### LAPORAN PRAKTIKUM PEMOGRAMAN PERANGKAT BERGERAK

# (APLIKASI LAUNDRY)

Diajukan untuk memenuhi salah satu persyaratan dalam Mata Kuliah Pemograman Perangkat Bergerak



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### **PENDAHULUAN**

### A. Latar Belakang Aplikasi Mobile

Aplikasi *Mobile* merupakan sebuah Program yang dikembangkan agar dapat digunakan pada perangkat bergerak seperti *Phone/Tablet* ataupun Jam tangan.

Android digunakan lebih dari 80% dari semua *smartphone* Lebih dari 2 Juta aplikasi Android di *Google Play store*.

Aplikasi *Mobile* pada saat ini merupakan teknologi yang snagat berkembang pesat. Perkembangan aplikasi *Mobile* yang pesat berdampak pada gaya hidup masyarakat sehati-hari. Aplikasi *Mobile* saat ini banyak digunakan untuk membantu aktivitas pada kehidupan sehari-hari. Keunggulan dari aplikasi *mobile* adalah sifatnya yang mudah dan dapat diguanakn dimana saja sehingga aplikasi ini sangat cocok untuk membantu aktivitas yang memiliki mobilitas Tinggi.

Laundry merupakan sebuah Usaha yang berada dikalangan masyarakat yang saat ini sangat bersatu dengan kehidupan masyarakat. Keberadaan Laundry dikalangan masyarakat sangat dibutuhkan terutama bagi masyarakat yang keseharian nya sangat produktif dalam pekerjaan atau pun kegiatan luar lainnya.

Dikarenakan Pesatnya perkembangan Aplikasi *Mobile* dikalangan Masyarakat disini kami membuat sebuah aplikasi *Mobile* yang dapat digunakan oleh pengusaha *Laundry* yang dapat membantu dalam Proses perhitungan jumlah *laundry* hingga pembayarannya.

### B. Tujuan Pembuatan Aplikasi Laundry

Secara umum Tujuan kami membuat Aplikasi ini yaitu untuk memenuhi sebuah syarat dalam Mata Kuliah Pemograman Perangkat Bergerak, selain itu Tujuan kami yaitu untuk mempermudah dalam proses *Lundry* Pakaian dikalangan masyarakat, yang dimana seperti yang kita tahu saat ini *Laundry* masih banyak yang menggunakan kertas untuk proses Pembayaran nya, jadi kami membuat Aplikasi Mobile Laundry yang dapat diguanakan untuk Penghitungan dan pembayaran agar mempermudah dan mempercepat pekerjaan.

### C. Batasan Masalah

Adapun batasan masalah yang penulis buat berguna sebagai pedoman agar tidak meluas dari pembahasan yang penulis lakukan, adapun batasan tersebut :

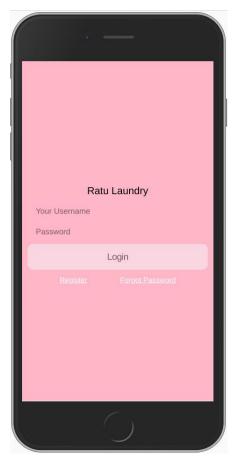
- 1. Kurang nya Pemahaman dalam menggunakan Visual Studio Code.
- 2. Alat Kerja yang kurang memadai.

### C. Pembahasan

Aplikasi *Laundry* merupakan sebuah Aplikasi *Mobile* yang dimana berisikan mengenai pendataan jumlah kain yang akan dilaundry hingga proes pembayarannya, yang dimana aplikasi *Laundry* dapat digunakan di *Smartphone* yang di buat sederhana agar mudah dipahami dan juga mudah digunakan.

