

Restaurant micro frontend

Bon Appétit

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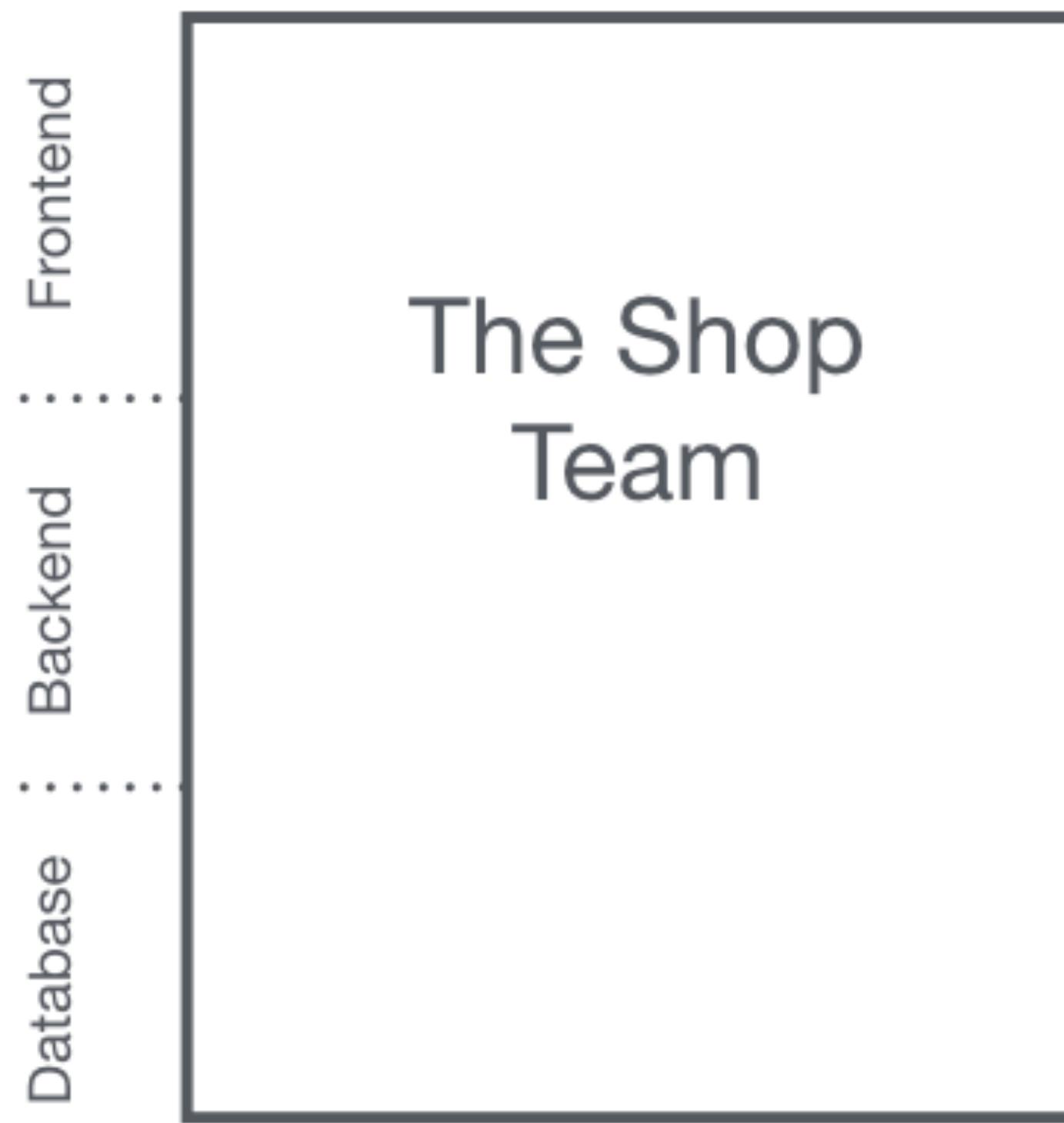
