

### LAB8

### **M**UC TIÊU

Kết thúc bài thực hành sinh viên có khả năng:

✓ Làm việc với API vận chuyển (GHN)

## **N**ỘI DUNG

BÀI 1: LẤY DỮ LIỆU LOCAITON (TP/TỉNH, QUẬN/HUYỆN, XÃ/PHƯỜNG) GHN

Bước 1: Setup GHN

Truy cập vào website. Đăng ký 1 tài khoản (Tài khoản test)

https://5sao.ghn.dev/

Tiếp theo xem hướng dẫn của GHN qua link bên dưới để cập nhật vị trị cửa cửa hàng và thông tin của token, id shop

https://api.ghn.vn/home/docs/detail?id=49

Bước 2: Tạo model

Model dữ liệu thành phố / tỉnh (https://api.ghn.vn/home/docs/detail?id=60)



```
public class Province {
   private String ProvinceName;
   public Province(int provinceID, String provinceName) {
       ProvinceID = provinceID;
       ProvinceName = provinceName;
   public int getProvinceID() {
   public void setProvinceID(int provinceID) {
       ProvinceID = provinceID;
   public String getProvinceName() {
   public void setProvinceName(String provinceName) {
       ProvinceName = provinceName;
```

Model dữ liệu Quận/Huyện (https://api.ghn.vn/home/docs/detail?id=78)



```
public class District {
   private int ProvinceID;
   private String DistrictName;
   public District(int districtID, int provinceID, String districtName) {
      ProvinceID = provinceID;
   public int getDistrictID() {
      return DistrictID;
   public void setDistrictID(int districtID) {
      DistrictID = districtID;
   public int getProvinceID() {
   public void setProvinceID(int provinceID) {
      ProvinceID = provinceID;
   public String getDistrictName() {
      return DistrictName;
   public void setDistrictName(String districtName) {
      DistrictName = districtName;
```



# Model Request lấy danh sách Quận Huyện

```
public class DistrictRequest{
    private int province_id;

public DistrictRequest(int province_id) {
    this.province_id = province_id;
}

public int getProvince_id() { You, 3 minutes ago return province_id;
}

public void setProvince_id(int province_id) {
    this.province_id = province_id;
}
}
```

Model dữ liệu Phường/Xã (<a href="https://api.ghn.vn/home/docs/detail?id=61">https://api.ghn.vn/home/docs/detail?id=61</a>)



```
public class Ward {
private String WardCode; You, Today • Uncommitted changes
   private String WardName;
   public Ward(String wardCode, int districtID, String wardName) {
       WardCode = wardCode;
       DistrictID = districtID;
       WardName = wardName;
   public String getWardCode() {
   public void setWardCode(String wardCode) {
       WardCode = wardCode;
   public int getDistrictID() {
      return DistrictID;
   public void setDistrictID(int districtID) {
       DistrictID = districtID;
   public String getWardName() {
       return WardName;
   public void setWardName(String wardName) {
       WardName = wardName;
```



#### **Model Respone GHN**

```
public class ResponeGHN<T> {
   private int code;
   private String message;
   public ResponeGHN(int code, String message, T data) {
       this.message = message;
    public int getCode() | You, Today • Uncommitted changes
    public void setCode(int code) {
    public String getMessage() {
   public void setMessage(String message) {
       this.message = message;
    public T getData() {
    public void setData(T data) {
```