# 1. Login Page

Login Page disini merupakan halaman untuk masuk kedalam aplikasi Ratu Laundry



Login Page

```
ratu_laundry-master > src > app > pages > login > ♀ login.page.scss > ધ₃ .flex
      .flex {
          display: flex;
          display: flex;
          justify-content: center;
          align-items: center;
          width: 100%;
        .space-evenly {
          display: flex;
          justify-content: space-evenly;
          align-items: center;
          width: 100%;
          display: flex;
          justify-content: flex-end;
          align-items: center;
          width: 100%;
        .formCenter {
          display: flex;
          justify-content: center;
          align-items: center;
          height: 100%;
          color: □#fff;
```

```
TS login.page.spec.ts ×
ratu_laundry-master > src > app > pages > login > TS login.page.spec.ts > ...
  1 vimport { async, ComponentFixture, TestBed } from '@angular/core/testing';
2 import { IonicModule } from '@ionic/angular';
       import { LoginPage } from './login.page';
       describe('LoginPage', () => {
         let component: LoginPage;
         let fixture: ComponentFixture<LoginPage>;
         beforeEach(async(() => {
           TestBed.configureTestingModule({
              declarations: [ LoginPage ],
              imports: [IonicModule.forRoot()]
            }).compileComponents();
            fixture = TestBed.createComponent(LoginPage);
            component = fixture.componentInstance;
            fixture.detectChanges();
          it('should create', () => {
          expect(component).toBeTruthy();
```

# 2. Home Page

Home Page disini merupakan halaman awal dalam aplikasi Ratu Laundry





Home Page

```
dashboard.page.html ×
ratu_laundry-master > src > app > pages > dashboard > ♦ dashboard.page.html > ♦ ion-app
      ion-app>
        <ion-menu side="start" content-id="main-content">
            <ion-toolbar translucent>
             <ion-title>Menu</ion-title>
            </ion-toolbar>
                <ion-icon name="person" slot="start"></ion-icon>
                <ion-label>Profile</ion-label>
              <ion-item (click)="logout()">
                <ion-icon name="log-in-outline" slot="start"></ion-icon>
                 <ion-label>Logout</ion-label>
         </ion-menu>
        <div class="ion-page" id="main-content">
            <ion-toolbar>
              <ion-buttons slot="start">
                <ion-menu-button></ion-menu-button>
              <ion-title>Home</ion-title>
```

```
dashboard.page.scss X
ratu_laundry-master > src > app > pages > dashboard > 💡 dashboard.pag
       .text {
       // margin-top: 0;
        margin-bottom: 0;
        margin-left: 1em;
      .card {
        margin-top: 0;
         margin-bottom: 0;
      .image {
        width: 10000rem;
        height: auto;
      .leftCard {
        margin: auto;
      .center {
         display: flex;
         justify-content: space-around;
         align-items: center;
         width: 100%;
      ion-card {
         height: 100%;
         width: 87%;
```

```
TS dashboard.page.spec.ts ×
ratu_laundry-master > src > app > pages > dashboard > TS dashboard.page.spec.ts > ...
      import { async, ComponentFixture, TestBed } from '@angular/core/testing';
      import { IonicModule } from '@ionic/angular';
      import { DashboardPage } from './dashboard.page';
      describe('DashboardPage', () => {
         let component: DashboardPage;
         let fixture: ComponentFixture<DashboardPage>;
         beforeEach(async(() => {
          TestBed.configureTestingModule({
            declarations: [ DashboardPage ],
             imports: [IonicModule.forRoot()]
           }).compileComponents();
           fixture = TestBed.createComponent(DashboardPage);
           component = fixture.componentInstance;
           fixture.detectChanges();
         it('should create', () => {
          expect(component).toBeTruthy();
```

```
🕦 dashboard.page.ts 🗙
ratu_laundry-master \gt src \gt app \gt pages \gt dashboard \gt TS dashboard.page.ts \gt ...
       import { Component, OnInit } from "@angular/core";
       import { AuthenticationService } from "src/app/services/authentication.service";
       import { LocalStorageService } from "src/app/services/local-storage.service";
       import { Router } from "@angular/router";
       @Component({
        selector: "app-dashboard",
        templateUrl: "./dashboard.page.html", styleUrls: ["./dashboard.page.scss"],
       export class DashboardPage implements OnInit {
        constructor(
         private authService: AuthenticationService,
          public localStorage: LocalStorageService,
          public router: Router
         ) {}
         data: any = {
         fullName: "",
         async ngOnInit() {
         this.data = await this.localStorage.getData("accountData");
           console.log(this.data);
         logout() {
         this.authService.logout();
         goDetails(data: string) {
           console.log(data);
           this.localStorage.pageParameter = data;
           this.router.navigate(["/services"], { skipLocationChange: true });
```

