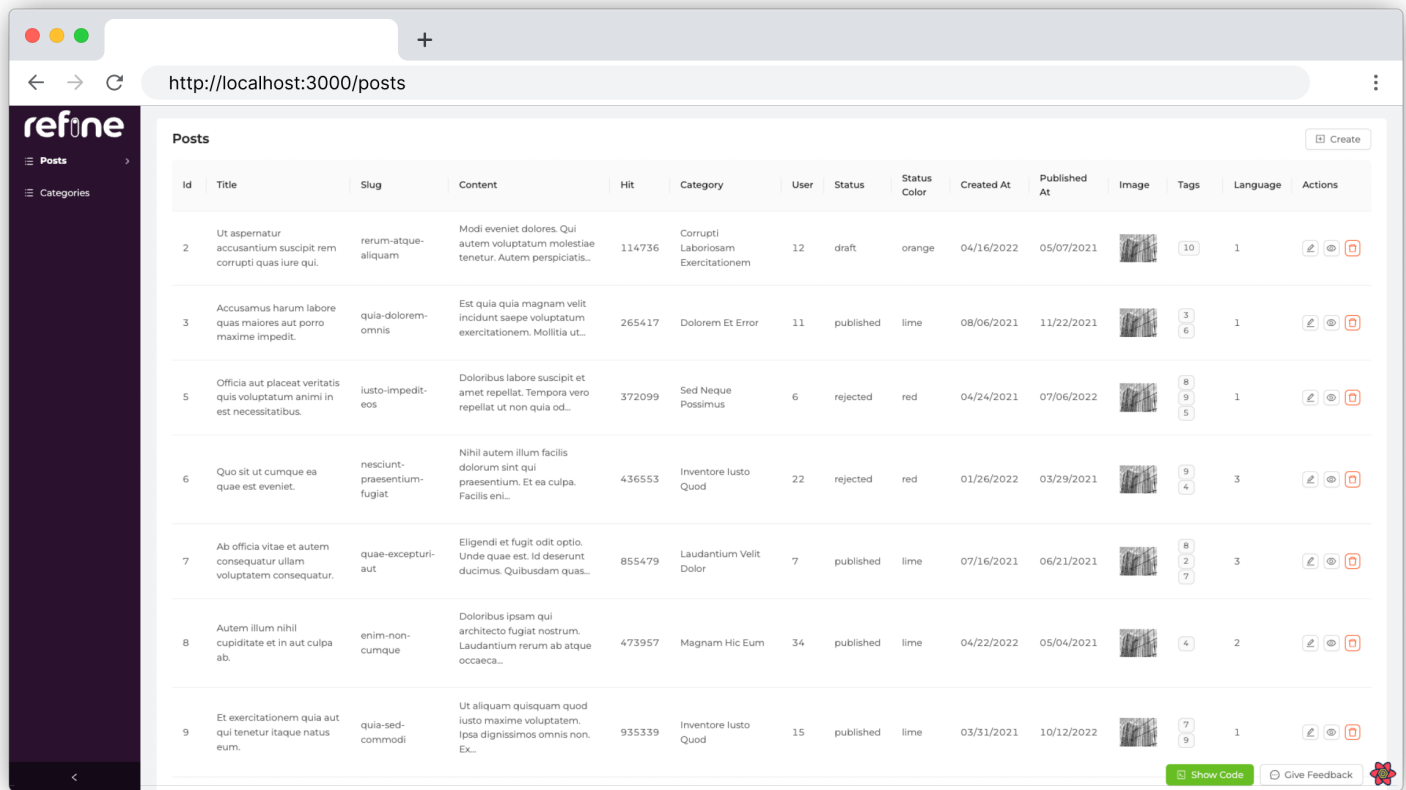
    },
    {
      name: 'categories',
      list: "/categories",
      show: "/categories/show/:id",
    }
  ]}
}
>
<Routes>
  <Route
    element={({
      <Layout>
        <Outlet />
      </Layout>
    })}
  >
  <Route index element={<NavigateToResource />} />
  <Route path="posts">
    <Route index element={<AntdInferencer />} />
    <Route path="show/:id" element={<AntdInferencer />} />
    <Route path="create" element={<AntdInferencer />} />
    <Route path="edit/:id" element={<AntdInferencer />} />
  </Route>
  <Route path="categories">
    <Route index element={<AntdInferencer />} />
    <Route path="show/:id" element={<AntdInferencer />} />
  </Route>
  <Route path="*" element={<ErrorComponent />} />
</Route>
</Routes>
</Refine>
</BrowserRouter>
);
};

export default App;

```

🚀 Thanks to **refine Inferencer package**, it guesses the configuration to use for the `list`, `show`, `create`, and `edit` pages based on the data fetched from the API and generates the pages automatically.

Now, you should see the output as a table populated with `post` & `category` data:



You can get the auto-generated pages codes by clicking the `show code` button on each page. Afterward, simply pass the pages to the `resources` array by replacing with the Inferencer components.

