

TINF22B6 Semester 4

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OUR FOCUS

Semester 3 and our start in semester 4

TECHNICAL IMPLEMENTATION

We want to give you a big overview about our technical aspects of the project

RUNNING DEMO

We want to share our progress and workflow with you

LESSONS LEARNED

In this semester we got a lot of insights into software development and learnt many things

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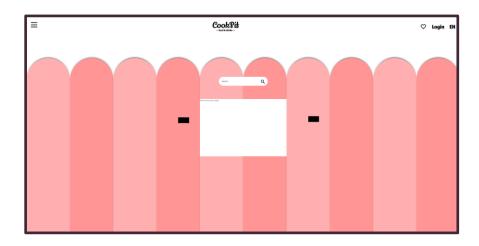
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Recap

We have decided to keep CookPit as simple as possible:

→ the reason for this: usability

We decided to not offer many special functions for the user, because we knew that only 10% of CookPit users actually use them. Therefore we made the decision to focus more on UX





CookPit is a cooking platfrom where you can browse for recipes and upload your own

-> this topic were our main focus on

Userbility

full range of functions on all platforms

Efficiencies

fast and standardised communication between user and database

Simplicity

easy to find your way around and no hidden functions



Project setup

React as main framework



GitHub actions for automated tests



SQLite as Database



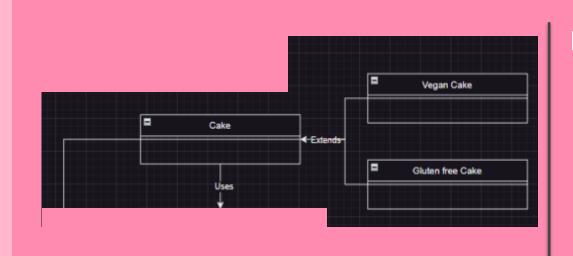
Express



Architecture Design

Seperation between frontend, backend and database

Component-based architecture enables a modular and scalable solution, simplifying maintenance and future expansions. By clearly separating frontend, backend, and database, each component can be developed and optimized independently.



Design Patterns

Minimal use of the builder pattern Problem:

-> CookPit is not object-orientated, but template for displaying a cake recipe is used for other categories

Used Metrics:

- Web Application Performance Metrics (User Satisfaction / Apdex Scores)
 - -> Apdex = (StatisfiedCount + (0.5 * ToleratingCount) +(0 * FrustratedCount))/TotalSamples
- Web Application Monitoring Tools
 - > Check user interactions
- Code Complexity Metric
 - -> Callculate Code Complexity

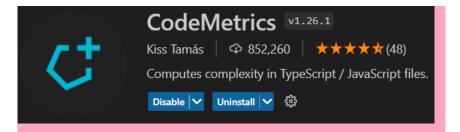
Test Setup:

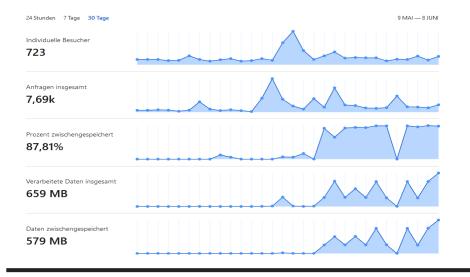
- Component Testing
 - -> Key features like OpenAl, RecipeUpload, Communication between
- Unit Testing:
 - -> Test for Buttons, Inputfileds, Renderring

METRICS AND TESTS

```
Complexity is 3 Everything is cool!
const getallrecipe = () => {
 axios
    .post("http://localhost:3001/getallrecipe", {})
    .then((response: { data: any }) => {
      setAllRecipes(response.data.results);
    });
Complexity is 4 Everything is cool!
useEffect(() => {
 getallrecipe();
 const token = localStorage.getItem("token");
 if (token) {
    axios
      .post("http://localhost:3001/verifyToken", { token })
      .then((response) => {
        console.log(
          "Token verification, Token valid?",
          response.data.isValid
```

We have used a VSCode extention to callculate our Code complexity and establish Clean Code



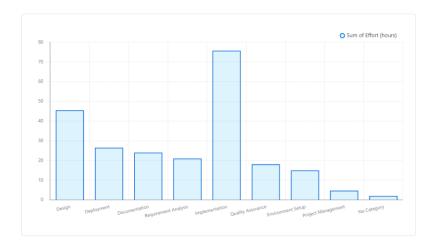




Web Application Monitoring Tools

We are using Strato fo hosting our web application and Mapbox to track the user interactions.

Last month we had in total 8000 users visting our website. We are looking forward to it





EFFORT

Chart one shows the planed time effort per category.

The second chart is displaying our planed time effort per person.

It can be said that the planning of the time was very difficult, that it was our first own project and we had not yet dealt with many technologies and therefore put a lot of time into the research

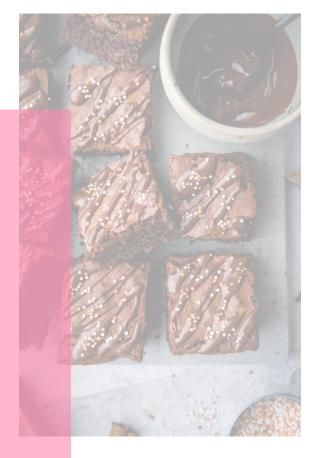


Docker & NodeJS

Like other Teams we are using Github Actions for automated tests. For example NodeJS to ensure that CookPit runs on all possible NodeJS versions

Demo time

Follow the project updates on our weekly GitHub blog.





Setting up a project

Planning

Framework and technologies

Teamwork

Data structure

Testing & Metrics