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Semester 1
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Entwicklung einer Webapp

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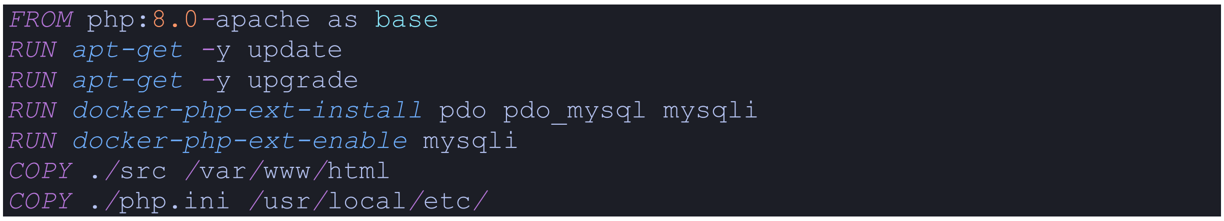
Tools

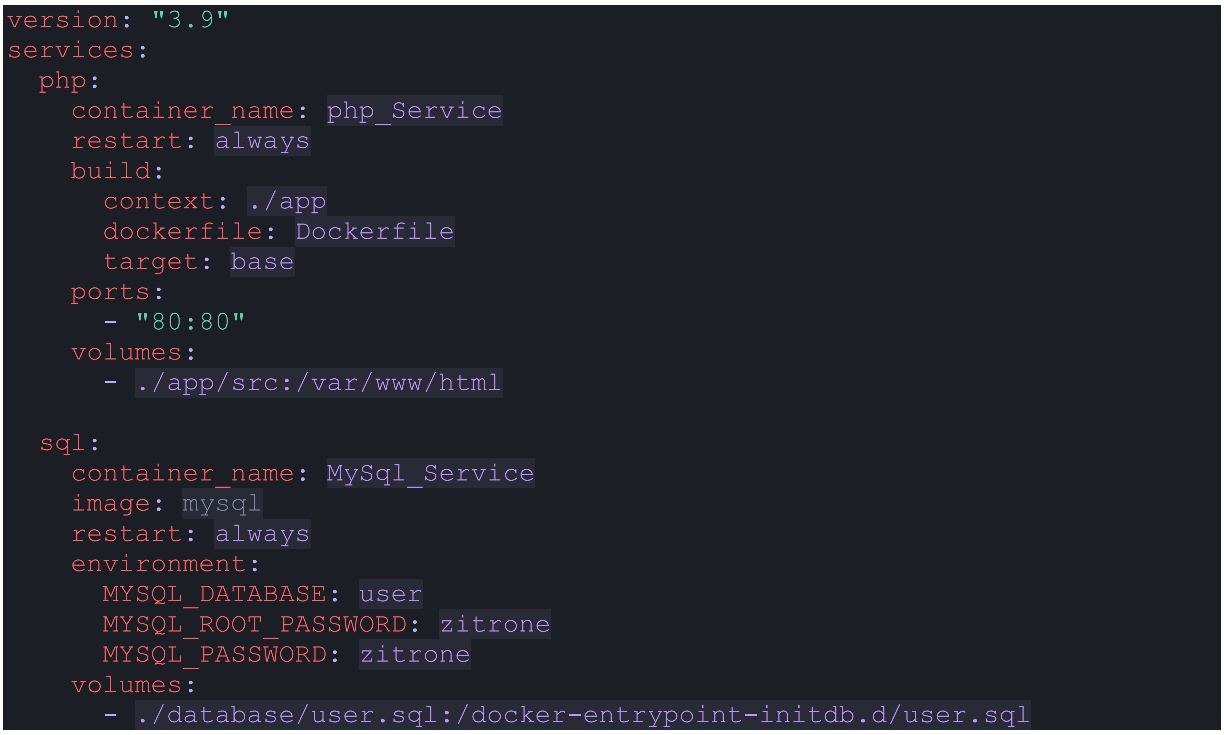
Docker

Dockerfile



```
FROM php:8.0-apache as base
RUN apt-get -y update
RUN apt-get -y upgrade
RUN docker-php-ext-install pdo pdo_mysql mysqli
RUN docker-php-ext-enable mysqli
COPY ./src /var/www/html
COPY ./php.ini /usr/local/etc/
```