# 3. Halaman Kategori Paket

Halaman kategori paket disini berisi paket apa yang akan dipilih untuk proses *Laundry* nya.



```
TS services.module.ts ×
ratu_laundry-master > src > app > pages > services > TS services.module.ts > ...
       import { NgModule } from '@angular/core';
      import { CommonModule } from '@angular/common';
      import { FormsModule } from '@angular/forms';
      import { IonicModule } from '@ionic/angular';
      import { ServicesPageRoutingModule } from './services-routing.module';
      import { ServicesPage } from './services.page';
      @NgModule({
        imports: [
          CommonModule,
           FormsModule,
          IonicModule,
          ServicesPageRoutingModule
        declarations: [ServicesPage]
       export class ServicesPageModule {}
```

```
TS services.page.spec.ts ×
ratu_laundry-master > src > app > pages > services > TS services.page.spec.ts > ...
       import { async, ComponentFixture, TestBed } from '@angular/core/testing';
      import { IonicModule } from '@ionic/angular';
      import { ServicesPage } from './services.page';
      describe('ServicesPage', () => {
        let component: ServicesPage;
        let fixture: ComponentFixture⟨ServicesPage⟩;
        beforeEach(async(() => {
          TestBed.configureTestingModule({
           declarations: [ ServicesPage ],
            imports: [IonicModule.forRoot()]
          }).compileComponents();
          fixture = TestBed.createComponent(ServicesPage);
           component = fixture.componentInstance;
          fixture.detectChanges();
         it('should create', () => {
          expect(component).toBeTruthy();
```

```
TS services.page.ts \times
ratu_laundry-master > src > app > pages > services > TS services.page.ts > ...
        import { Component, OnInit } from "@angular/core";
import { Router } from "@angular/router";
import { LocalStorageService } from "src/app/services/local-storage.service";
        @Component({
    selector: "app-services",
          templateUrl: "./services.page.html",
          styleUrls: ["./services.page.scss"],
        export class ServicesPage implements OnInit {
          constructor(
            public localStorage: LocalStorageService,
            public router: Router
          ) {}
          data: string;
          listDetail = [
               name: "Komplit",
               items: [
                  { name: "Cuci Komplit Reguler (2 HARI)", harga: 8000 },
                    name: "Cuci Komplit Kilat (1 HARI)",
                    harga: 15000,
                   name: "Cuci Komplit 5 Jam (5 JAM)",
                    harga: 20000,
```

