

RUBBERDØK PRESENTERER:

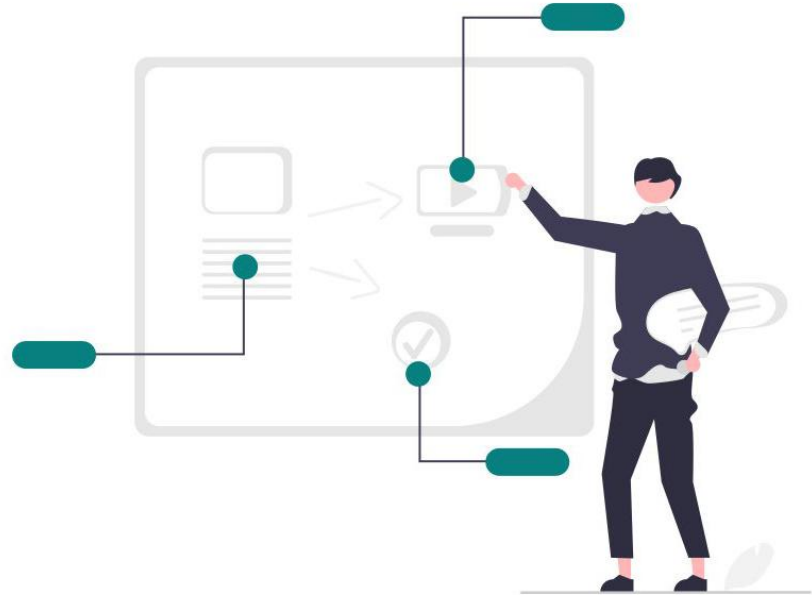
Intro til frontend-utvikling

github.com/rubberdok/webdev-demo

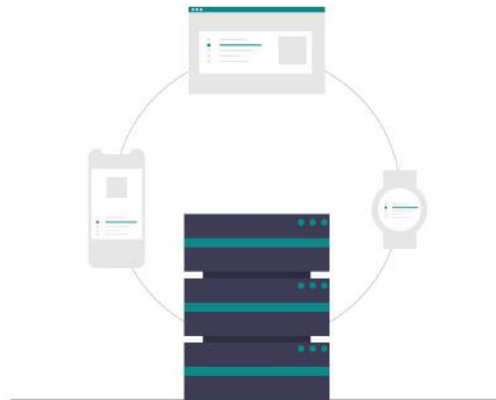
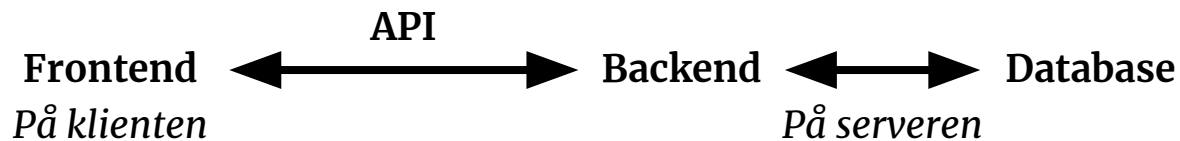
Innhold

- Struktur i webapplikasjoner
- Byggeklosser i frontend
 - HTML
 - CSS
 - JavaScript
- TypeScript
- Frontend-rammeverk
 - React
- Eksempel-app i React

github.com/rubberdok/webdev-demo



Typisk struktur i webapplikasjoner



Byggeklosser i frontend



HTML

Struktur

HTML



```
<html>
  <head>
    <title>My website</title>
  </head>
  <body>
    <h1>Welcome!</h1>
    <button class="my-btn">Click me!</button>
  </body>
</html>
```



Welcome!

Click me!

CSS

Utseende

CSS



```
h1 {  
  font-family: "Arial";  
  color: sienna;  
}  
  
.my-btn {  
  background-color: sandybrown;  
  border-radius: 10px;  
}
```



Welcome!

Click me!

JavaScript

Interaksjon

A yellow square containing the letters "JS" in a large, bold, black sans-serif font.

```
const setGoodbye = (element) => {  
  element.innerText = "Goodbye!";  
};  
  
const header = document.querySelector("h1");  
const button = document.querySelector(".my-btn");  
  
button.onclick = () => setGoodbye(header);
```



Welcome!

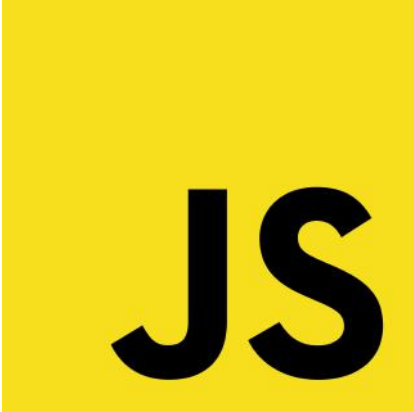
Click me!