docker-compose.yml



```
version: "3.9"
services:
  php:
    container_name: php_Service
    restart: always
    build:
      context: ./app
      dockerfile: Dockerfile
      target: base
    ports:
      - "80:80"
    volumes:
      - ./app/src:/var/www/html

  sql:
    container_name: MySql_Service
    image: mysql
    restart: always
    environment:
      MYSQL_DATABASE: user
      MYSQL_ROOT_PASSWORD: zitrone
      MYSQL_PASSWORD: zitrone
    volumes:
      - ./database/user.sql:/docker-entrypoint-initdb.d/user.sql
  phpmyadminZ%Ttttttttttttttttttttttttttttttttttttttt







Gggggggggggggggggggggggg5,zzzzzzzzzzzzzzzzzzzzzzzz:
    image: phpmyadmin
    restart: always
    ports:
      - 8088:80
    environment:
      - PMA_ARBITRARY=1
```

Github

https://github.com/SpaRaw/IU_GWD_Chatroom.git

Registrierung

Registrierung.php

```
if(isset($_POST["pw"], $_POST["user"])){
    $pw = hash('sha256', $_POST["pw"]);
    $user = $_POST["user"];
    $servername = "sql";
    $username = "root";
    $password = "zitrone";
    $sql = "INSERT INTO `user`(`user_name`, `passwort`) VALUES (?, ?)";
    try {
        $conn = new PDO("mysql:host=$servername;dbname=user", $username,
$password);
        // set the PDO error mode to exception
        $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
        $stmt = $conn->prepare($sql);
        $stmt->execute([$user, $pw]);
        echo("<script>location.href='/'; </script>");
    } catch(PDOException $e) {
        echo "Connection failed: " . $e->getMessage();
    }
}
```

register.js

```
function isPWsecure(pw){
    let pwStatus = [];
    if(pw.length < 8){
        pwStatus.push("8 Zeichen");
    }
    if(pw.match(/[A-Z]/)==null){
        pwStatus.push("Großbuchstaben");
    }
    if(pw.match(/\W/)== null){
        pwStatus.push("Sonderzeichen");
    }
    return pwStatus;
}
```

API

Api.php

```
<?php
$servername = "sql";
$username = "root";
$password = "zitrone";
$sql_fetch = "SELECT posts.ID, posts.content, user.user_name FROM `posts`
LEFT JOIN `user` ON posts.post_id=user.ID ORDER BY `posts`.`ID` DESC ";
try {
    $conn = new PDO("mysql:host=$servername;dbname=user", $username,
$password);
    // set the PDO error mode to exception
    $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
    if ($_SERVER['REQUEST_METHOD'] === 'POST'){
        $sql_insert = "INSERT INTO `posts`(`post_id`, `content`) VALUES ('"
. trim($_POST["user"]) . "','" . trim($_POST["content"]) . "')";
        $stmt = $conn->prepare($sql_insert);
        $stmt->execute();
        echo("<script>location.href='/chat.php';</script>");
    }else{
        $stmt = $conn->prepare($sql_fetch);
        $stmt->execute();
        $result = $stmt->fetchAll();
        echo(json_encode(['obj' => $result]));
    }

} catch (PDOException $e) {
    echo "Connection failed: " . $e->getMessage();
}
```

