

Why You Don't Need That New Library

Sticking to fundamentals

Denis Ermakov, Software Engineer, Techflow, 2025-02-20

Did HTML coding for Netscape
ACC-ICF Coach 🤯 PSM-II 🚀🚀

Principal Software Engineer
developing portfolio & program
management software for banking



<https://errmakov.com>

The Setup: Our Usual Tech Mess

NextJS Frontend (User Interface)



NextJS Server-side (Node Environment)
(API routes)

NextJS Frontend (User Interface)



NextJS Server-side (Node Environment)
(API routes)



REST API

NextJS Frontend (User Interface)



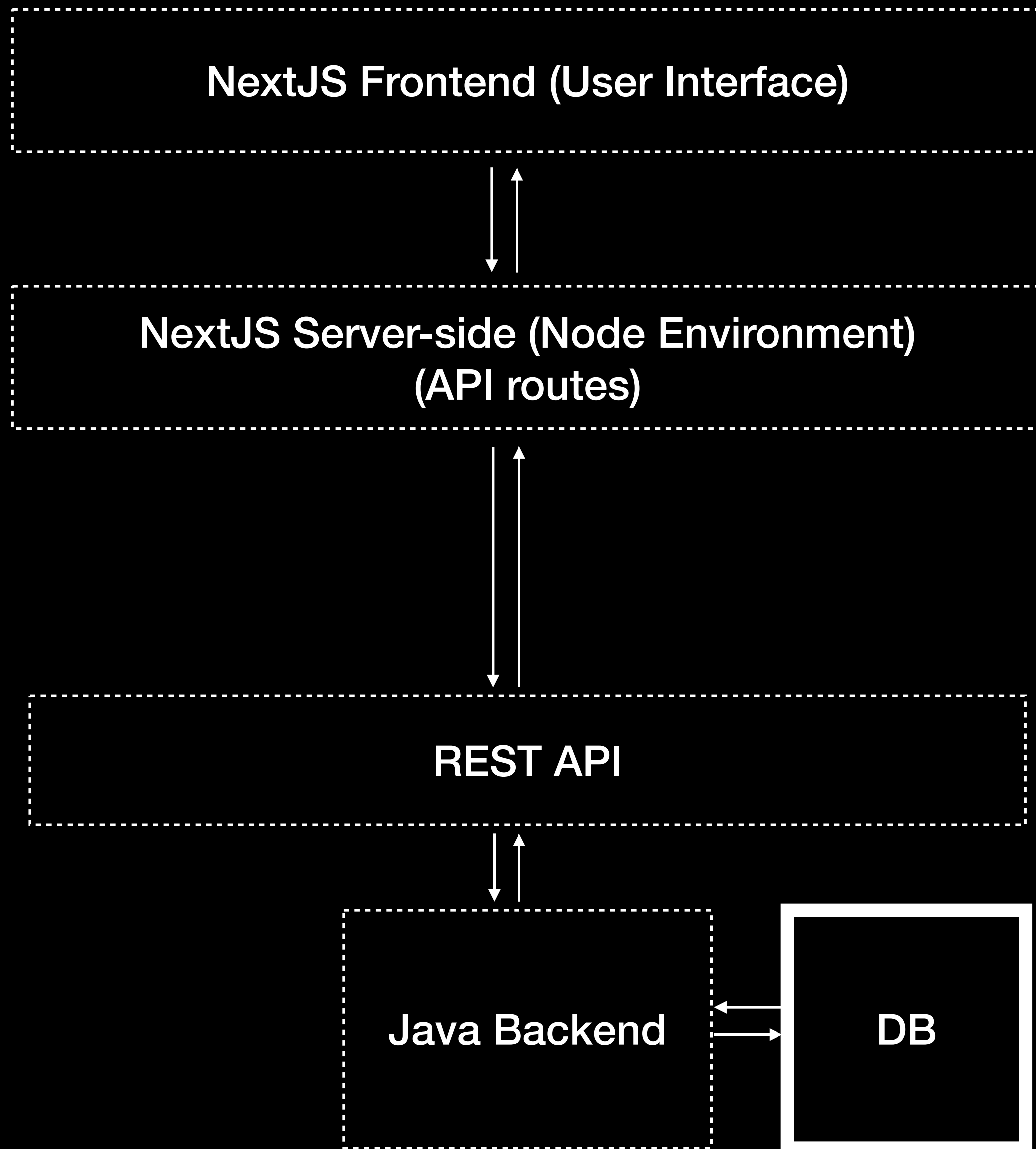
NextJS Server-side (Node Environment)
(API routes)

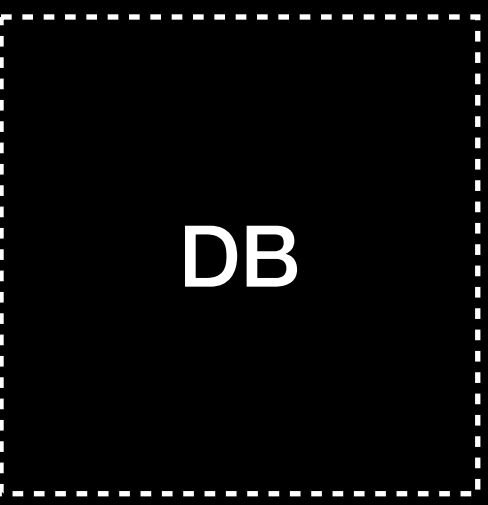
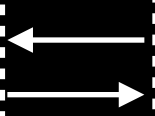
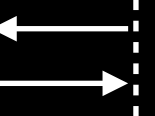
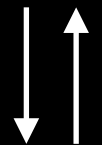
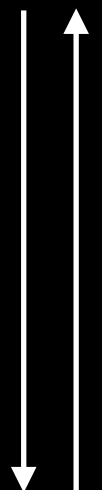
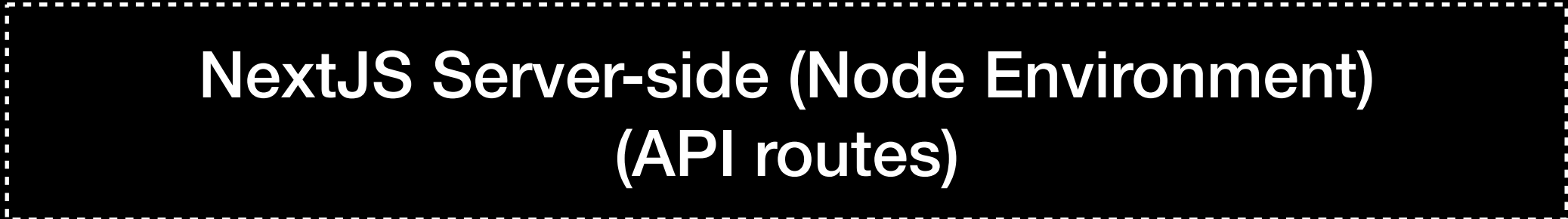