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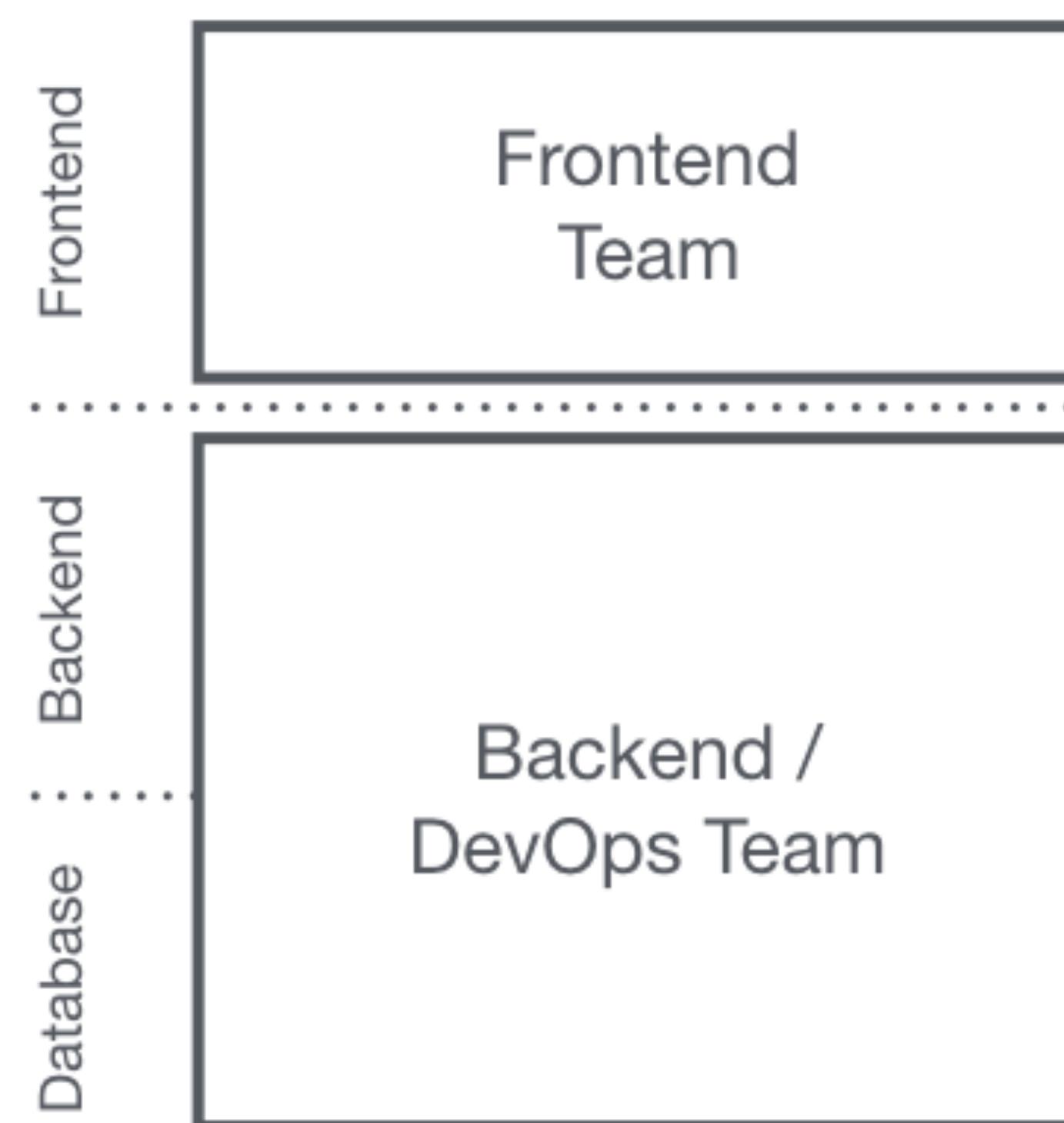