#### Bước 3: Tạo GHN Services và GHN Request (tại folder Serives)

```
public interface GHNServices {
    public static String GHN_URL = "https://dev-online-qateway.qhn.vn/";

    //Get danh sách TP/Tinh
    @GET("shiip/public-api/master-data/province")
    Call<ResponeGHN<ArrayList<Province>>> getListProvince();
    //Get danh sách Quân/Huyên
    @POST("shiip/public-api/master-data/district")
    Call<ResponeGHN<ArrayList<District>>> getListDistrict(@Body DistrictRequest districtRequest);
    //Get danh sách Phường/Xã
    @GET("shiip/public-api/master-data/ward")
    Call<ResponeGHN<ArrayList<Ward>>> getListWard(@Query("district_id") int district_id);
}
```



```
public class GHNRequest {
   public final static String SHOPID = "188698";
   public final static String TokenGHN = "39fa33f2-4b4b-11ee-a6e6-e60958111f48";
   private GHNServices ghnRequestInterface;
   public GHNRequest()
       OkHttpClient.Builder httpClient = new OkHttpClient.Builder();
        httpClient.addInterceptor(new Interceptor() {
            @NonNull
            @Override
            public Response intercept(Chain chain) throws IOException {
                Request request = chain.request().newBuilder()
                        .addHeader( name: "ShopId", SHOPID)
               return chain.proceed(request);
        ghnRequestInterface = new Retrofit.Builder()
               .baseUrl(GHN_URL)
                .addConverterFactory(GsonConverterFactory.create())
                .client(httpClient.build())
                .build().create(GHNServices.class);
   public GHNServices callAPI() {
```



**Bước 4:** Mua hàng (Tại giao diện sản phẩm thêm nút mua, khi nhấn mua sẽ truyền sang giao diện chọn vị trí giao hàng)

```
.into(holder.image);
holder.buy.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Bundle bundle = new Bundle();
        bundle.putSerializable("item",ds.get(holder.getAdapterPosition())); You,
        Intent intent = new Intent(context, LocationActivity.class);
        intent.putExtras(bundle);
        (context).startActivity(intent);
    }
});
```

#### Bước 5: Chọn vị trí giao hàng



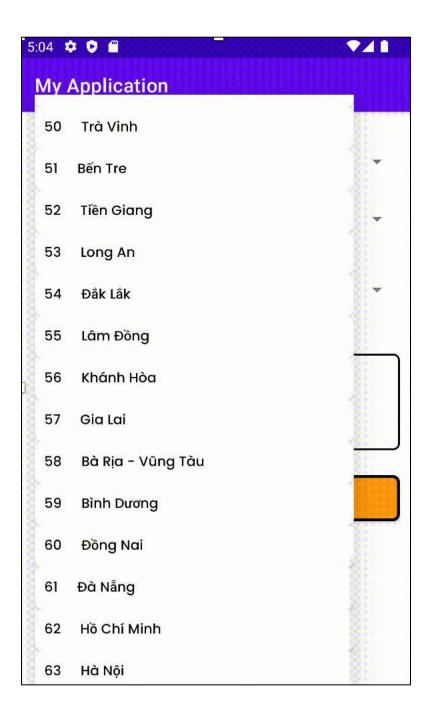


```
//Set view len giao dien Spinner You, Moments ago * Uncommitted changes
private void SetDataSpinProvince(ArrayList<Province> ds){
    adapter_item_province_select_ghn = new Adapter_Item_Province_Select_GHN( context: this,ds);
    sp_province.setAdapter(adapter_item_province_select_ghn);
}
private void SetDataSpinDistrict(ArrayList<District> ds){
    adapter_item_district_select_ghn = new Adapter_Item_District_Select_GHN( context: this,ds);
    sp_district.setAdapter(adapter_item_district_select_ghn);
}
private void SetDataSpinWard(ArrayList<Ward> ds){
    adapter_item_ward_select_ghn = new Adapter_Item_Ward_Select_GHN( context: this,ds);
    sp_ward.setAdapter(adapter_item_ward_select_ghn );
}
```



```
tallback<ResponsGHN-ArrayList<Province>>> responseProvince = new Callback<ResponsGHN-ArrayList<Province>>>() [
   public void onResponse(Call<ResponsGHN-ArrayList Province>>> call, Response<ResponsGHN-ArrayList Province>>> response) |
   Moverride
   public void onTesponse(Call-ResponsGRN-ArrayList-District>>> call, Response-ResponsGRN-ArrayList-District>>> response)
               ArrayList<District> ds = new ArrayList<>(response.body().getOata());
   public void onFmilure(Call<ResponeGHN-ArrayList<District>>> call, Throwable t) (
Callback<ResponeGHN-ArrayList(Ward>>> responseWard = new Callback<ResponeGHN-ArrayList(Ward>>>) (
   Bovernide
   public void onResponse(Call<ResponsGHM ArrayList Ward>>> call, Response<ResponsGHM ArrayList Ward>>> response) [
               ArrayList<Ward> ds = new ArrayList<>();
    public void onFailure(Call<ResponeGHN<ArrayList<Ward>>> call, Throwable t) {
```