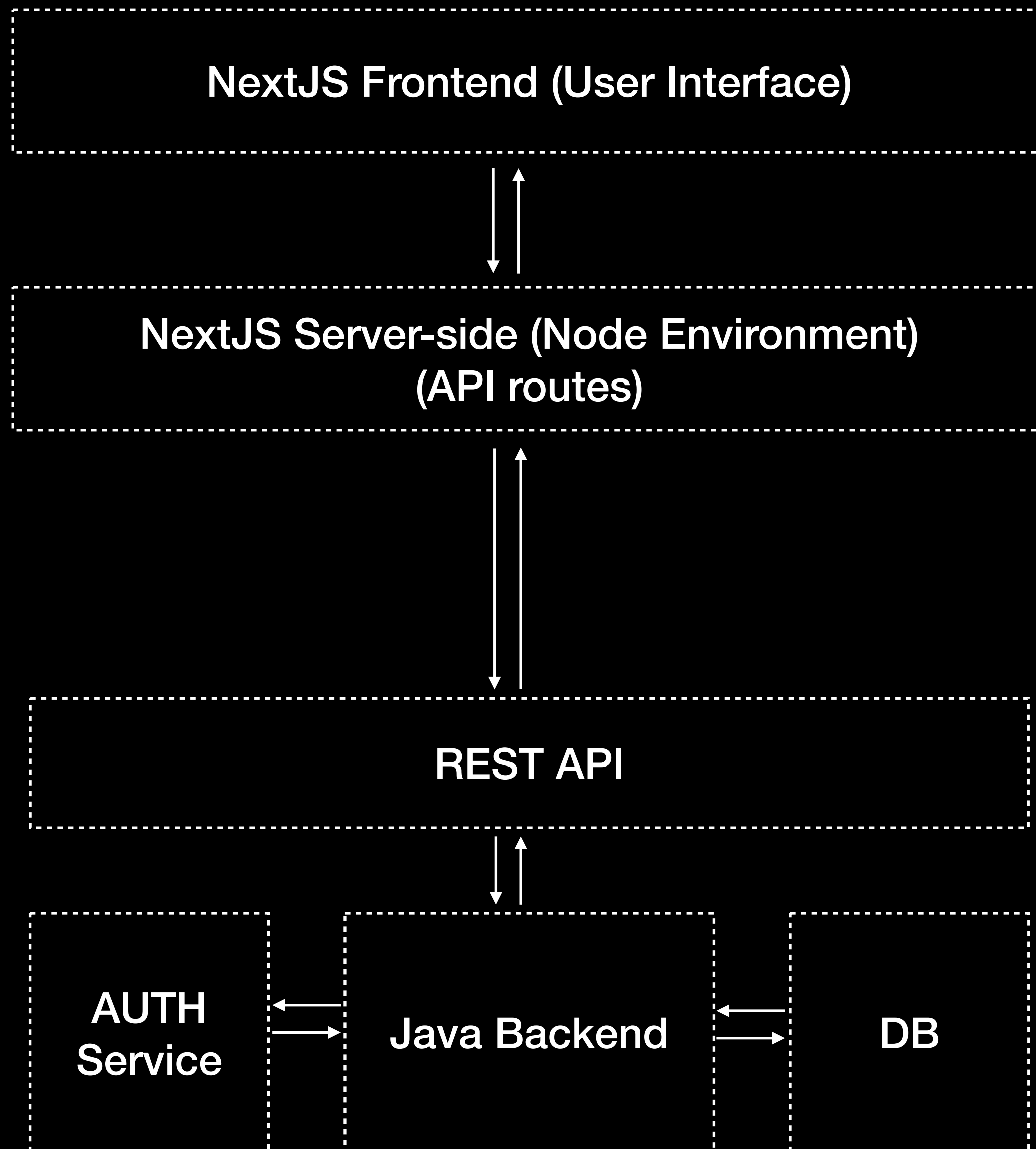
REST API



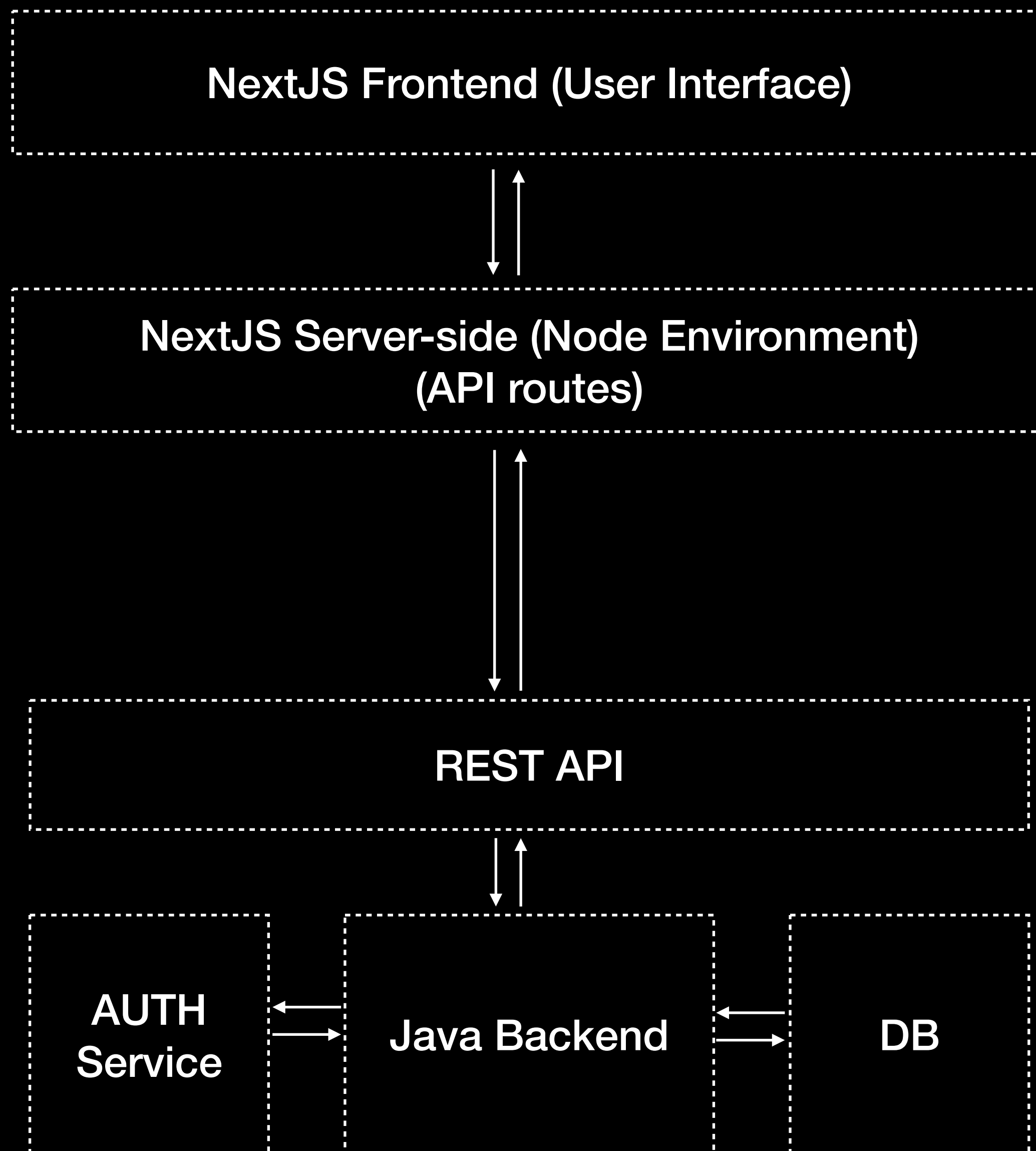
