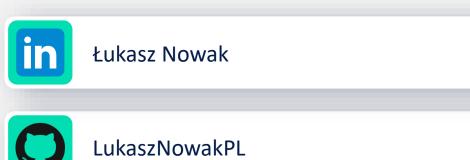


Codemods how to support your users with breaking changes delivery

Łukasz Nowak





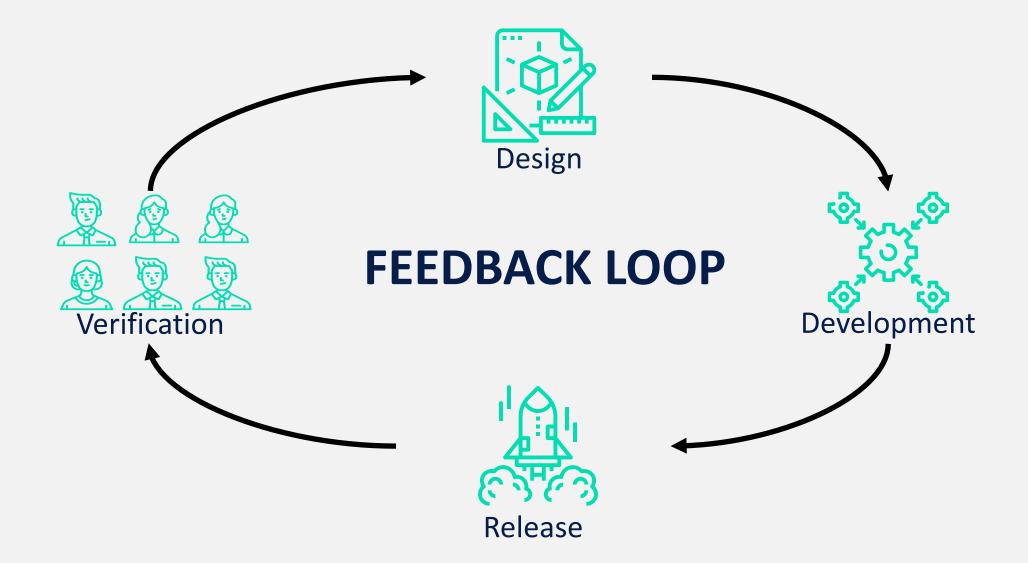






OPENSOURCE SOFTWARE DEVELOPMENT





PARTS AS GOOD AS OUR TEAM IS





Design



Development



Release

PARTS INDEPENDENT FROM TEAM QUALITY



Verification

INTRODUCING BREAKING CHANGES

- Sometimes are neutral for consumers
- Sometimes require some refactor
- This leads to delays on providing feedback

HANDLING BREAKING CHANGES

```
v 🖹 src/components/Breadcrumbs/Breadcrumbs.stories.tsx 🖺
                                                                                                                                                      View file @30f5f8e6
         <FlareBreadcrumbs>
                                                                                               <FlareBreadcrumbs>
          <FlareBreadcrumbs.Link href="#" label="Home" />
                                                                                                 <FlareBreadcrumbs.Link href="#" label="Home" />
          <FlareBreadcrumbs.Link href="#" label="Help" />
                                                                                                 <FlareBreadcrumbs.Link href="#" label="Help" />
          <FlareBreadcrumbs.Label label="Bonds" />
                                                                                                 <FlareBreadcrumbs.Link href="#" label="Bonds" />
         </FlareBreadcrumbs>
                                                                                                </FlareBreadcrumbs>
                                                                                             );
v 🖺 src/components/Breadcrumbs/Breadcrumbs.tsx 🖺
                                                                                                                                                      View file @30f5f8e6
       @@ -31,13 +31,6 @@ const BreadcrumbLink = ({ href = '#', label }: { href:
                                                                                             @@ -31,13 +31,6 @@ const BreadcrumbLink = ({ href = '#', label }: { href:
        );
                                                                                             );
       const BreadcrumbLabel = ({ label }: { label: string }) => (
       <div className={styles['breadcrumbs_label']}>{label}</div>
        38 - );
 39 -
       FlareBreadcrumbs.Link = BreadcrumbLink;
                                                                                             FlareBreadcrumbs.Link = BreadcrumbLink;

    FlareBreadcrumbs.Label = BreadcrumbLabel;

       export default FlareBreadcrumbs;
                                                                                              export default FlareBreadcrumbs;
```

AUTOMATING BREAKING CHANGES FIXES

jscodeshift Support Ukraine

jscodeshift is a toolkit for running codemods over multiple JavaScript or TypeScript files. It provides:

- A runner, which executes the provided transform for each file passed to it. It also outputs a summary of how many files have (not) been transformed.
- A wrapper around recast, providing a different API. Recast is an AST-to-AST transform tool and also tries to preserve the style of original code as much as possible.



Jscodeshift github page

EXAMPLE SOURCE CODE

Codemods code example @

This repository supports Codemods talk. Its aim is to show working example of codemod which performs changes over consumer codebase.

The repository contains two potential projects.

library contains code of frontend library which suppose to break api exposed. It also contains codemod example.

consumer contains code of application consuming the library.

The talk was performed during:

• React Alicante lightning talk (29.09.2023)



Github code example

CODEMOD EXAMPLE EXPLANATION



https://github.com/LukaszNowakPL/codemods/blob/main/library/codemods/v2/breadcrumbs.js



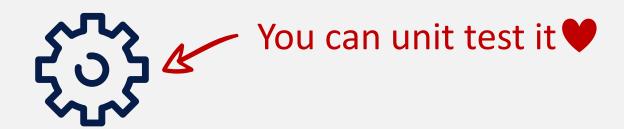
LukaszNowakPL/codemods

EXECUTING THE CODEMOD

```
npx jscodeshift
./src/
--parser=tsx
--extensions=ts,tsx
--transform=./codemods/v2/breadcrumbs.js
```

WORKING ASSURANCE

<FlareBreadcrumbs.Label label="Bonds" />



<FlareBreadcrumbs.Link href="#" label="Bonds" />

TEST CODE EXPLANATION



https://github.com/LukaszNowakPL/codemods/blob/main/library/codemods/v2/__tests__/breadcrumbs.test.ts



LukaszNowakPL/codemods

NOT COVERED EDGE CASES

```
export const Breadcrumbs: React.FC = () => {
  const {Link, Label} = FlareBreadcrumbs;
  return (
    <FlareBreadcrumbs>
      <Link href="#" label="Home" />
      <Label label="Bonds" />
    </FlareBreadcrumbs>
```

PUBLISH CODEMOD WITH YOUR LIBRARY

```
npx jscodeshift ./path/to/src/ \
    --extensions=ts,tsx \
    --parser=tsx \
    --transform=./node_modules/@tanstack/react-query/codemods/
    v4/replace-import-specifier.js
```



TanStack Query migration guide



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