

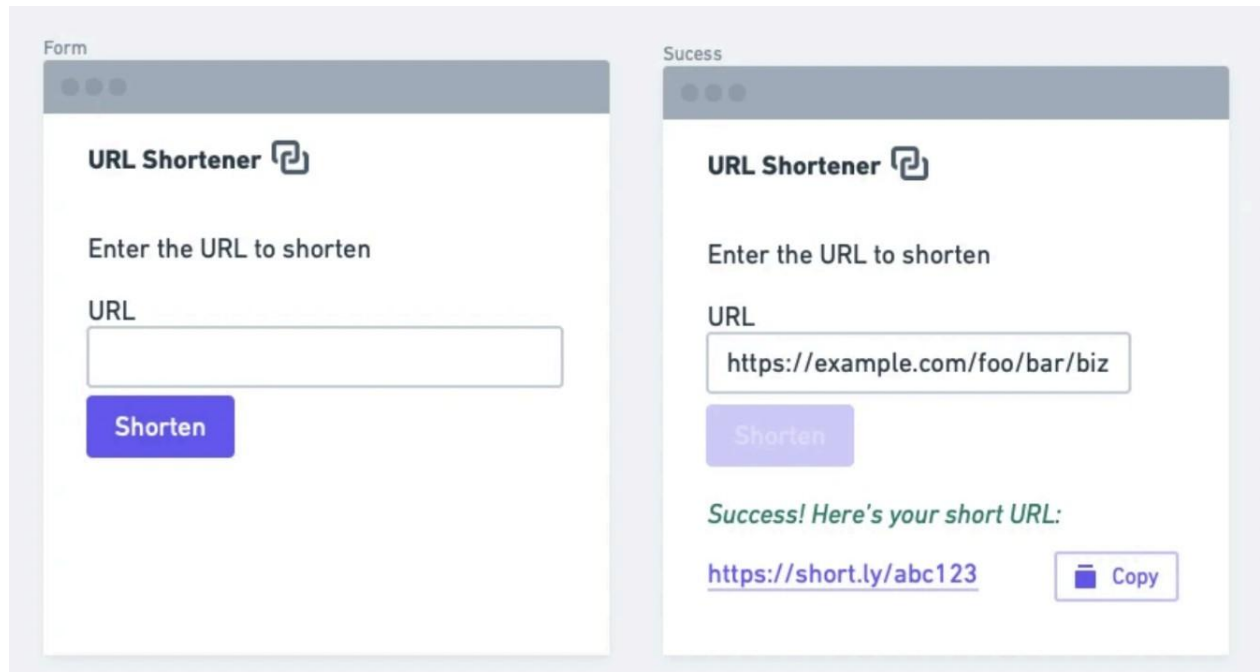
# URL Shortener

Hello fellow recruitee, we need your help! We've been tasked to create a URL shortener, and as a new potential to our team we would like your help to create this application. The task is simple, we want to be able to create a short link for a given URL.

`https://some.place.example.com/foo/bar/biz` should be shortened to  
`https://{domain}/abc123`

## Mock-up

Here's what the simple interface could look like:



Note: bonus points for creativity on the UI side.

## Requirements

- Build a React application that allows you enter a URL
- When the form is submitted, return a shortened version of the URL
- Save a record of the shortened URL to a database
- Ensure the slug of the URL (abc123 in the screenshot above) is unique
- When the shortened URL is accessed, redirect to the stored URL
- If an invalid slug is accessed, display a 404 Not Found page
- You should have a list of all URLs saved in the database

## Extra Credit

- Add support for accounts so people can view the URLs they have created
- Validate the URL provided is an actual URL
- Display an error message if invalid
- Make it easy to copy the shortened URL to the clipboard
- Allow users to modify the slug of their URL
- Track visits to the shortened URL
- Add rate-limiting to prevent bad-actors
- Add a dashboard showing how popular your URLs are
- Build a Docker image of your application

## Required Tech

- React w/ typescript for the front end
- Node.JS w/ typescript for the backend

## Output format

Please submit the ready task in a format of a github link for a quicker review.

## FAQ

- Can I use frameworks
  - Yes, it's encouraged
- Can I use a language other than typescript
  - No, we expect the solution to be in typescript only
- What stack do you use internally
  - Node.js with NestJS and Postgresql for backend
  - React with Next.js for front end
- Should I use an ORM
  - If you'd like
- What database should I use
  - Any, this is completely up to you