Java Backend





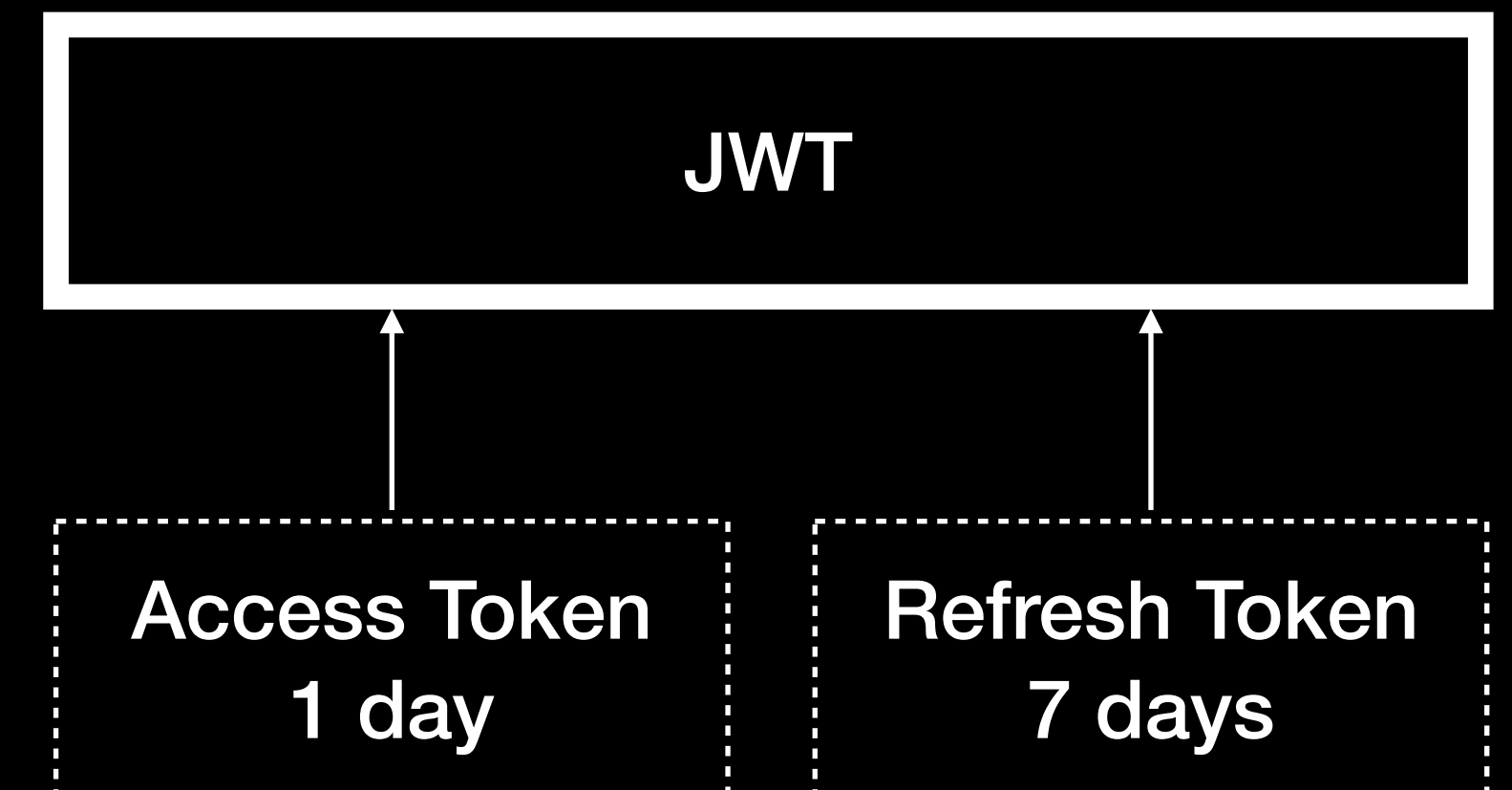
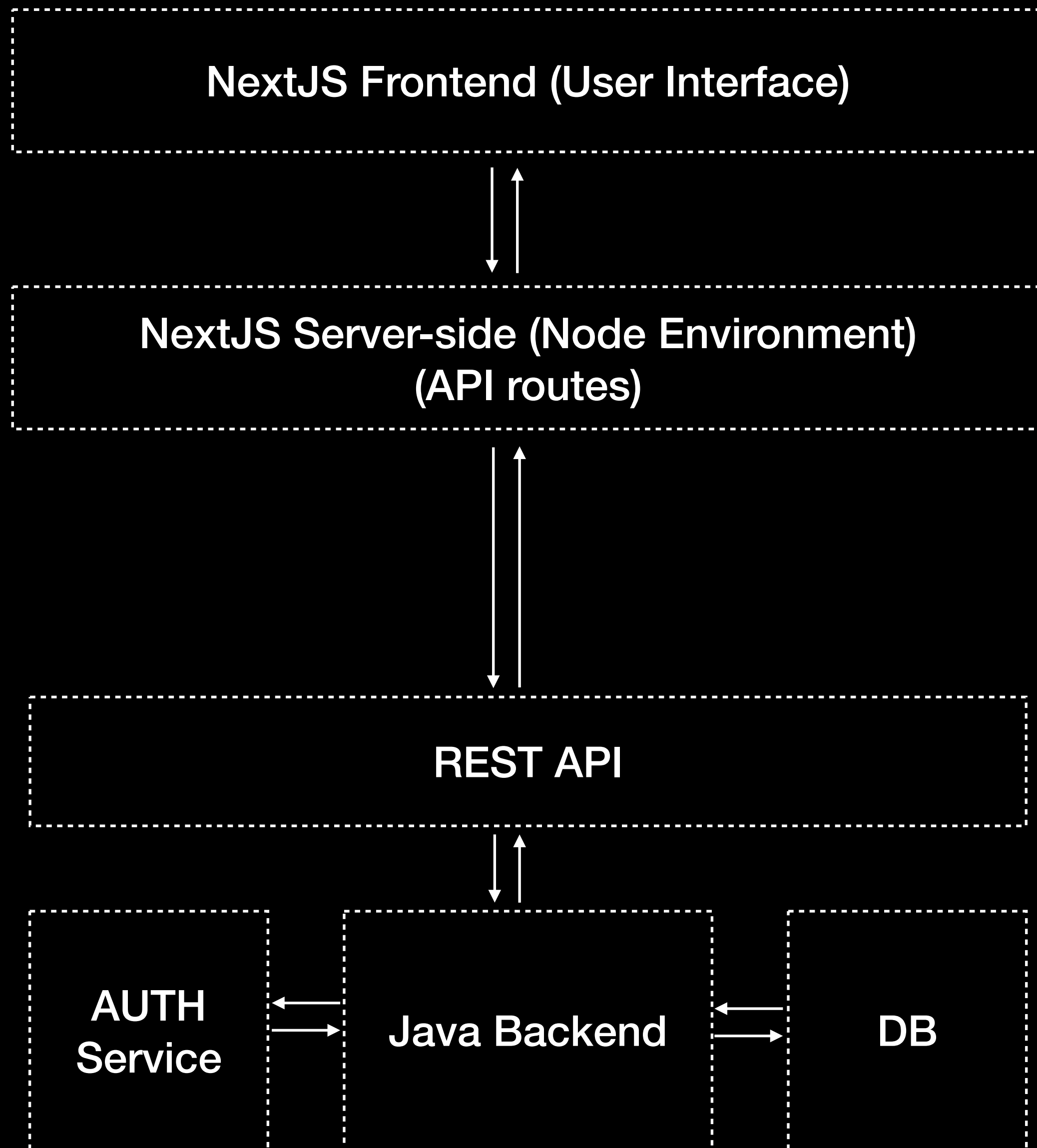