Erklärung

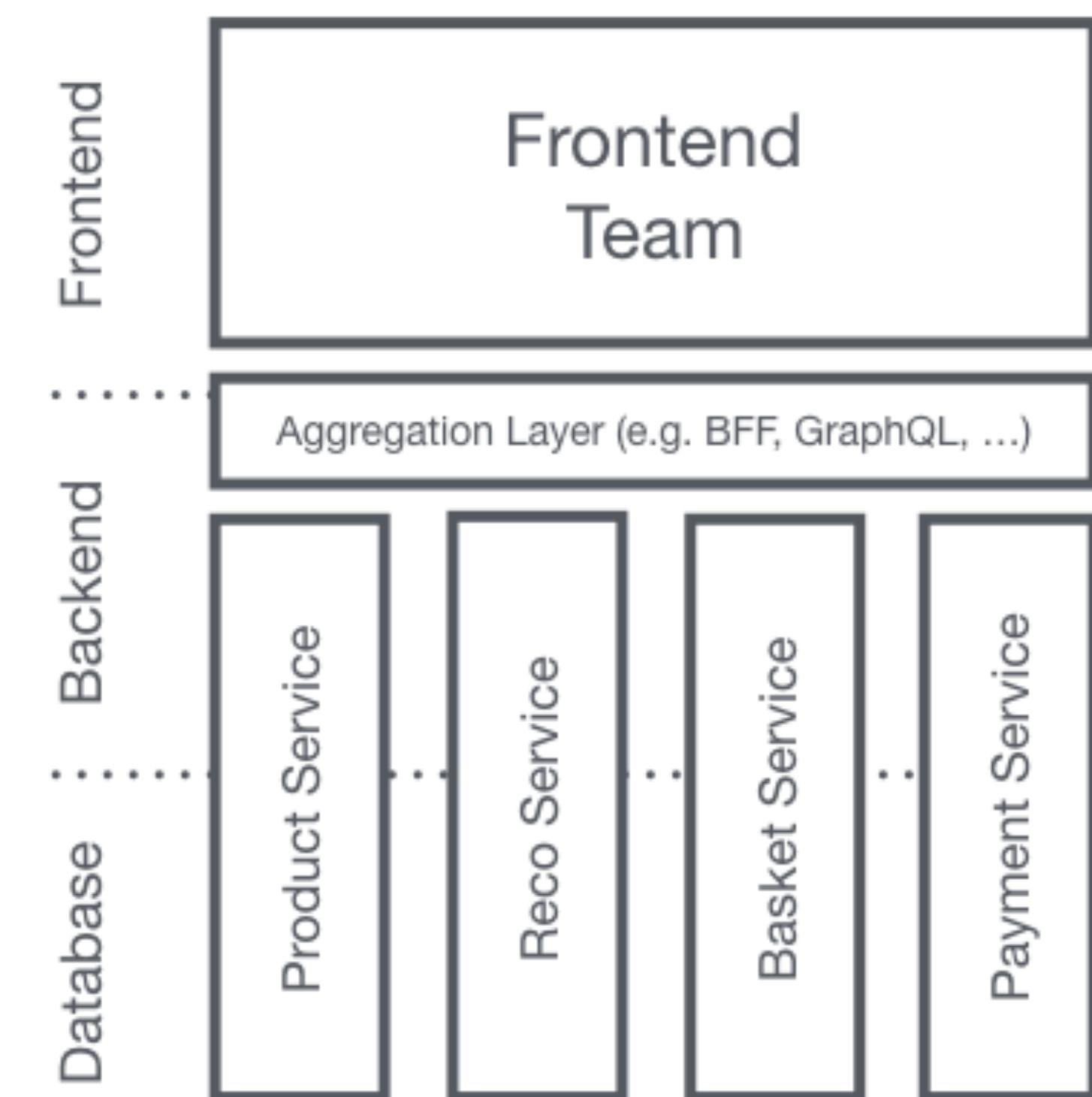
The Monolith



Front & Back