TypeScript



JavaScript

Dynamiske typer

A yellow square with the letters "JS" in a large, bold, black sans-serif font.

```
const setGoodbye = (element) => {  
  element.innerText = "Goodbye!";  
};  
  
const header = document.querySelector("h1");  
const button = document.querySelector(".my-btn");  
  
button.onclick = () => setGoodbye(undefined);
```



```
✖ ▶ Uncaught TypeError: Cannot set properties of undefined (setting 'innerText')  
    at setGoodbye (example.js:2:21)  
    at button.onclick (example.js:8:24)
```

TypeScript

Statistiske typer



```
const setGoodbye = (element: HTMLElement) => {  
  element.innerText = "Goodbye!";  
};  
  
const header = document.querySelector("h1")!;  
const button = document.querySelector("button")!;  
  
button.onclick = () => setGoodbye(undefined);
```

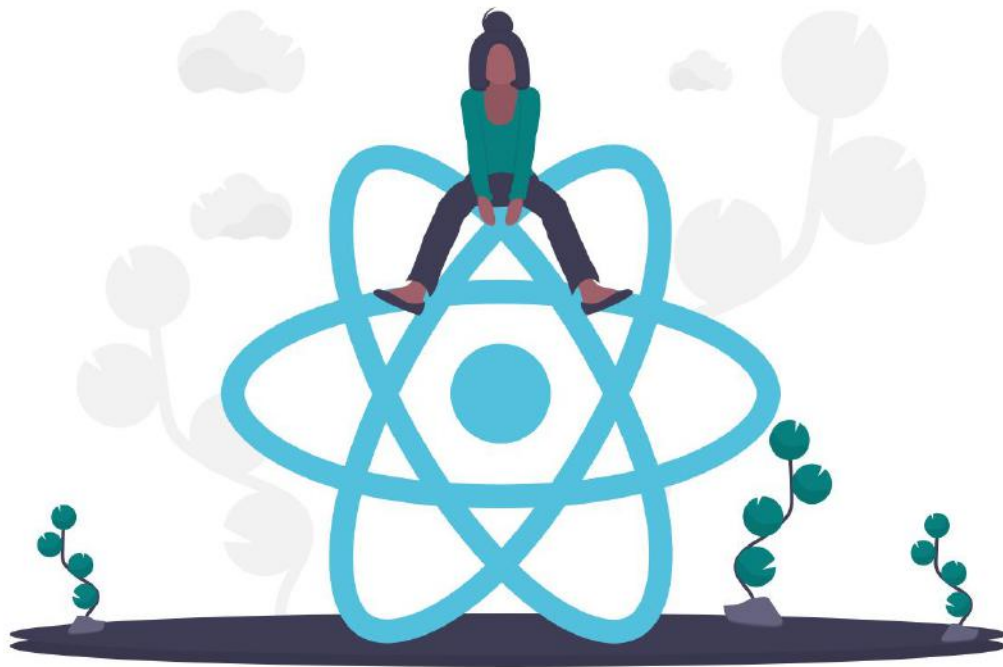


```
const hea  
const but  
button.onclick = () => setGoodbye(undefined);
```

Argument of type 'undefined' is not assignable to parameter of type 'HTMLElement'. ts(2345)

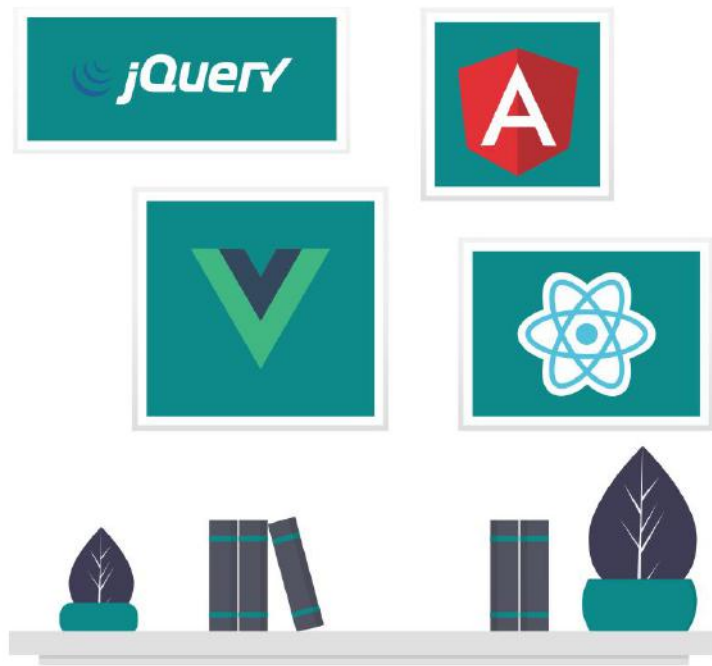
[View Problem](#) No quick fixes available