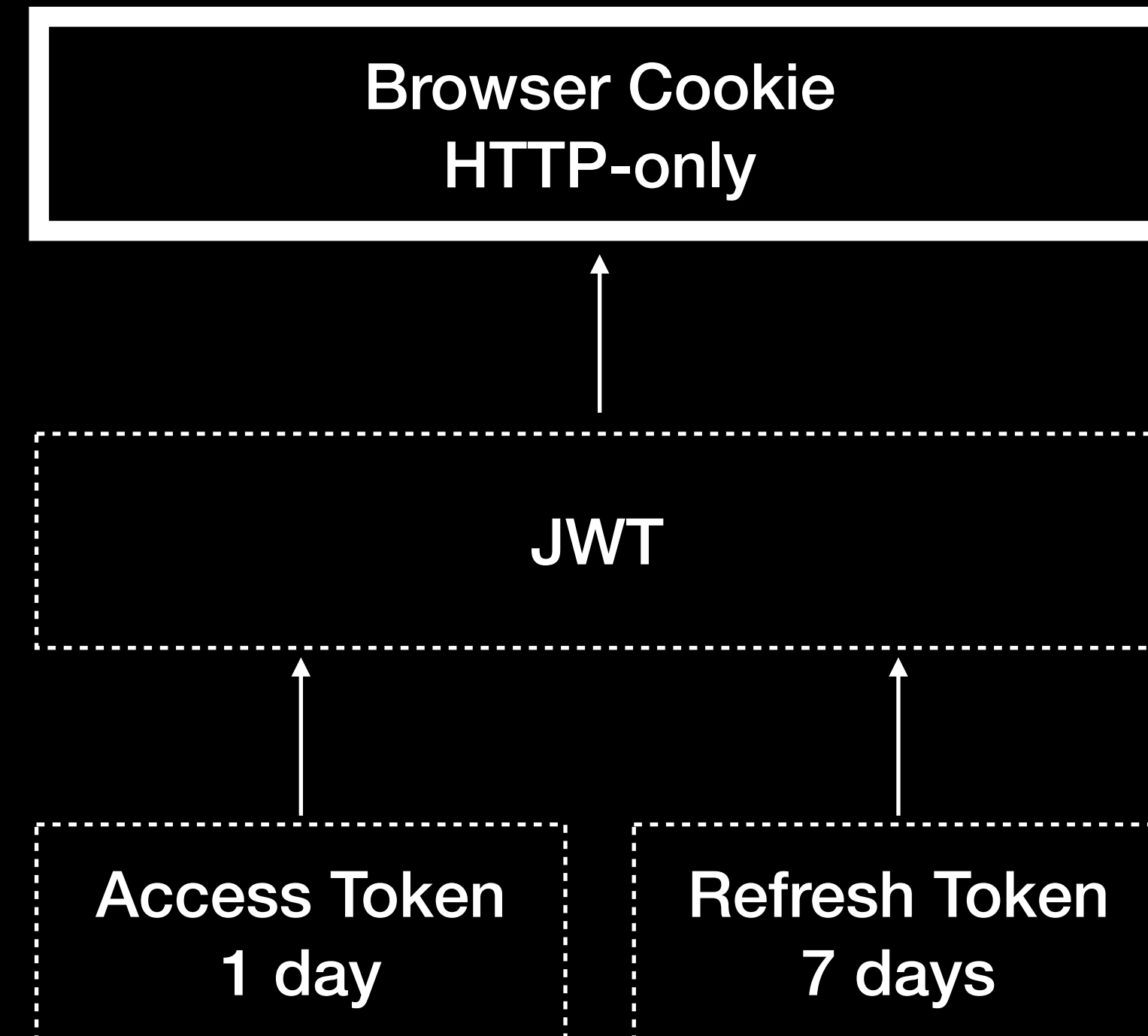
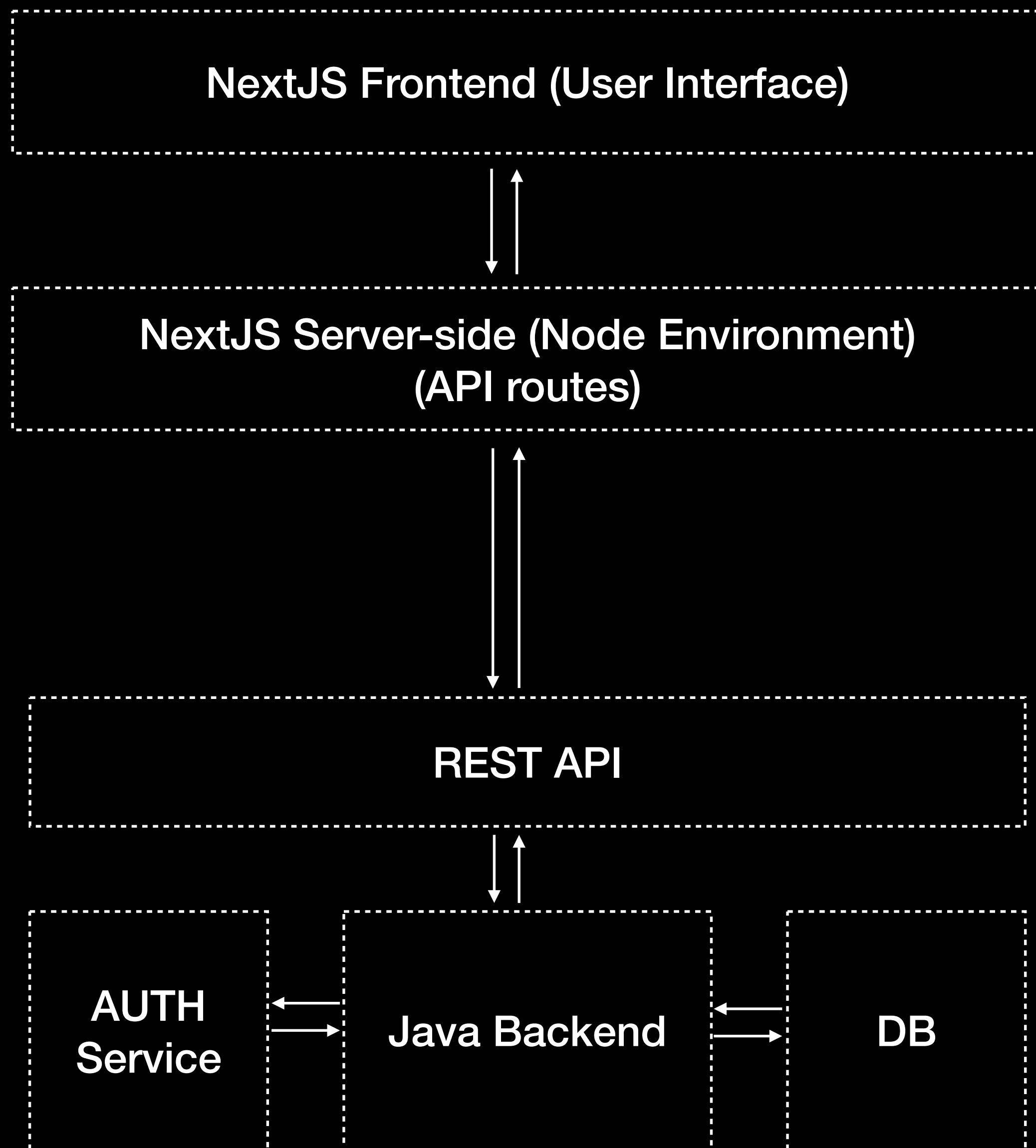
Refresh Token
7 days