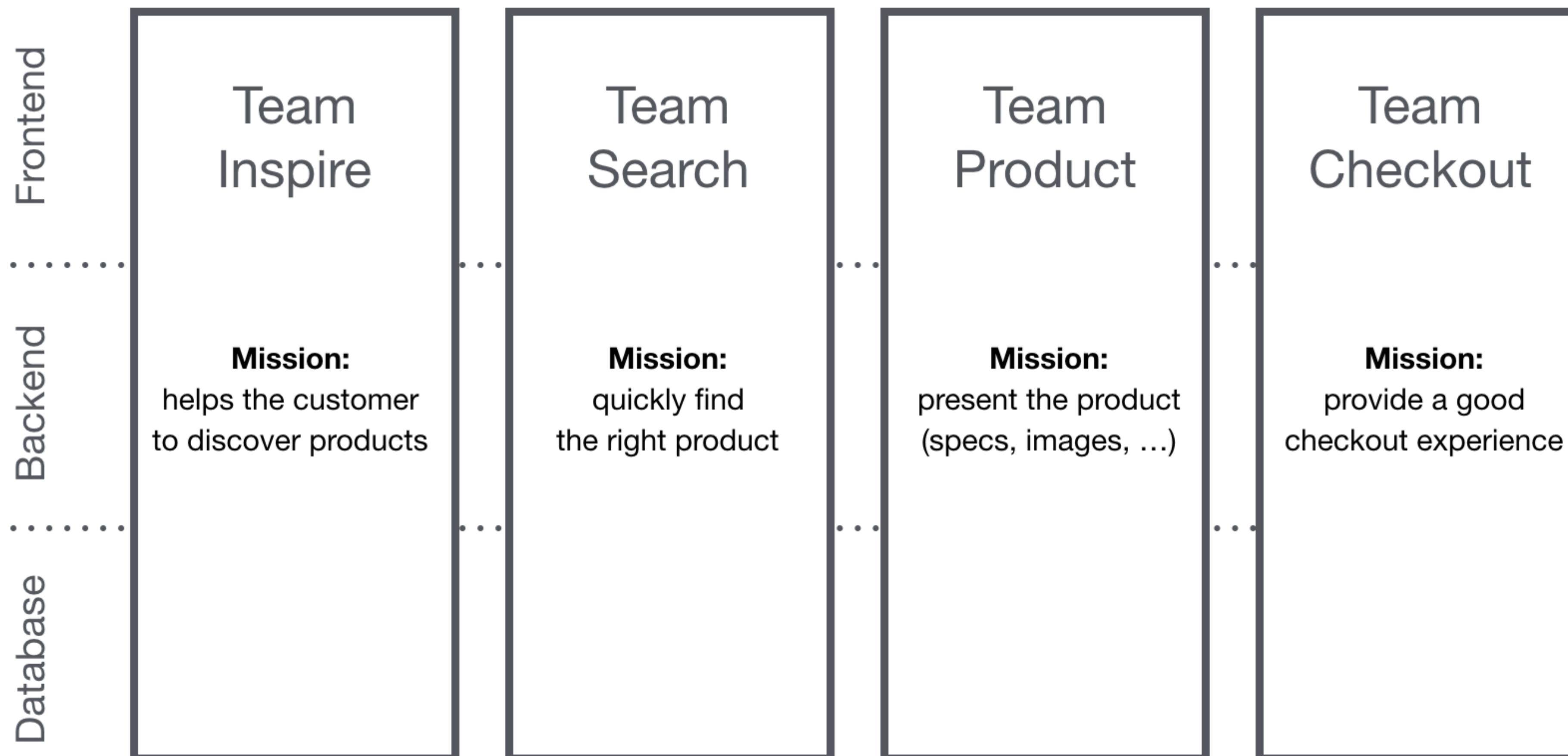


Microservices



Erklärung

End-to-End Teams with Micro Frontends



