#### **GROUP 1**

Abdullah Tariq Giovanni De Franceschi Riyad Argoub

# Wiley Edge Final Project

# Shop orders management tool

Full Stack Application



### **BUSINESS MODEL**



- Create an order management system to be used by small business owners to visualize and manage various custom orders coming in
- Have a login page so each user's order inventory will only be visible to them
- Implement a geographical representation of the clients' positions in order to picture the dispersion of orders across the globe



# The Project: Shopping Management tool



- Create a frontend application in Angular with interface for:
  - Displaying all the orders of a business owner
  - Display orders details

- Create a backend application in JAVA JPA to request http services and execute CRUD actions on the database
  - SQL Database MySQL
  - Spring JPA
  - Google Maps API and OpenWeatherMap API to visualize the buyer's geographical position







### **DATABASE**

Define business logic

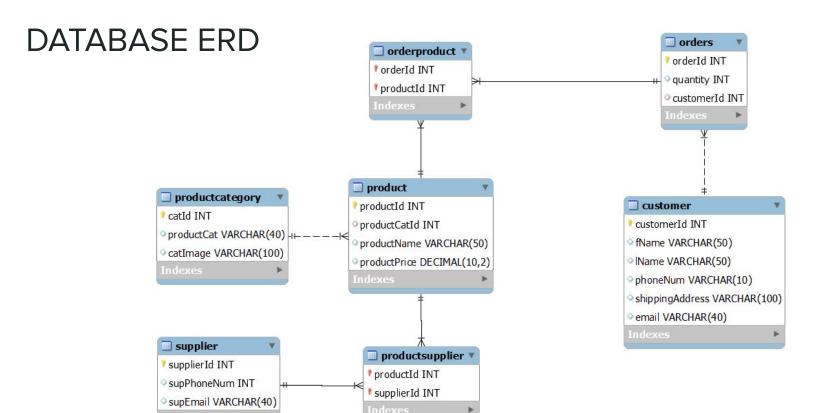
Define entities

Define relationships

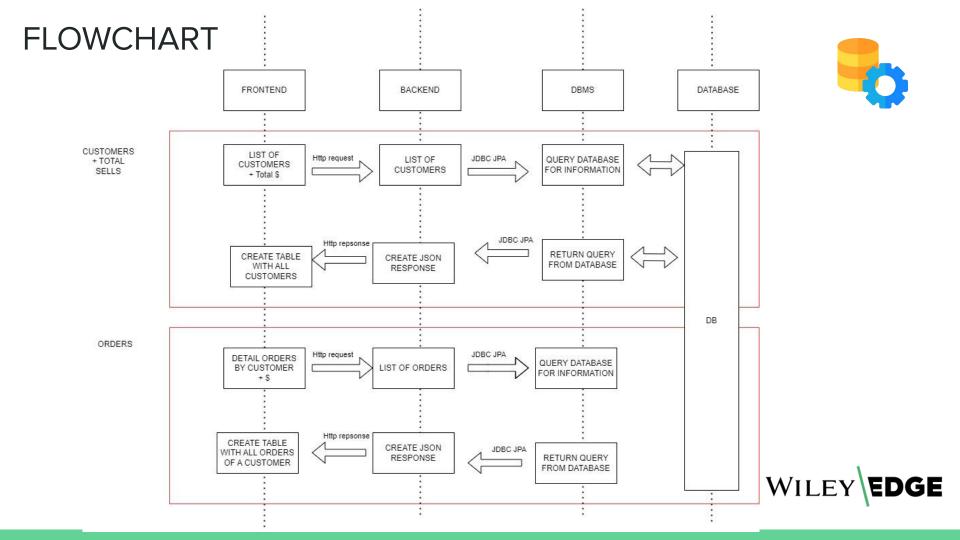
Normalization of databases











# JAVA Spring JPA App



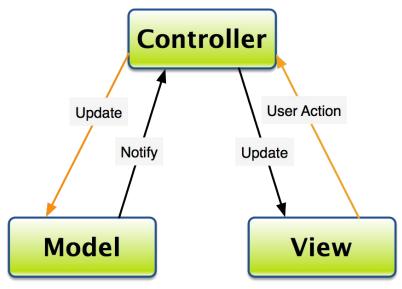
#### **MVC** Model structure

Model (data + business logic)

- Control (orchestrate)

View (user interface
+ displaying the data from the model)

Spring JPA Annotations





## JAVA Spring JPA App



#### **CRUD** OPERATIONS

@GetMapping

@PathVariable

@PostMapping

@RequestBody

@PutMapping

@RequestBody

@DeleteMapping

@PathVariable





## JAVA Spring JPA Exceptions handling



NotAvailableError.java

OrderNotFoundException.java

OrderIdDuplicateException.java

OrderDataValidationException.java





### JAVA Unit test with JUnit suite



#### STATEFUL UNIT TEST

- Service layer
- Controller





### Using the Geographical APIs

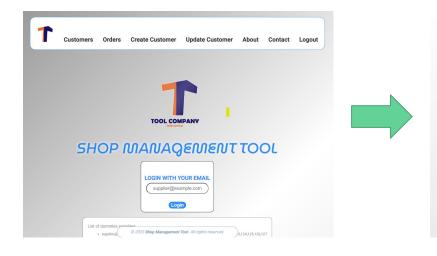
- -OpenWeatherMap API
- -Google Maps API