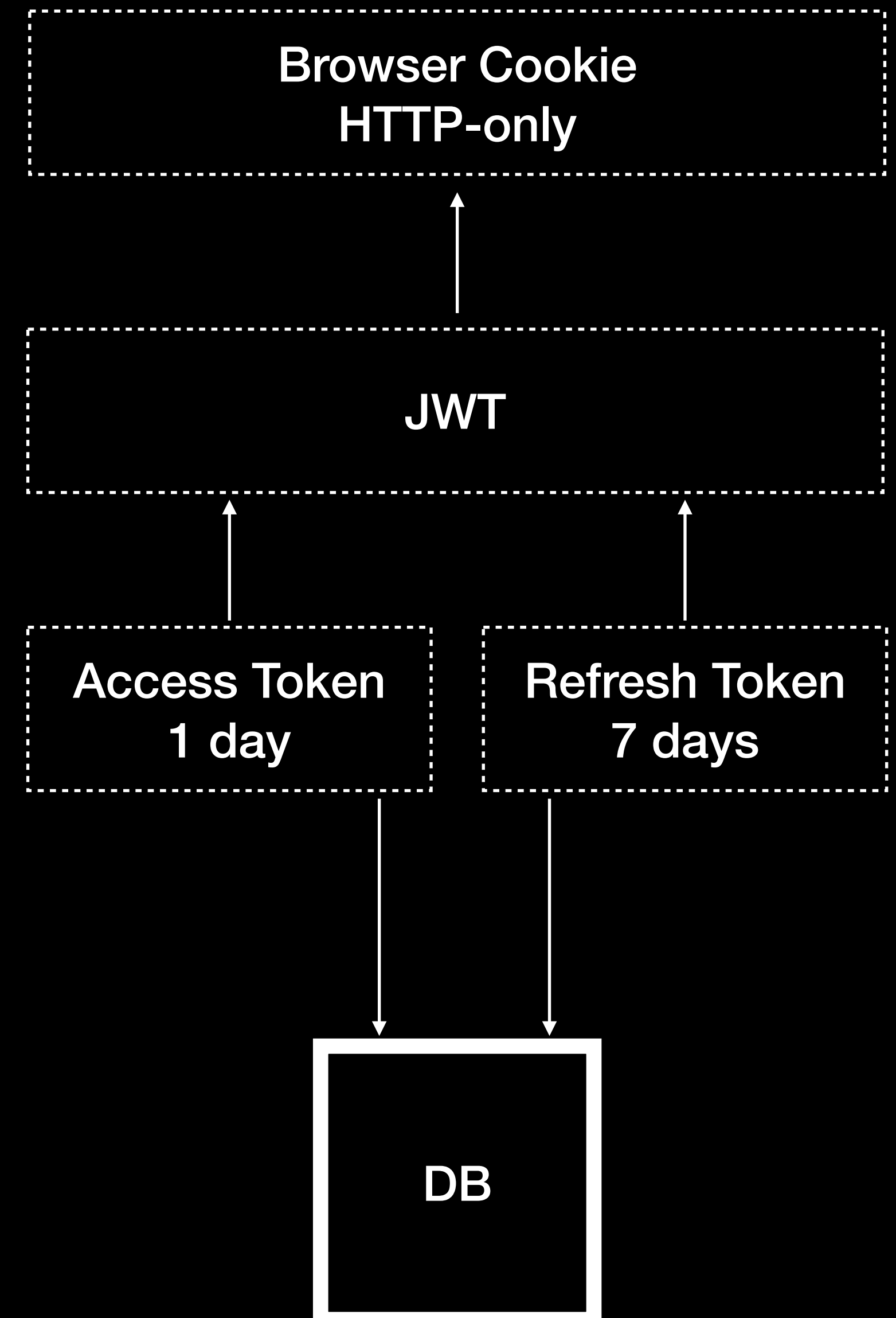
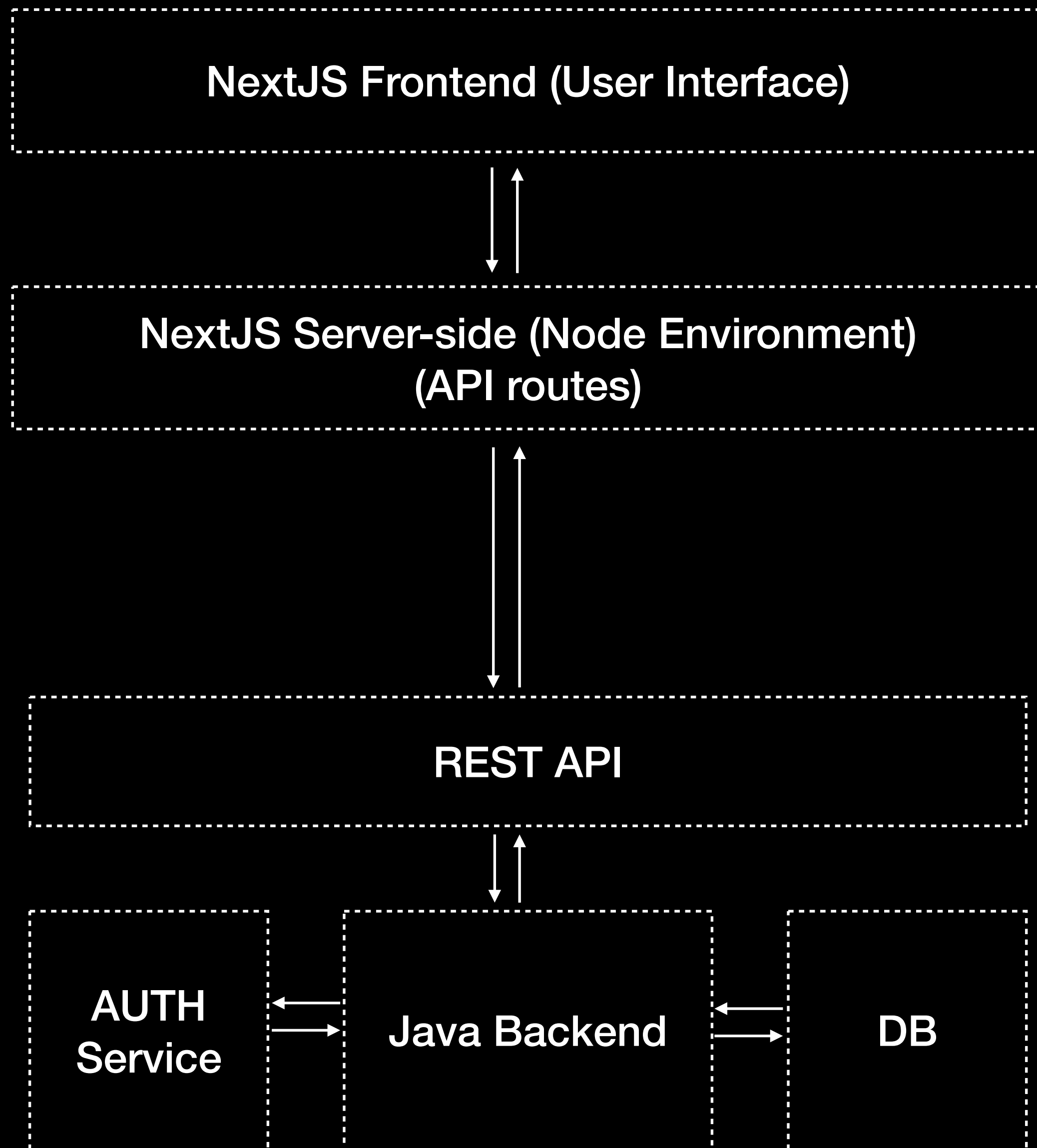