# BÀI 2: TẠO ĐƠN HÀNG

# Bước 1: Tạo model database

```
const mongoose = require('mongoose');
const Scheme = mongoose.Schema;

const Orders = new Scheme({
    order_code: {type: String},
    id_user : {type: Scheme.Types.ObjectId, ref: 'user'}
},{
    timestamps: true
})

module.exports = mongoose.model('Order', Orders)
```



### Bước 2: Viết API lưu thông tin đơn hàng vào đatabase (api.js)

```
const Orders = require('../models/order')
router.post('/add-order',async(req,res) =>{
       const data = req.body;
       const newOrder = new Orders({
           order_code: data.order_code,
           id_user : data.id_user
       const result = await newOrder.save(); //Thêm vào database
        if(result)
            res.json({
                "status" : 200,
               "messenger" : "Thêm thành công",
                "data" : result
               "messenger" : "Lỗi, thêm không thành công",
               "data" : null
        console.log(error);
```



#### Bước 3: Tạo Model

# JSON GHN Order ( <a href="https://api.ghn.vn/home/docs/detail?id=123">https://api.ghn.vn/home/docs/detail?id=123</a>)

```
"payment_type_id": 2,
"note": "Tintest 123",
"required_note": "KHONGCHOXEMHANG",
"return_phone": "0332190444", ///số điện thoại trả hàng
"return_address": ·"39 ·NTT", ·// ·địa ·chỉ ·trả ·hàng
"to_name": "TinTest124", // tên người nhận
"to_phone": "0987654321", ·//·Số·điện·thoại ·người ·nhận
"to_address": "72 · Thành · Thái, · Phường · 14, · Quận · 10, · Hồ · Chí · Minh, · Vietnam", · // · địa · chỉ · người · nhận
"to_ward_code": . "90768", . // . mã . phường/ . xã
"to_district_id": 3695, // mã huyện/quận
"cod_amount": 200000, //giá
"content": "Theo New York Times", // nội dung đặt hàng
"weight": 200, // trọng lượng
·"length": ·1, ·//·chiều·dài·hàng·(·theo·đóng·gói·)
·"width": 19, ·//chiều·rồng·hàng·(·theo·đống·gối·)
·"height": 10, // chiều cao hàng (theo đóng gối)
·"insurance_value": 10000000, ·// ·khai ·báo ·giá ·trị ·lô ·hàng
"service_id": 0, // loại dịch vụ mặc định
"service_type_id":2, // ·loai ·giao ·hàng ·2
"items": []·//·sản·phẩm
             "name": "Áo Polo",
             "code":"Polo123",
             "quantity": 1, //Yêu cầu phải có
             "price": 200000,
             "weight": 1200 //Yêu cầu phải có
```



```
public class GHNItem {
   private String name, code;
    public GHNItem() | You, Moments ago • Uncommitted changes
    public GHNItem(String name, String code, int quantity, int price, int weight) {
       this.quantity = quantity;
       this.weight = weight;
    public String getName() {
    public void setName(String name) {
    public String getCode() {
```



```
profile state some unrethyport {
provets that any experiment {
provets that any make required, not retains address;
provets that any to establish the following to address; to amend the following to address;
provets that any to establish the following to address; to amend the following the follow
```

# \*Tạo một hàm tạo có dữ liệu setup mặc định

```
public browner newer (String to_name, String to_phore, String to_address, String to_
```





```
public class Order {
   private String _id;
   private String order_code;
   private String id_user;
   public Order(String _id, String order_code, String id_user) {
       this.order_code = order_code;
       this.id_user = id_user;
   public String get_id() You, Moments ago * Uncommitted changes
   public void set_id(String _id) {
   public String getOrder_code() {
   public void setOrder_code(String order_code) {
       this.order_code = order_code;
   public String getId_user() {
   public void setId_user(String id_user) {
       this.id_user = id_user;
```