# 4. Order Page

Merupakan halaman dimana bisa menambah jumlah *Laundry* dan mengurang kan nya yang berguna untuk menghitung berapa biaya total *laundry* an kita.



```
TS order-page.module.ts ×
ratu_laundry-master > src > app > pages > order-page > TS order-page.module.ts > ...
      import { NgModule } from '@angular/core';
      import { CommonModule } from '@angular/common';
      import { FormsModule } from '@angular/forms';
      import { IonicModule } from '@ionic/angular';
      import { OrderPagePageRoutingModule } from './order-page-routing.module';
      import { OrderPagePage } from './order-page.page';
      @NgModule({
        imports: [
           CommonModule,
           FormsModule,
           IonicModule,
          OrderPagePageRoutingModule
         ],
        declarations: [OrderPagePage]
      export class OrderPagePageModule {}
```

```
order-page.page.html ×
ratu_laundry-master > src > app > pages > order-page > ♦ order-page.page.html > ♦ ion-header
       ||dion-header
           <ion-title>orderPage</ion-title>
      <ion-content class="container" color="primary">
         <ion-grid>
           <ion-row class="list" *ngFor="let data of jenisPakaian; let i = index">
             <ion-col class="nama">
              <img class="image" [src]="data.src" />
<ion-label>{{data.nama}}</ion-label>
             <ion-col class="contents">
              <ion-icon name="add-circle-outline" (click)="add(i)"></ion-icon>
               <ion-label class="jumlah">{{data.jumlah}} KG</ion-label>
               <ion-icon name="remove-circle-outline" (click)="minus(i)"></ion-icon>
         </ion-grid>
         <ion-grid class="btn-holder">
                 <ion-label>Harga Total</ion-label>
```

```
</ion-col>
        <ion-col class="contents">
          <ion-label>Rp. {{harga}}</ion-label>
        </ion-col>
      </ion-row>
      <ion-row>
        <ion-col>
            size="large"
            expand="block"
            color="dark"
            (click)="goToPayment()"
            Submit
          </ion-button>
        </ion-col>
      </ion-row>
    </div>
  </ion-grid>
</ion-content>
```

```
    Ø order-page.page.scss ×

ratu_laundry-master > src > app > pages > order-page > 🔗 order-page.page.scss > 😭 .contents
      .contents {
        display: flex;
        align-items: center;
        justify-content: flex-end;
      .colorPrimary {
        background-color: transparent;
       height: 100vh;
        display: flex;
        justify-content: space-between;
        align-items: flex-end;
        position: absolute;
        width: 100%;
        bottom: 0px;
      .bottom {
        width: auto;
         position: fixed;
         bottom: 0;
       .list {
         margin-top: 2rem;
         margin-bottom: 2rem;
```

```
26
27  .list {
28     margin-top: 2rem;
29     margin-bottom: 2rem;
30  }
31
32  .jumlah {
33     margin-left: 5%;
34     margin-right: 5%;
35  }
36
37  .image {
38     width: 5rem;
39     height: auto;
40  }
41
42  .nama {
43     display: flex;
44     justify-content: flex-start;
45     align-items: center;
46     height: 100%;
47  }
48
```

```
TS order-page.page.spec.ts ×
ratu_laundry-master > src > app > pages > order-page > 18 order-page.page.spec.ts > ...
       import { async, ComponentFixture, TestBed } from '@angular/core/testing';
       import { IonicModule } from '@ionic/angular';
       import { OrderPagePage } from './order-page.page';
       describe('OrderPagePage', () => {
        let component: OrderPagePage;
         let fixture: ComponentFixture<OrderPagePage>;
         beforeEach(async(() => {
           TestBed.configureTestingModule({
             declarations: [ OrderPagePage ],
             imports: [IonicModule.forRoot()]
           }).compileComponents();
           fixture = TestBed.createComponent(OrderPagePage);
           component = fixture.componentInstance;
           fixture.detectChanges();
         it('should create', () => {
         expect(component).toBeTruthy();
```

```
TS order-page.page.ts ×
ratu\_laundry\text{-master} > src > app > pages > order\text{-page} > {\color{red} {\tt TS}} \ order\text{-page.page.ts} > \dots
        import { Component, OnInit } from "@angular/core";
import { Router } from "@angular/router";
import { LocalStorageService } from "src/app/services/local-storage.service";
        import { ToastControllerService } from "src/app/services/toast-controller.service";
        @Component({
    selector: "app-order-page",
    templateUrl: "./order-page.page.html",
           styleUrls: ["./order-page.page.scss"],
         export class OrderPagePage implements OnInit {
             public localStorage: LocalStorageService,
              public showToast: ToastControllerService,
             public routing: Router
           jenisPakaian = [
                 nama: "Baju",
                 jumlah: 0,
                 src: "../../assets/icon/baju.png",
                 nama: "Bed Cover",
                 jumlah: 0,
                src: "../../assets/icon/bedCover.png",
```

```
nama: "Boneka",
    jumlah: 0,
    src: "../../assets/icon/boneka.png",
    nama: "Celana",
   jumlah: 0,
   src: "../../assets/icon/celana.png",
];
harga: number = 0;
hargaDasar: any;
async ngOnInit() {
 this.hargaDasar = await this.localStorage.getData("price");
add(index: number) {
  this.jenisPakaian[index].jumlah++;
 this.countTotal();
minus(index: number) {
  if (this.jenisPakaian[index].jumlah > 0) {
    this.jenisPakaian[index].jumlah--;
    this.countTotal();
  }
```

# 5. Payment Page

Merupakan halaman dimana total dan uang yang anda masukkan kemudian transaksi.