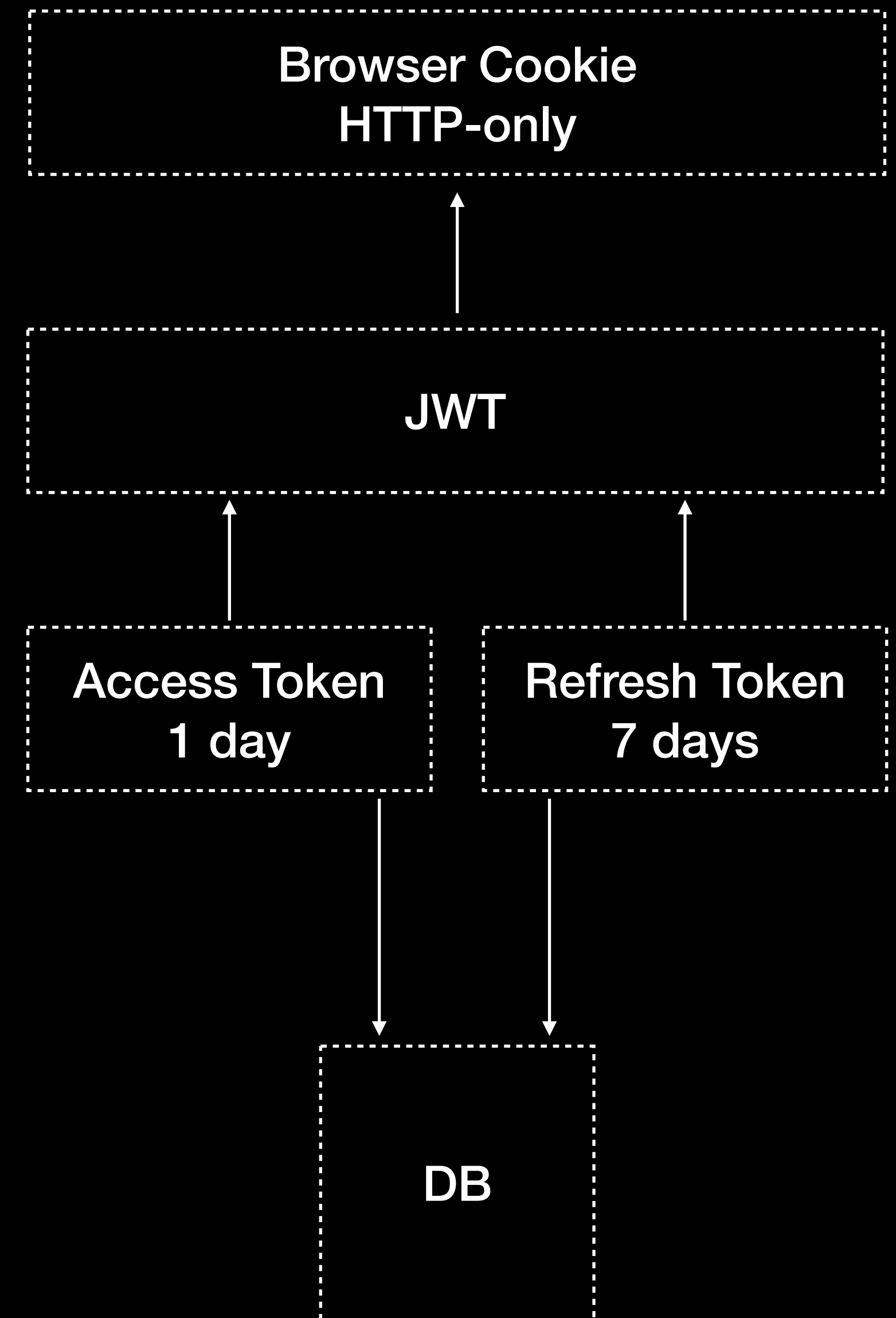
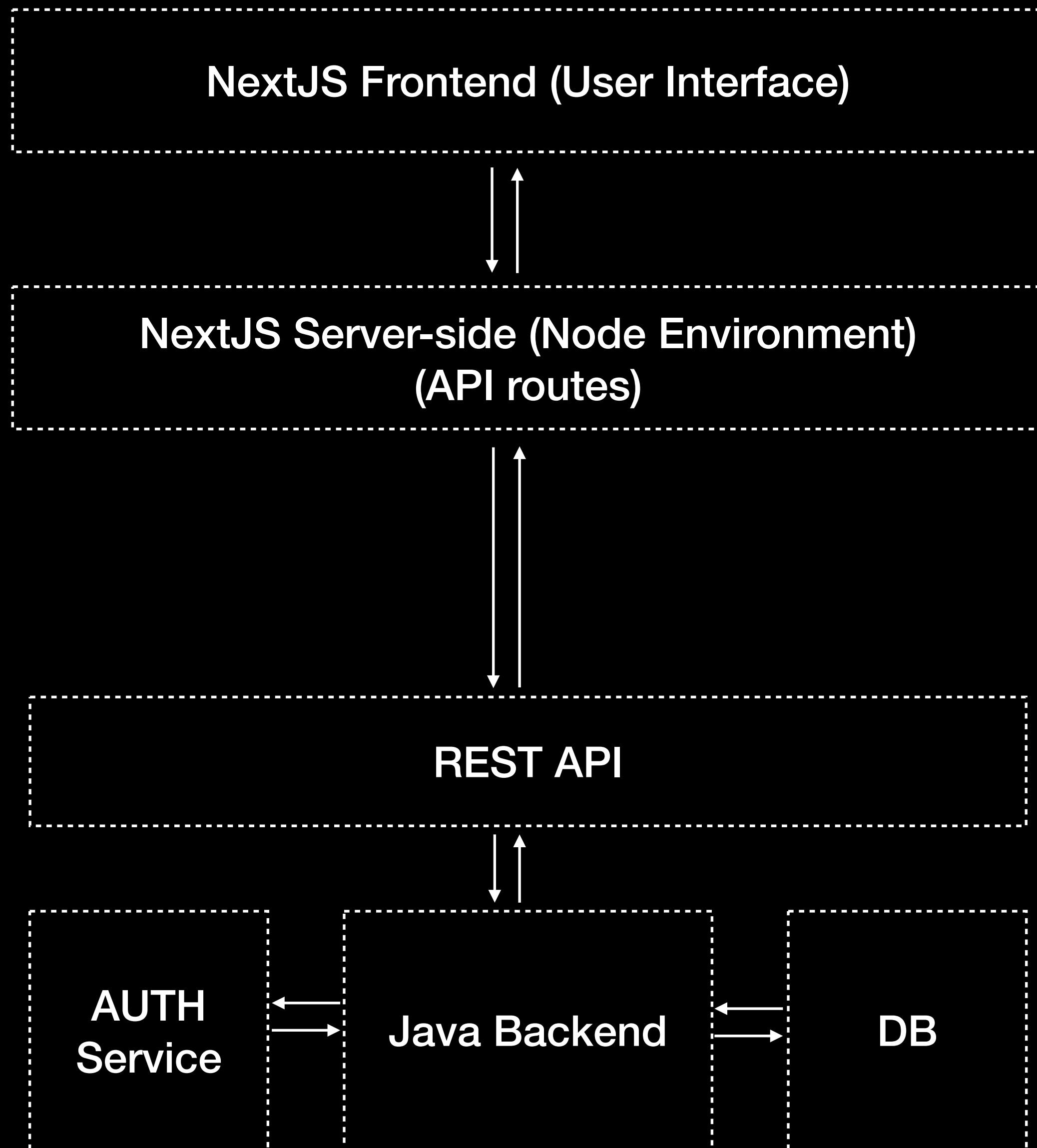
Access Token
1 day

Refresh Token
7 days











«Add authentication in minutes»

next-auth.js.org

next-auth TS

4.24.11 • Public • Published 2 months ago

 Readme

 Code Beta

 9 Dependencies

 416 Dependents

 715 Versions



NextAuth.js

Authentication for Next.js

Open Source. Full Stack. Own Your Data.

 Release failing  install size 3.81 MB  downloads 5.3M/month  Stars 26k

latest @auth/azure-tables-adapter@1.7.4

Overview

NextAuth.js is a complete open source authentication solution for **Next.js** applications.

It is designed from the ground up to support Next.js and Serverless.


This is a monorepo containing the following packages / projects:

1. The primary `next-auth` package
2. A development test application
3. All `@next-auth/*-adapter` packages

Install

```
> npm i next-auth
```

Repository

 github.com/nextauthjs/next-auth

Homepage

 authjs.dev

Weekly Downloads

1,305,157



Version

4.24.11

License

ISC

Unpacked Size

828 kB

Total Files

486

Issues

308

Pull Requests

86

Last publish

2 months ago

Server

/pages/api/auth/[...nextauth].js

```
import NextAuth from 'next-auth'
import AppleProvider from 'next-auth/providers/apple'
import FacebookProvider from 'next-auth/providers/facebook'
import GoogleProvider from 'next-auth/providers/google'
import EmailProvider from 'next-auth/providers/email'

export default NextAuth({
  providers: [
    // OAuth authentication providers...
    AppleProvider({
      clientId: process.env.APPLE_ID,
      clientSecret: process.env.APPLE_SECRET
    }),
    FacebookProvider({
      clientId: process.env.FACEBOOK_ID,
      clientSecret: process.env.FACEBOOK_SECRET
    }),
    GoogleProvider({
      clientId: process.env.GOOGLE_ID,
      clientSecret: process.env.GOOGLE_SECRET
    }),
    // Passwordless / email sign in
    EmailProvider({
      server: process.env.MAIL_SERVER,
      from: 'NextAuth.js <no-reply@example.com>'
    }),
  ],
})
```


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    }),
    GoogleProvider({
      clientId: process.env.GOOGLE_ID,
      clientSecret: process.env.GOOGLE_SECRET
    }),
    // Passwordless / email sign in
    EmailProvider({
      server: process.env.MAIL_SERVER,
      from: 'NextAuth.js <no-reply@example.com>'
    }),
  ],
})
```

Client (App)

/pages/_app.jsx

```
import { SessionProvider } from "next-auth/react"

export default function App({
  Component, pageProps: { session, ...pageProps }
}) {
  return (
    <SessionProvider session={session}>
      <Component {...pageProps}/>
    </SessionProvider>
  )
}
```


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import NextAuth from 'next-auth'
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}
```

Client (Page)