### **Bước 4: Thêm Interface GHNServices và interface ApiSevices**

```
public interface GHNServices {
    public static String GHN_URL = "https://dev-online-qateway.qhn.vn/";
    You, Moments ago * Uncommitted changes
    @POST("shiip/public-api/v2/shipping-order/create")
    Call<ResponeGHN<GHNOrderRespone>> GHNOrder(@Body GHNOrderRequest ghnOrderRequest);
```

```
public interface ApiServices {

//Sử dụng máy ảo android studio thi localhost thay thành ip 10.0.0.2

//Đổi với máy thật ta sự dụng ip của máy

//Base_URL là url của api
public static String BASE_URL = "http://10.0.2.2:3000/api/";

@POST("add-order")

Call<Response<Response<Order>>> order(@Body Order order); You, Moments of the content of the conten
```



#### Bước 5: Tạo order

#### Tại file LocationActivity

```
btn_order.setOnClickListener(new View.OnClickListener() {
   @Override
   public void onClick(View view) {
       if(WardCode.equals("")) return;
       Fruit fruit = (Fruit) getIntent().getExtras().getSerializable( key: "item");
       GHNItem ghnItem = new GHNItem();
       ghnItem.setName(fruit.getName());
       ghnItem.setPrice(Integer.parseInt(fruit.getPrice()));
       ghnItem.setCode(fruit.get_id());
       ghnItem.setQuantity(1);
       ghnItem.setWeight(50);
       ArrayList<GHNItem> items = new ArrayList<>();
       items.add(ghnItem);
       GHNOrderRequest ghnOrderRequest = new GHNOrderRequest(
               edt_name.getText().toString(),
               edt_phone.getText().toString(),
                edt_location.getText().toString(),
               WardCode,
       ghnRequest.callAPI().GHNOrder(ghnOrderRequest).enqueue(responseOrder);
```



```
Callback-ResponsSHN-SHNOrderRespons-> responseOrder = new Callback-ResponsSHN-SHNOrderRespons->O
               public void onResponse(Call-ResponseCHN-CHNOrderRespons > call, retrofit2. Response-ResponsCHN-CHNOrderRespons > response) {
                                                             Toust sminsText( content LocationActivity.this, text 'Dat hang thanh cong', Toust LENGTH SHORT), show();
                                                            \label{local_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_set_in_s
                public void onFaiture(Call<ResponeSHN>SHNOrderRespone>> call, Throwable t) (
Callback:Response:Order=> responseOrderOutabase = new Callback:Response-Order>>() (
               public void onHumponsm(Call Response-Order > call, retrofit2.Response-Response-Order > response) {
```



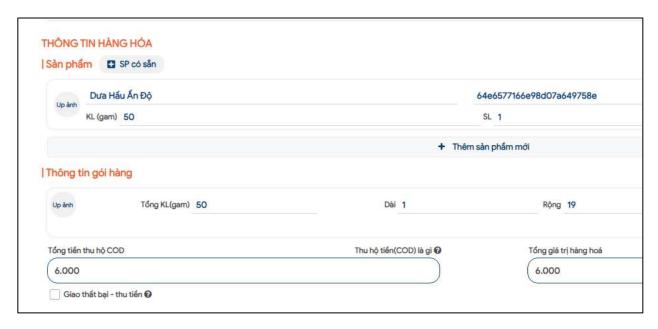




# Tại GHN quản lý đơn hàng (<a href="https://5sao.ghn.dev/order?tab=ORDER\_CREATED">https://5sao.ghn.dev/order?tab=ORDER\_CREATED</a>)