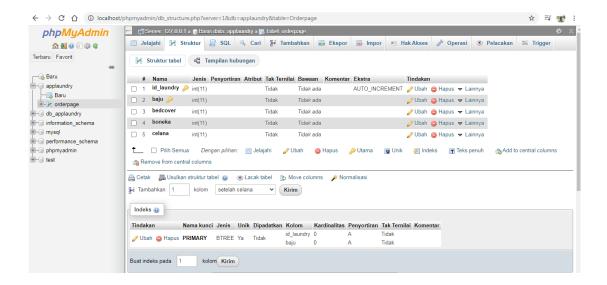
```
</ion-col>
      </ion-row>
      <ion-row>
        <ion-col>
            [disabled]="harga>money"
            size="large"
            expand="block"
            color="dark"
            (click)="presentAlert()"
           Submit
          </ion-button>
        </ion-col>
     </ion-row>
   </div>
  </ion-grid>
</ion-content>
```

```
TS payment-page.page.spec.ts ×
ratu_laundry-master > src > app > pages > payment-page > 18 payment-page.page.spec.ts > ...
       import { async, ComponentFixture, TestBed } from '@angular/core/testing';
       import { IonicModule } from '@ionic/angular';
       import { PaymentPagePage } from './payment-page.page';
       describe('PaymentPagePage', () => {
         let component: PaymentPagePage;
         let fixture: ComponentFixture<PaymentPagePage>;
         beforeEach(async(() => {
           TestBed.configureTestingModule({
             declarations: [ PaymentPagePage ],
             imports: [IonicModule.forRoot()]
           }).compileComponents();
           fixture = TestBed.createComponent(PaymentPagePage);
           component = fixture.componentInstance;
           fixture.detectChanges();
         }));
         it('should create', () => {
           expect(component).toBeTruthy();
```

```
TS payment-page.page.ts ×
ratu_laundry-master > src > app > pages > payment-page > TS payment-page.page.ts > ...
       import { Component, OnInit } from "@angular/core";
       import { AlertController } from "@ionic/angular";
       import { Router } from "@angular/router";
       import { LocalStorageService } from "src/app/services/local-storage.service";
       @Component({
    selector: "app-payment-page",
         templateUrl: "./payment-page.page.html",
        styleUrls: ["./payment-page.page.scss"],
       export class PaymentPagePage implements OnInit {
        harga: number = null;
        money: number = null;
        constructor(
         public localStorage: LocalStorageService,
public alertController: AlertController,
          public router: Router
         ) {}
         ngOnInit() {
           this.harga = this.localStorage.totalPrice;
         async presentAlert() {
           const alert = await this.alertController.create({
             header: "Transaksi diterima",
              message: "Pakaian anda Rapi adalah Prioritas kami.",
             buttons: [
```



