



Computer Engineering	3 <sup>rd</sup> Year	1 <sup>st</sup> Semester	2022-23	Periodic Evaluation
<b>Project</b>	Limit date for results divulgation: 14 Jan 2023			
Date: 18 Oct 2022	<b>Delivery Date: 22 Dec 2022</b>			

F T - P . T . I . C SPA . O ( ) ( 1 99). C ) , . T ( ) ( , . W , . T ( ) . A ( ) SPA ) . H , - . T 1 10 ( . , =

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## MENU

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## USERS AND CUSTOMERS

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## ORDER ITEMS

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## ADMINISTRATION

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## NOTIFICATIONS AND REAL TIME DATA

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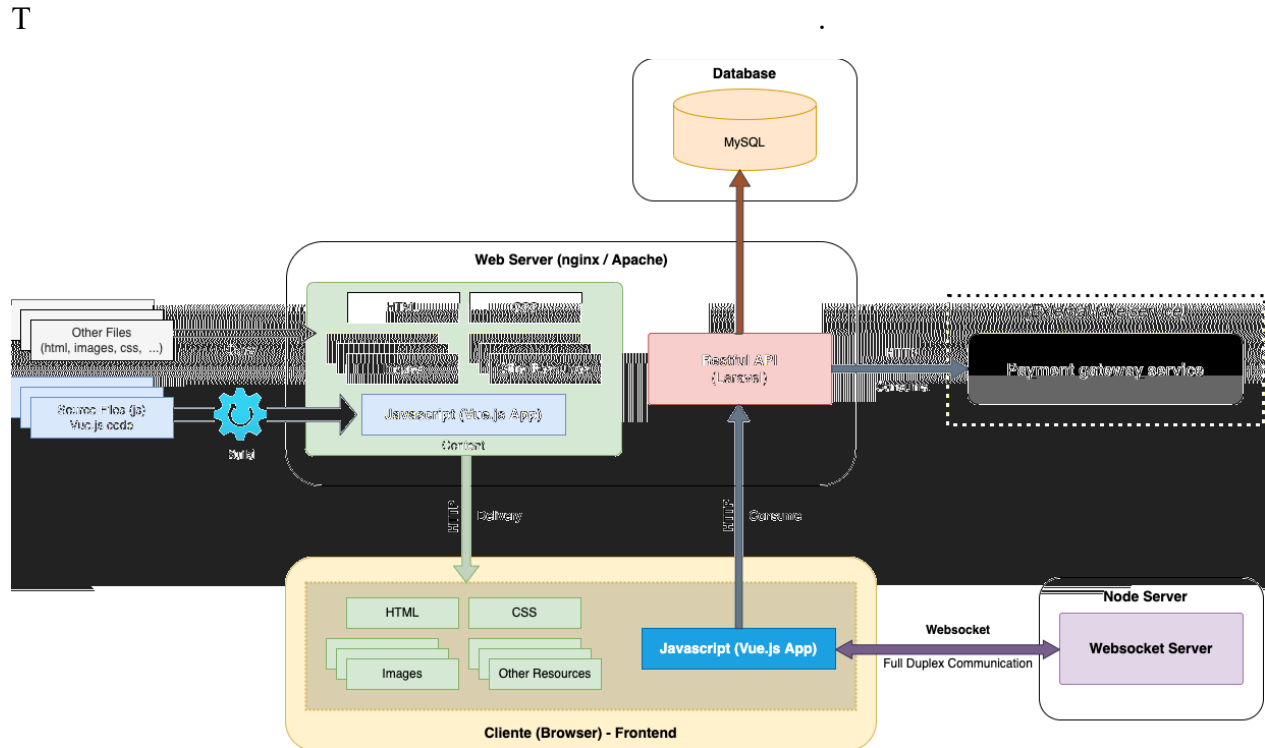
,

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### 3. PROJECT

The project is a Full Stack application, developed using the SPA (Single Page Application) pattern. The frontend is developed using Vue.js, the backend using Node.js, Express.js, and MySQL. The application is a REST API that interacts with a MySQL database and a Payment gateway service.

#### ARCHITECTURE



The project is a Full Stack application, developed using the SPA (Single Page Application) pattern. The frontend is developed using Vue.js, the backend using Node.js, Express.js, and MySQL. The application is a REST API that interacts with a MySQL database and a Payment gateway service.