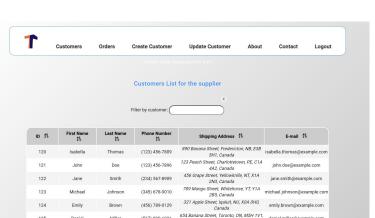


#### **LOGIN**



#### LIST OF CUSTOMERS

125



(678) 901-2341

987 Orange Street, Montreal, QC, H2X 1Y8,

olivia.davis@example.com

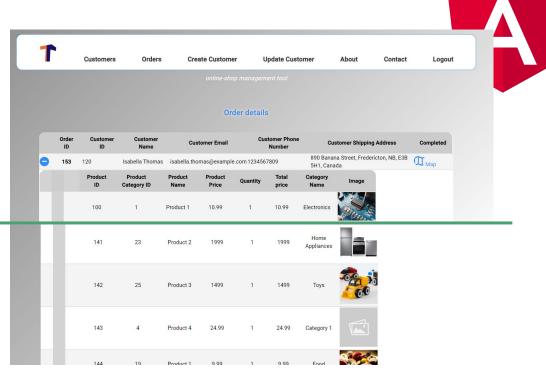




#### LIST OF CUSTOMERS

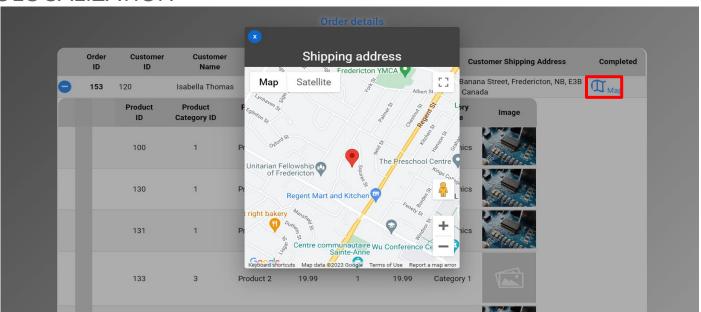








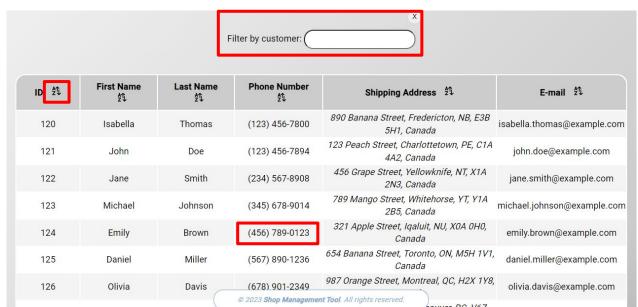
#### **GEOLOCALIZATION**







#### VISUALIZATION





Filtering service

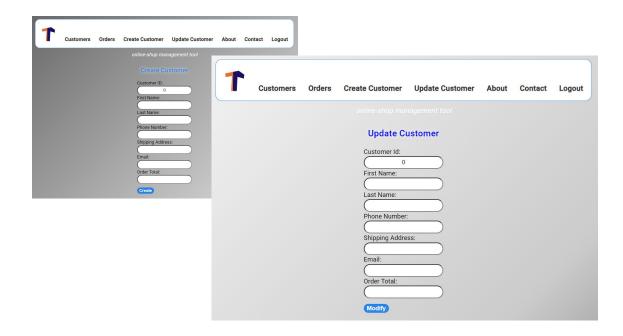
Sorting service

Phone formatting Pipe

Capitalization Pipe



#### CRUD OPERATIONS FROM WEB INTERFACE



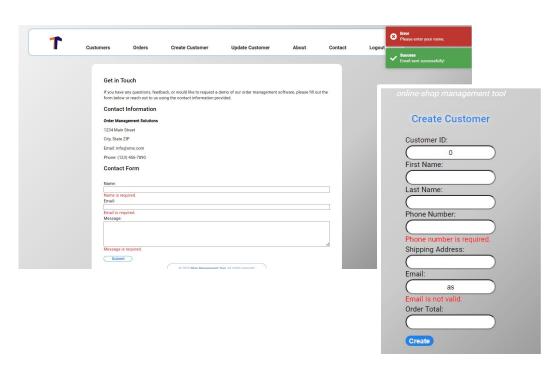


Create, Update UI

+ Endpoints for others operation



#### FIELDS VALIDATION





Fields validation

Popup feedback messages



### Lessons Learned

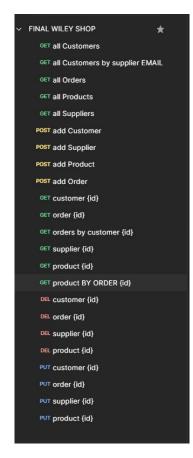
- Utilizing an API can be very efficient for the end-user, but it can become very costly for a developer if not tested correctly. APIs can be essential to a business.



### Possible improvements

- Provide web interface for all the endpoints created in the backend
- Include user profile with picture
- Implement payment database

 Storing different sessions for different users made us use our SQL abilities in order to correctly attribute each orders/customers to the correct user.





### **THANKS**

#### **GROUP 1**

Abdullah Tariq Giovanni De Franceschi Riyad Argoub