#### DATABASE ORDERPAGE



#### **SERVER**

```
EXPLORER
                                      JS db.config.js X

✓ OPEN EDITORS

                                      app > config > Js db.config.js > ...
                                               module.exports = {
  X JS db.config.js app\config
                                                   HOST: "localhost",

✓ SERVER_LAUNDRY

                                                   USER: "root",

√ app

                                                   PASSWORD: "",
   config
                                                   DATABASE: "applaundry",
   JS db.config.js
                                               };

∨ controller

    JS data.controller.js
   models
    JS data.model.js
    JS db.js

✓ routes

    JS data.routes.js
  > node_modules
```

```
EXPLORER
                                  JS data.controller.js X
OPEN EDITORS
                                   app > controller > JS data.controller.js > ♦ update > ♦ exports.update > ♦ Orderpage.updateById
                                          //app/controllers/orderpage.controller.js
const Orderpage = require("../models/orderpage.model");
 X JS data.controller.js app\controller
SERVER_LAUNDRY
                                          //Mengambil semua data
                                          exports.findAll = (req, res) => {

✓ config

                                               Orderpage.getAll((err, data) => {
   JS db.config.js

∨ controller

                                                        res.status(500).send({
                                                            message:
                                                                 err.message || "Terjadi kesalahan"
  ∨ models
  JS data.model.js
  JS db.is
                                                        res.send(data);

✓ routes

   JS data.routes.js
 > node_modules
 > public
                                          exports.findOne = (req, res) => {
{} package.json
                                              Orderpage.findById(req.params.id, (err, data) => {
{} package-lock.json
                                                   if (err) {
JS server.is
                                                        if (err.kind === "not_found") {
                                                            res.status(404).send({
                                                                message: `Data dengan id ${req.params.id} tidak
                                          ditemukan`
                                                            res.status(500).send({
                                                                 message: `Error ketika mengambil data dengan id
                                               ${req.params.id}
OUTLINE
> TIMELINE
                                                       res.send(data);
```

```
EXPLORER
                                 JS data.controller.js X
✓ OPEN EDITORS
                   app > controller > JS data.controller.js > ♦ findOne > ♦ exports.findOne > ♦ Order
 X JS data.controller.js app\controller
SERVER_LAUNDRY
 ∨ app

✓ config

                                         exports.create = (req, res) => {
   JS db.config.js
                                             if (!req.body) {

∨ controller

                                                 res.status(400).send({
   JS data.controller.js
                                                      message: "Content tidak boleh kosong"
  ∨ models
   JS data.model.js
                                             const orderpage = new Orderpage({
  JS db.js
                                                 title: req.body.title,

✓ routes

                                                 description: req.body.description,
   JS data.routes.js
                                                 images: req.body.images
 > node_modules
                                             Orderpage.create(orderpage, (err, data) => {
 > public
                                                  if (err) {
 {} package.json
                                                      res.status(500).send({
 {} package-lock.json
                                                          message:
 JS server.js
                                                              err.message || "Terjadi kesalahan"
                                                  else {
                                                      res.send(data);
                                         // Mengupdate data yang memiliki id = id
                                         exports.update = (req, res) => {
                                             if (!req.body) {
> OUTLINE
                                                 res.status(400).send({
 TIMELINE
                                                      message: "Content tidak boleh kosong"
```

```
EXPLORER
                                 JS data.controller.js X
OPEN EDITORS
                                 app > controller > JS data.controller.js > ♦ create > ♦ exports.create > ♦ Orderpage.create() callback
SERVER LAUNDRY
                                             Orderpage.updateById(
                                                 req.params.id,

✓ config

                                                 new Orderpage(req.body), (err, data) => {
  JS db.config.js
                                                     if (err) {

∨ controller

                                                         if (err.kind === "not_found") {
                                                              res.status(404).send({

∨ models

                                                                  message: `Data dengan id ${req.params.id} tidak
                                            ditemukan
  JS data.model.js
  JS db.js
                                                              res.status(500).send({
  JS data.routes.js
                                                                  message: `Error ketika mengupdate data dengan id
 > node_modules
                                                 ${req.params.id}`
> public
{} package.json
{} package-lock.json
                                                         res.send(data);
JS server.js
                                         exports.delete = (req, res) => {
                                            Orderpage.remove(req.params.id, (err, data) => {
                                                 if (err) {
    if (err.kind === "not_found") {
                                                        res.status(404).send({
                                                              message: `Data dengan id ${req.params.id} tidak
OUTLINE
> TIMELINE
```

```
JS data.controller.js X
                                         \mathsf{app} > \mathsf{controller} > \mathsf{JS} \  \, \mathsf{data.controller.js} > \boldsymbol{\diamondsuit} \  \, \mathsf{update} > \boldsymbol{\diamondsuit} \  \, \mathsf{exports.update} > \boldsymbol{\diamondsuit} \  \, \mathsf{Orderpage.updateById}(\mathsf{graphics})