Erklärung

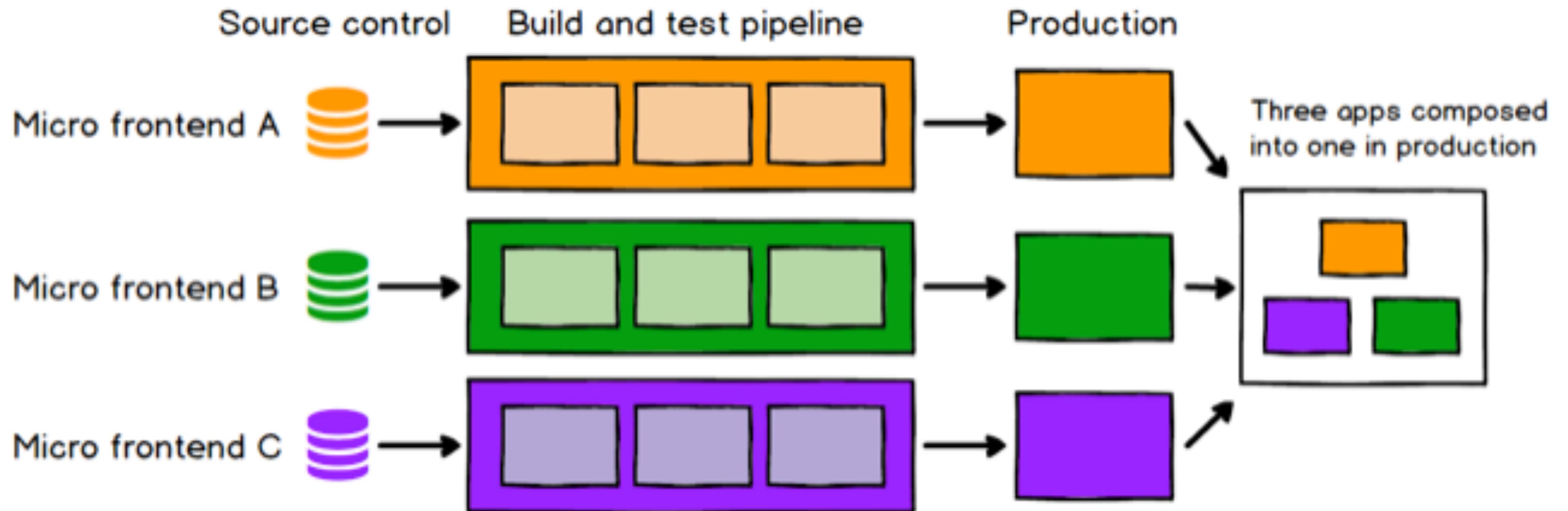
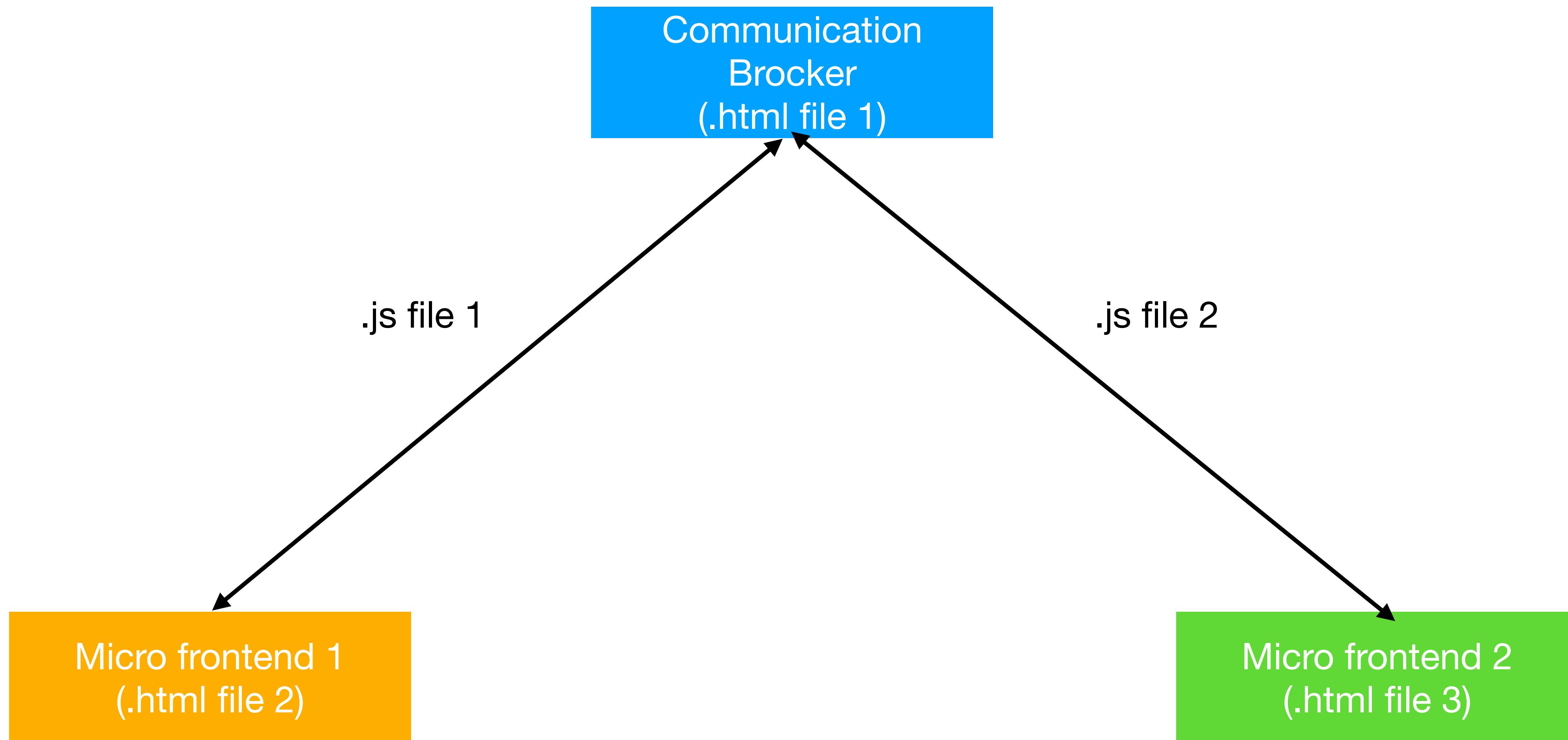