## Next Steps

- 👉 Jump to [Tutorial](#) to continue your work and turn the example into a full-blown CRUD application.
- 👉 Visit [Learn the Basics Page](#) to get informed about the fundamental concepts.
- 👉 Read more on [Advanced Tutorials](#) for different usage scenarios.
- 👉 See the real-life [Finefoods Demo](#) project.
- 👉 Play with interactive [Examples](#)

## Roadmap

You can find refine's [Public Roadmap](#) here!

## Stargazers



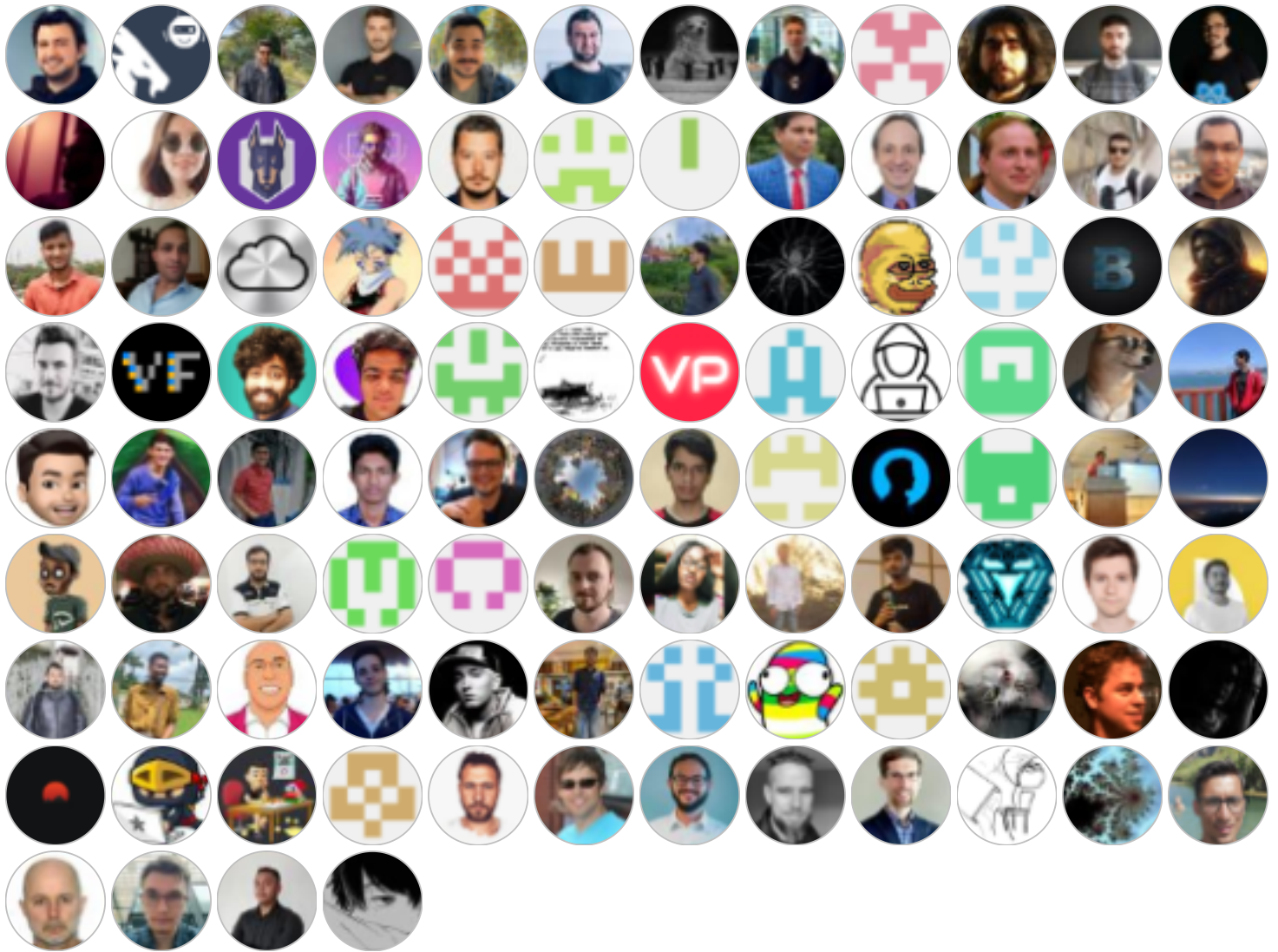
@whitejsx, @jtweis, @jesusbello, and **8,631 others** starred this repository.

# Contribution

👉 [Refer to contribution docs for more information](#)

If you have any doubts related to the project or want to discuss something, then join our [Discord Server](#).

## Our ❤️ Contributors



## License

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## Languages

● TypeScript 97.1%   ● JavaScript 2.7%   ● CSS 0.2%   ● Handlebars 0.0%   ● Smarty 0.0%   ● Dockerfile 0.0%