OPEN EDITORS
X JS data.controller.js app\controller
                                                             ditemukan`
SERVER_LAUNDRY
                                                                        res.status(500).send({

✓ config

                                                                           message: `Error ketika menghapus data dengan id
 JS db.config.js
                                                             ${req.params.id}

∨ controller

 JS data.controller.js

✓ models

                                                             } else res.send({
  JS data.model.js
                                                                  message: `Berhasil menghapus data !`
 JS db.js

∨ routes

  JS data.routes.js
> node_modules
                                                  exports.deleteAll = (req, res) => {
> public
                                                       Orderpage.removeAll((err, data) => {
{} package.json
{} package-lock.json
                                                                  res.status(500).send({
                                                                      message:
JS server.js
                                                                              err.message || "Terjadi kesalahan"
                                                                   res.send({
                                                                      message: `Berhasil menghapus seluruh data buku!` });
```

```
JS data.model.js X
app > models > JS data.model.js > ...
       const sql = require("./db.js");
       const Orderpage = function (orderpage) {
           this.title = orderpage.title;
           this.description = Orderpage.description;
           this.images = Orderpage.images;
       Orderpage.getAll = result => {
           sql.query("SELECT * FROM orderpage", (err, res) => {
               if (err) {
                   console.log("error: ", err);
                   result(null, err);
                   return;
               console.log("result: ", res);
               result(null, res);
       Orderpage.findById = (id, result) => {
           sql.query(`SELECT * FROM orderpage WHERE id = ${id}`, (err, res)=> {
               if (err) {
                   console.log("error: ", err);
                   result(err, null);
                   return;
               if (res.length) {
                   console.log(res[0]);
                   result(null, res[0]);
                   return;
```

```
result({ kind: "not_found" }, null);
Orderpage.create = (neworderpage, result) => {
    console.log(newOrderpage);
    sql.query("INSERT INTO orderpage (title, description, images) VALUES (?,?,?)",
       [newOrderpage.title, newOrderpage.description, newOrderpage.images], (err,
        if (err) {
           console.log("error: ", err);
           result(err, null);
           return;
        console.log(res);
       console.log("buat data: ", {
           id: res.insertId, ...newOrderpage
        result(null, { id: res.insertId, ...newOrderpage });
Orderpage.updateById = (id, orderpage, result) => {
        'UPDATE orderpage SET title = ?, description = ?, images = ? WHERE id = ?",
        [Orderpage.title, Orderpage.description, Orderpage.images, id],
        (err, res) => {
           if (err) {
               console.log("error: ", err);
                result(null, err);
```

```
JS data.model.js X
app > models > JS data.model.js > 😚 Orderpage.remove > 😚 sql.query("DELETE FROM Orderpage WHERE id = '
                   if (res.affectedRows == 0) {
                       result({ kind: "not_found" }, null);
                       return;
                   console.log("update data: ", { id: id, ...Orderpage });
                   result(null, { id: id, ...Orderpage });
       // Menghapus data yang memiliki id = id
      Orderpage.remove = (id, result) => {
           sql.query("DELETE FROM Orderpage WHERE id = ?", id, (err, res) => {
               if (err) {
                   console.log("error: ", err);
                   result(null, err);
                   return;
               if (res.affectedRows == 0) {
                   // not found Orderpage with the id
                   result({ kind: "not found" }, null);
               console.log("hapus data dengan id: ", id);
               result(null, res);
       // Menghapus semua data
      Orderpage.removeAll = result => {
           sql.query("DELETE FROM Orderpage", (err, res) => {
               if (err) {
                  console.log("error: ", err);
                   result(null, err);
```

```
JS data.model.js X
app > models > 🧦 data.model.js > 😭 Orderpage.remove > 😭 sql.query("DELETE FROM Order
               console.log("hapus data dengan id: ", id);
               result(null, res);
           });
       };
       // Menghapus semua data
       Orderpage.removeAll = result => {
           sql.query("DELETE FROM Orderpage", (err, res) => {
               if (err) {
                   console.log("error: ", err);
                   result(null, err);
                   return;
               console.log(`Menghapus ${res.affectedRows} orderpage`);
               result(null, res);
           });
       module.exports = Orderpage;
```

```
app > routes > JS data.routes.js > ② <unknown>
    module.exports = app => {
        const orderpage = require("../controller/orderpage.controller");

        //Mengambil semua data
        app.get("/api/orderpage", orderpage.findAll);
        //Mengambil data yang memiliki id = id
        app.get("/api/orderpage/:id", orderpage.findOne);
        //Membuat data baru
        app.post("/api/orderpage", orderpage.create);
        //Mengubah data yang memiliki id = id
        app.put("/api/orderpage/:id", orderpage.update);
        //Hapus data yang memiliki id = id
        app.delete("/api/orderpage/:id", orderpage.delete);
        //Hapus seluruh data
        app.delete("/api/orderpage", orderpage.deleteAll);
};
```

```
Is serverjs X

Is serverjs > ...

1     const express = require("express");
2     const bodyParser = require("body-parser");
3     var cors = require("cors")
4     var path = require('path');
5     const app = express();
6     //parse requests - application/json
7     app.use(bodyParser.json());
8     //parse requests - application/x-www-form-urlencoded
9     app.use(bodyParser.urlencoded({ extended: true}));
10     //cors
11     var cor = cors();
12     app.use(cor);
13     //path
14     app.use(express.static(path.join(_dirname, "./public")));
15     app.get("/", (req, res) => {
16          res.json({ message: "Selamat datang pada matakuliah pemrograman perangkat bergerak" });
17     });
18     require("./app/routes/book.routes") (app);
19     const PORT = process.env.PORT || 3000;
19     app.listen(PORT, () => {
20          console.log(`Server is running on port ${PORT}.`);
21     });
22     });
```