# Chi tiết đơn hàng





#### BÀI 3: XEM DAN SÁCH ĐƠN HÀNG TỪ DATABASE

### Bước 1: Viết API (api.js)

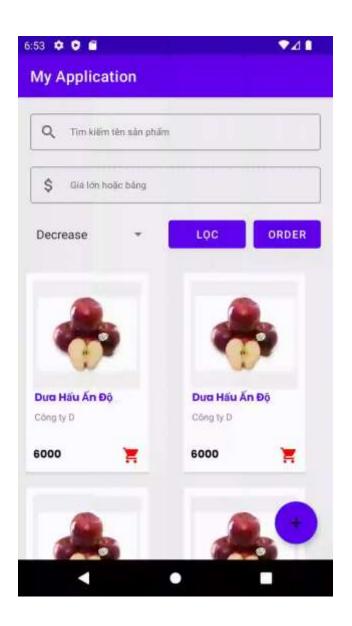
#### **Bước 2: Thêm APIServices**

```
@GET("get-list-order")
Call<Response<ArrayList<Order>>> getListOrder(@Query("id_user") String id_user); You, Moments
```



#### Bước 3: Thực thi API







#### BÀI 4: HỦY ĐƠN HÀNG

Bước 1: Viết API ( api.js ) (Có thể đặt thêm trường trạng thái và cập nhật trạng thái hủy đơn )

```
router.delete('/delete-order/:order code',async(req,res) =>{
       const {order_code} = req.params
       const result = await Orders.findOneAndDelete({order_code: order_code });
       console.log(order_code);
       console.log(result);
       if(result)
                "messenger" : "Xóa công",
                "data" : result
                "status" : 400 ,
                "messenger" : "Lỗi, xóa không thành công",
               "data" : null
       console.log(error);
```



#### Bước 2: Tạo model

```
public class GHNCancelRequest {
    private ArrayList<String> order_codes;

public GHNCancelRequest() { You, Moments ago · Uncommitted change }

public GHNCancelRequest(ArrayList<String> order_codes) {
    this.order_codes = order_codes;
}

public ArrayList<String> getOrder_codes() {
    return order_codes;
}

public void setOrder_codes(ArrayList<String> order_codes) {
    this.order_codes = order_codes;
}
}
```



```
public class GHNCancelResponse {
   private String order_code;
   private String result;
   private String message;
   public GHNCancelResponse() {
   public GHNCancelResponse(String order_code, String result, String message) {
       this.order_code = order_code;
       this.result = result;
       this.message = message;
   public String getOrder_code() ∦ You, Moments ago - Uncommitted changes
       return order_code;
   public void setOrder_code(String order_code) {
       this.order_code = order_code;
   public String getResult() {
   public void setResult(String result) {
       this.result = result;
   public String getMessage() {
   public void setMessage(String message) {
       this.message = message;
```



# Bước 3: Thêm Interface GHNServices và interface ApiSevices

```
@POST("shiip/public-api/v2/switch-status/cancel")
Call<ResponeGHN<ArrayList<GHNCancelResponse>>> cancelOrder(@Body GHNCancelRequest cancelRequest); You
```

```
@DELETE("delete-order/{order_code}")
Call<Response<Order>> deleteOrder(@Path("order_code") String order_code);
```

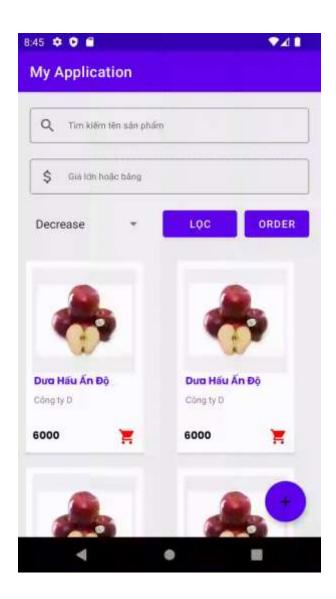
#### Bước 4: Thực thi API

```
public void Delete(String order_code) {
    ArrayList<String> listCancel = new ArrayList<>();
    listCancel.add(order_code);
    GHNCancelRequest cancelRequest = new GHNCancelRequest(listCancel);

    ghnRequest.callAPI().cancelOrder(cancelRequest).enqueue(responseCancelOrder);
}
```









#### \*\*\* YÊU CẦU NỘP BÀI:

Sv nén file bao gồm các yêu cầu đã thực hiện trên, nộp lms đúng thời gian quy định của giảng viên. Không nộp bài coi như không có điểm.

--- Hết ---