Figure 2: Each micro frontend is deployed to production independently

Erklärung



Beispiel

Restaurant.html

Suche.html
Micro frontend

Filtern.html
Micro frontend

Products.html
Micro frontend

Code - HTML Frontends

```
<> composition.html > ⚭ script
  1  <link rel="stylesheet" href="style.css" />
  2  <iframe src="./menu/index.html" id="menu"></iframe>
  3  <iframe src="./filter/index.html" id="filter"></iframe>
  4  <script src="script.js"></script>
```

```
filter > <> index.html > ⚭ div#main > ⚭ div.container-fluid
<form class="form-inline" id="searchForm">
  <input class="form-control mr-sm-2" type="text">
  <button class="btn btn-primary my-2 my-sm-0" type="submit">
    | Search
    </button>
  </form>
```

Code - EventBus (Connector)

```
EventBus > JS EventBus.js > EventBus > emmit
  1  function EventBus() {
  2    this.listeners = {};
  3    this.emmit = (type, data) => {
  4      window.parent.postMessage({ type, data }, "*");
  5    };
  6    this.subscribe = (type, fn) => {
  7      this.listeners[type]
  8        ? this.listeners[type].push(fn)
  9        : (this.listeners[type] = [fn]);
 10    };
 11    this.unsubscribe = (type, fn) => {
 12      this.listeners[type] = this.listeners[type].filter(
 13        listener => listener !== fn
 14      );
 15    };
}
```

Code - Vue & JS

```
menu > JS script.js > ⚒ methods > ⚒ <unknown>
1  const eventBus = new EventBus();
2  new Vue({
3    el: "#search",
4    data: {
5      results: [],
6      products: ["Apple", "Banana", "Orange"]
7    },
8    methods: {
9      filter: function(searchObj) {
10        this.results = this.products.filter(o =>
11          Object.keys(o).some(k => o[k].toLowerCase().includes(searchObj.toLowerCase()))
12        console.log(this.results);
13      }
14    }
  ...
```

Beispiel

Products menu

- Apple [Add to filter](#)
- Banana [Add to filter](#)
- Orange [Add to filter](#)

Shopping filter

 [Search](#)

Search results: Apple, Orange, Banana

Products menu

- Apple [Add to filter](#)
- Banana [Add to filter](#)
- Orange [Add to filter](#)

Shopping filter

 [Search](#)

Search results: Orange

Products menu

- Apple [Add to filter](#)
- Banana [Add to filter](#)
- Orange [Add to filter](#)

Shopping filter

 [Search](#)

Search results: No search result found

Referenzen

- <https://martinfowler.com/articles/micro-frontends.html>
- <https://livebook.manning.com/book/micro-frontends-in-action/chapter-1/64>
- Beispiel: <https://demo.microfrontends.com>
- <https://layoutit.com/build>
- <https://github.com/andregardi/micro-frontends-iframe#compositionhtml>

Vielen Dank und Mahlzeit

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