Frontend-rammeverk



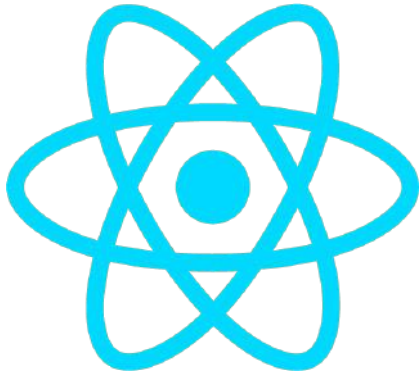
Frontend-rammeverk

- Hvorfor rammeverk?
 - **Struktur og interaksjon** er ofte tett koblet i applikasjoner
 - Synkronisere **state** og **rendering**
 - **Komponenter** gir bedre kodestruktur
- Mange alternativer
 - React
 - Vue
 - Angular
 - Svelte
 - ...



React

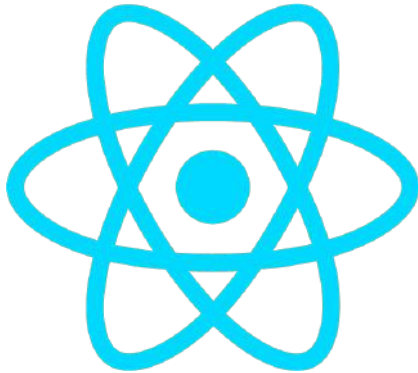
Komponenten



```
const App = () => {  
  const [header, setHeader] = useState("Welcome!");  
  
  const setGoodbye = () => {  
    setHeader("Goodbye!");  
  };  
  
  return (  
    <>  
      <h1>{header}</h1>  
      <button onClick={setGoodbye} className="my-btn">  
        Click me!  
      </button>  
    </>  
  );  
};
```

React

Komponenten

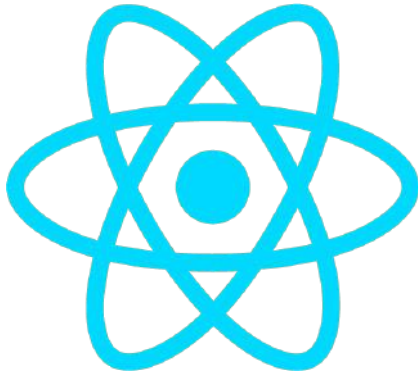


Komponent

```
const App = () => {  
  const [header, setHeader] = useState("Welcome!");  
  
  const setGoodbye = () => {  
    setHeader("Goodbye!");  
  };  
  
  return (  
    <>  
      <h1>{header}</h1>  
      <button onClick={setGoodbye} className="my-btn">  
        Click me!  
      </button>  
    </>  
  );  
};
```

React

Komponenten



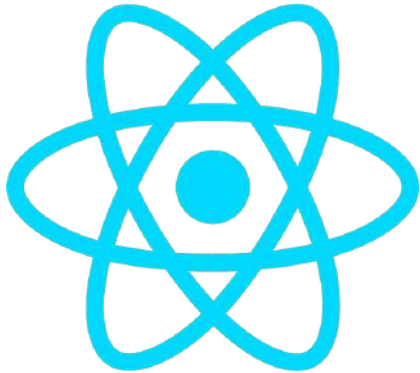
```
const App = () => {  
  const [header, setHeader] = useState("Welcome!");  
  
  const setGoodbye = () => {  
    setHeader("Goodbye!");  
  };  
};
```

HTML ("JSX")

```
return (  
  <>  
    <h1>{header}</h1>  
    <button onClick={setGoodbye} className="my-btn">  
      Click me!  
    </button>  
  </>  
)  
};
```


React

Komponenten



```
const App = () => {                                State
  const [header, setHeader] = useState("Welcome!");

  const setGoodbye = () => {
    setHeader("Goodbye!");
  };

  return (
    <>
      <h1>{header}</h1>
      <button onClick={setGoodbye} className="my-btn">
        Click me!
      </button>
    </>
  );
};
```


Tid for å progge!

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