Chatroom

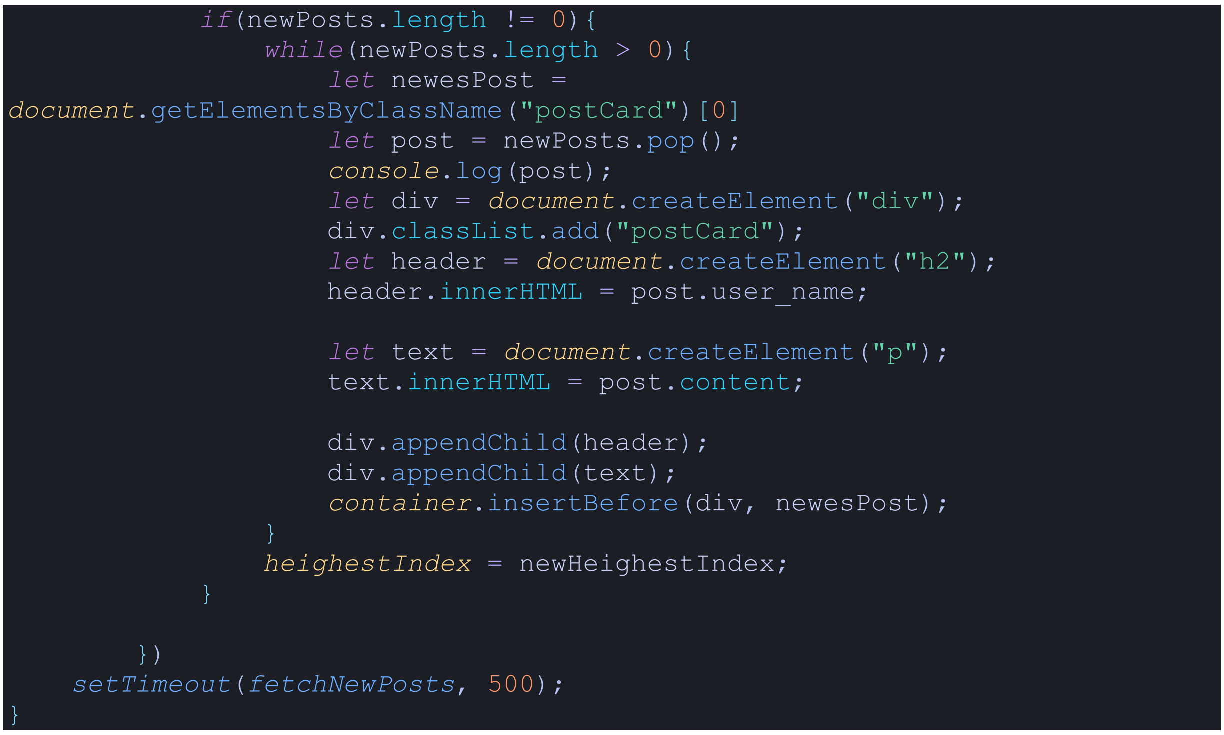
Chat.php

```
<?php
    if(empty($_SESSION["UID"])){
        $_SESSION["UID"] = 2;
    }
?>
<div class="contentLimiter">
    <div id="posts">

    </div>
```

handlePost.js

```
function fetchNewPosts(){
    console.log("fetch");
    fetch("/api.php")
        .then(response =>  response)
        .then(response => response.text())
        .then(body => {
            let data = JSON.parse(body).obj;
            let newHeighestIndex = data[0].ID;
            let newPosts = data.slice(0, newHeighestIndex-heighestIndex)
```



```
            if(newPosts.length != 0){
                while(newPosts.length > 0){
                    let newesPost =
document.getElementsByClassName("postCard")[0]
                    let post = newPosts.pop();
                    console.log(post);
                    let div = document.createElement("div");
                    div.classList.add("postCard");
                    let header = document.createElement("h2");
                    header.innerHTML = post.user_name;

                    let text = document.createElement("p");
                    text.innerHTML = post.content;

                    div.appendChild(header);
                    div.appendChild(text);
                    container.insertBefore(div, newesPost);
                }
                heighestIndex = newHeighestIndex;
            }

        })
    setTimeout(fetchNewPosts, 500);
}
```