/pages/index.js

```
import { useSession, signIn, signOut } from "next-auth/react"

export default function Component() {
  const { data: session } = useSession()
  if(session) {
    return <>
      Signed in as {session.user.email} <br/>
      <button onClick={() => signOut()}>Sign out</button>
    </>
  }
  return <>
    Not signed in <br/>
    <button onClick={() => signIn()}>Sign in</button>
  </>
}
```



1:0



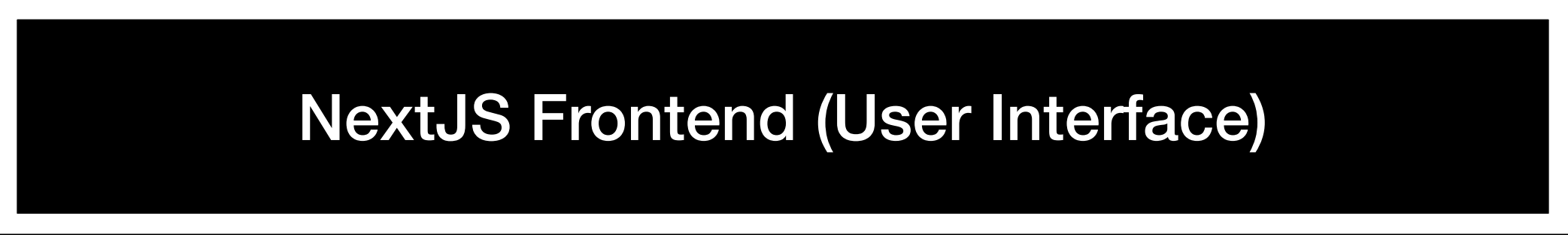
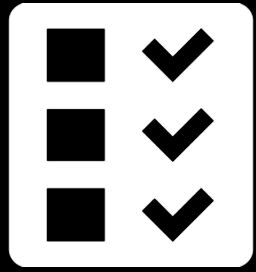
Credential Based Auth

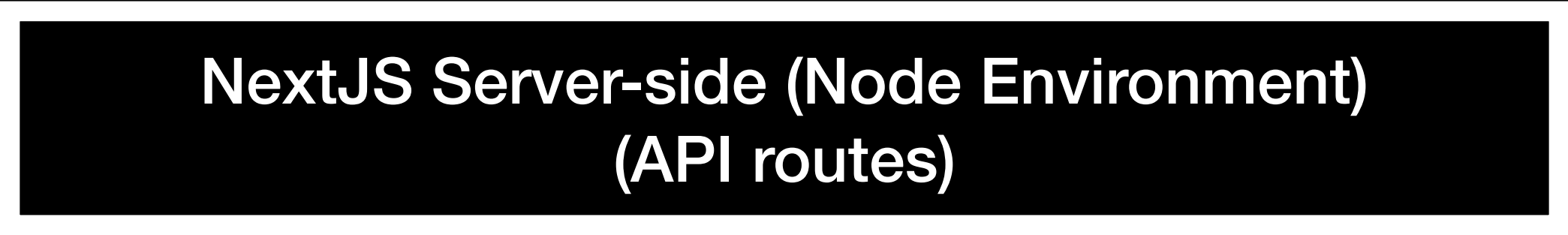
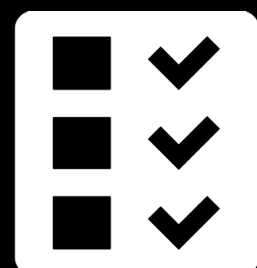


