Visual regression testing

Visual regression tests are split into two parts:

1. The rendered UI (short: fixture)
2. Instrumentation of that UI

Rendered UI

The composition of all tests happens in `./index.js`. The rendered UI is either:

1. located inside a separate file in `./fixtures` and written as a React component.

   Here is an [example](#) with the `Menu` component.

2. a demo from `docs/data`

   By default all demos are included. We exclude demos if they are redundant or flaky etc. The logic for this exclusion is handled (like the composition) in `./index.js`

If you introduce new behavior, prefer adding a demo to the documentation to solve documentation and testing with one file. If you're adding a new test prefer a new component instead of editing existing files since that might unknowingly alter existing tests.

Instrumentation

Manual

`yarn test:regressions:dev` will build all fixtures and render an overview page that lists all fixtures. This can be used to debug individual fixtures. By default, a devtools-like view is shown that can be disabled by appending `#no-dev` to the URL e.g. `http://localhost:3000/docs-customization-typography/CustomResponsiveFontSizes#no-dev` or forced by appending `#dev` to the URL e.g. `http://localhost:3000/docs-customization-typography/CustomResponsiveFontSizes#dev`.

Automatic

We're using [playwright](#) to iterate over each fixture and take a screenshot. It allows catching regressions like this one:

before diff

Screenshots are saved in `./screenshots/$BROWSER_NAME/`. Each test tests only a single fixture. A fixture can be loaded with `await renderFixture(fixturePath)` e.g. `renderFixture('TrapFocus/OpenTrapFocus')`.

Commands

For development `yarn test:regressions:dev` and `yarn test:regressions:run --watch` in separate terminals is recommended.

command	description

`yarn test:regressions`	Full run
`yarn test:regressions:dev`	Prepares the fixtures to be able to test in watchmode
`yarn test:regressions:run`	Runs the tests (requires `yarn test:regressions:dev` or `yarn test:regressions:build`+`yarn test:regressions:server`)
`yarn test:regressions:build`	Builds the webpack bundle for viewing the fixtures
`yarn test:regressions:server`	Serves the fixture bundle.