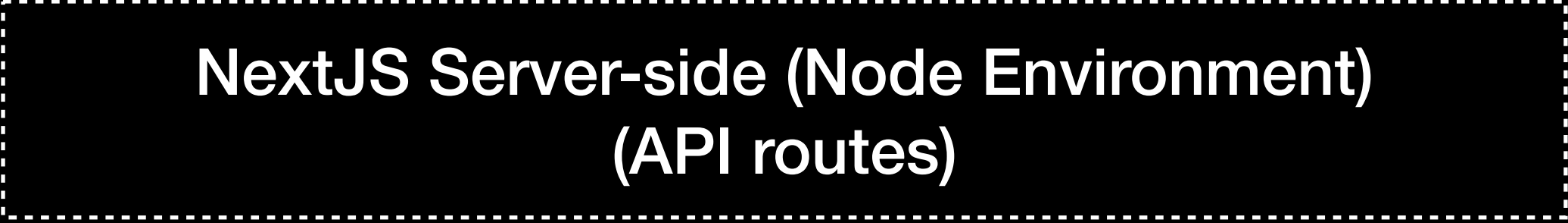
1:1



Token management

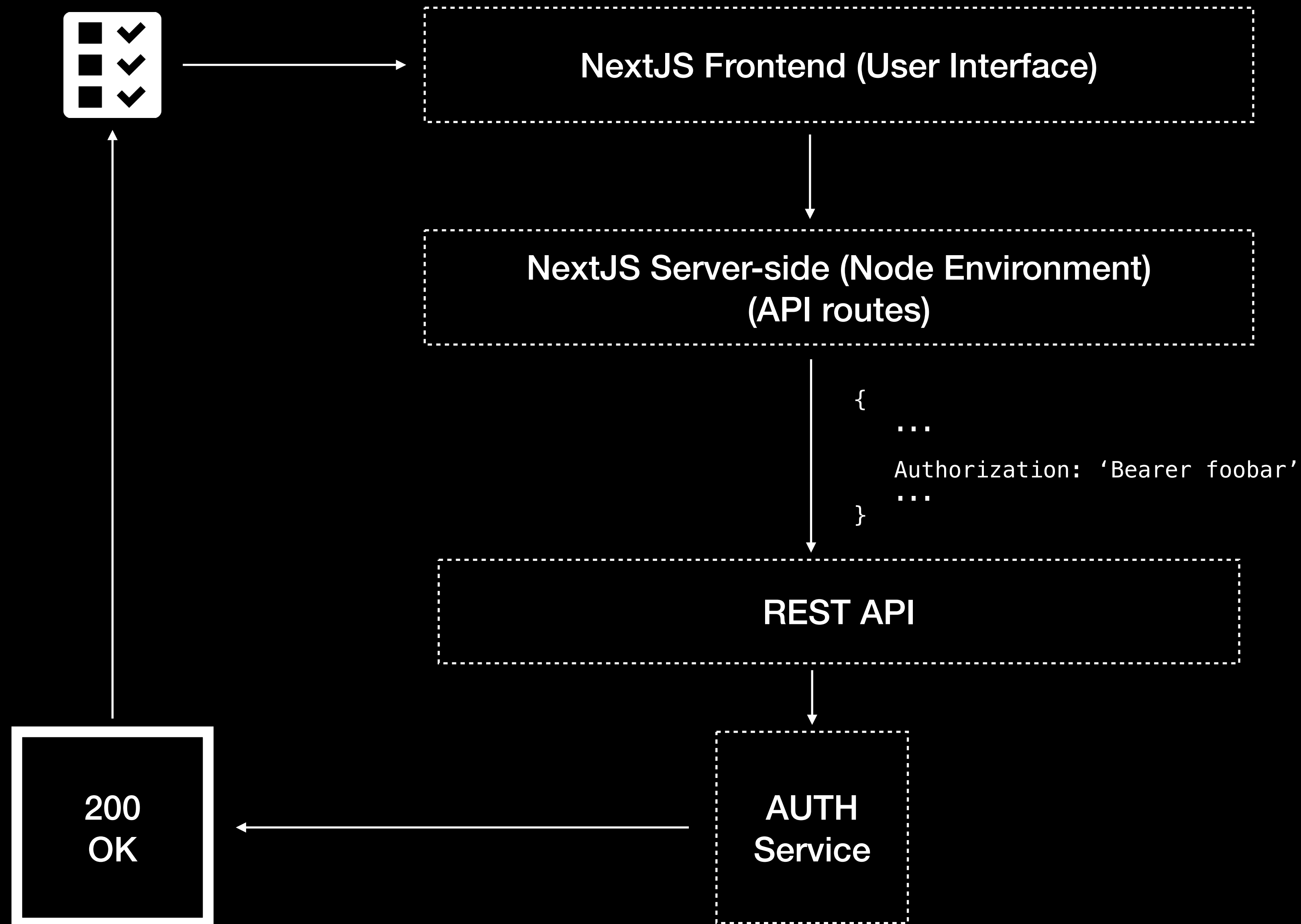


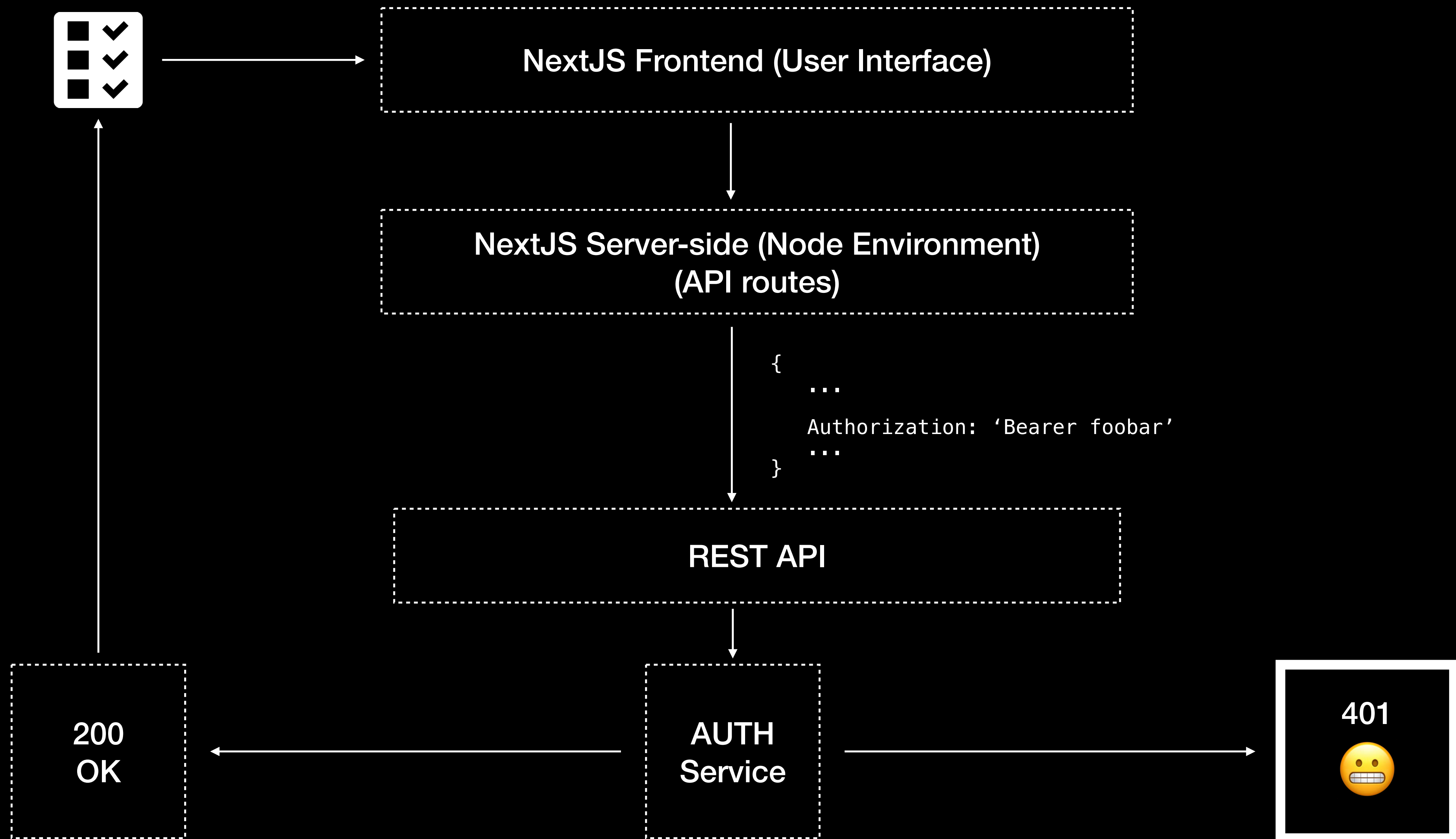




```
{  
  ...  
  Authorization: 'Bearer foobar'  
  ...  
}
```









1:2



**What Is The Library Even Doing
for Us?**

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 5KB of credential auth setup

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- Functions to handle JWT
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- Context Provider
- Middleware

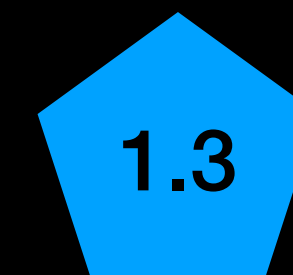
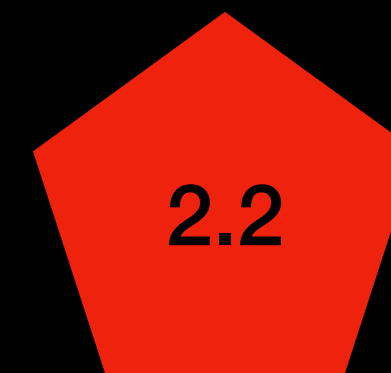
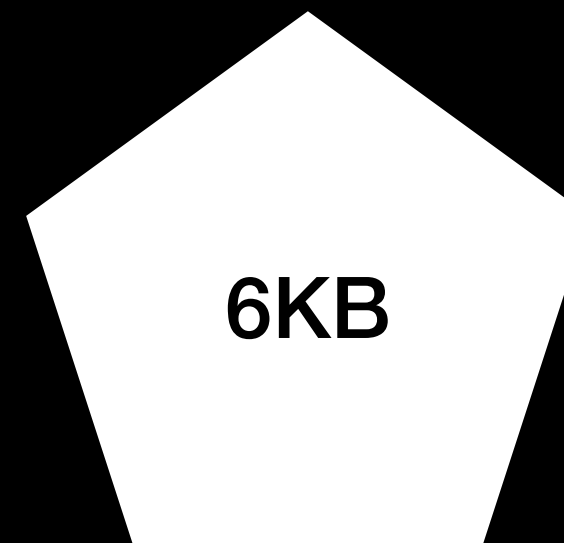
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 - `getSession()`
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- Context Provider
- Middleware



9.5 KB



The Final Verdict



800 KB

500 files

VS

9.5 KB

3 files



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- When the problem is truly **complex** at first
- When the alternative is way more **expensive**

But Be *Aware*

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- Hidden costs: library updates, breaking changes, maintenance headaches

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- Vendor lock-in: you're stuck with their roadmap, bugs, API decisions

Homework Time 📖

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- Find one external library in your project

Homework Time

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- Calculate the cost of the alternative

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- Suites you? Ged rid of it

Homework Time

- Find one external library in your project
- Calculate the cost of the alternative
- Suites you? Ged rid of it
- Repeat in a month



```
return axios.post(
  `${process.env.API_AUTH_URL}/oauth/token`,
  querystring.stringify(payload as any),
  {
    headers: {
      "Content-Type": "application/x-www-form-urlencoded",
      Authorization: `Basic
${process.env.API_AUTH_BASIC_TOKEN}`,
    }
  }
)
```



```
const fetchWrap = async <T = unknown>(url: string, options: RequestInit = {}): Promise<T> =>
{
  options = {
    ...options,
  }
  const response = await fetch(url, options)
  if (!response.ok) {
    const body = await response.json()
    if (body.message) {
      throw new Error(body.message)
    } else {
      throw `Error: ${response.status} ${response.statusText}`
    }
  }
  return await response.json()
}
export { fetchWrap }
```



```
const payload = new URLSearchParams(payload as
any).toString()
return fetchWrap(`${process.env.API_AUTH_URL}/oauth/token`, {
  method: "POST",
  body: payload,
  headers: {
    "Content-Type": "application/x-www-form-urlencoded",
    Authorization: `Basic ${process.env.API_AUTH_BASIC_TOKEN}`
  }
})
```




«Syntactic sugar
causes cancer of
the semi-colons»