The architecture is as follows:

- The **Frontend** (Client) is a Single Page Application (SPA) developed using **Vue.js**. It contains **HTML**, **CSS**, **Images**, and **Other Resources**.
- The **Backend** is a REST API developed using **Laravel** (or **Node.js**).
- The **Database** is **MySQL**.
- The **Payment gateway service** is an external service that the backend interacts with.
- The **Node Server** (Websocket Server) provides **Full Duplex Communication** with the frontend via **Websocket**.

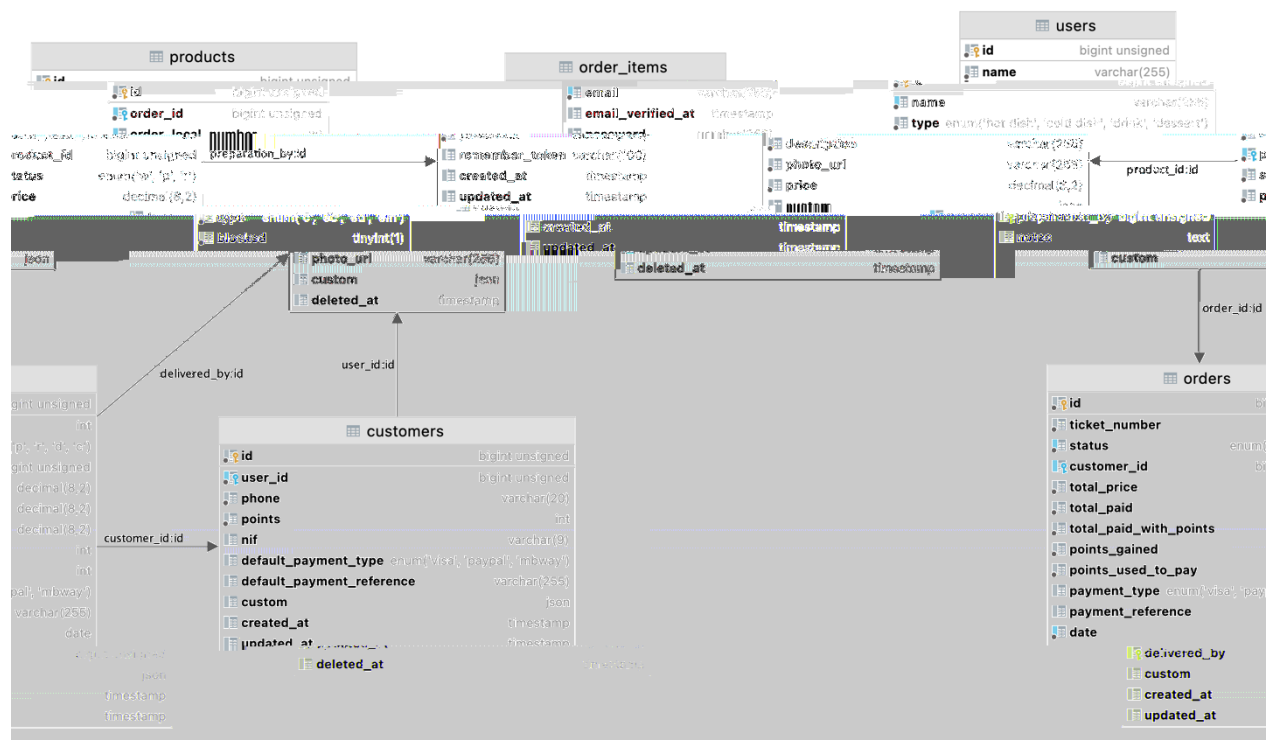
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## DATABASE

T M S , N -SQL  
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- : 'C' (C ), 'EC' (E C ), 'ED' (E D )  
 'EM' (E M );
- "O : 'P' (P ), 'R' (R ), 'D' (D ) 'C' (C );
- \_ : 'W' (W ), 'P' (P ) 'R' (R );

## PAYMENT GATEWAY SERVICE

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URI: https://dad-202223-payments-api.vercel.app

T ,  
.T 2 :

post	<service URI>/api/payments	C
post	<service URI>/api/refunds	C

B ( ):

```
{  
  "type": "visa",  
  "reference": "4283456893323321",  
  "value": 34.01  
}
```

W , HTTP  
R 201 Created.I

, HTTP  
R 422  
Unprocessable Entity.HTTP R

### VALIDATION

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## SIMULATION

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T cannot be validated on the client

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200 .

*Note: When verifying the operation value is always rounded to a 2 decimal number (e.g.: 0.001 is rounded to 0.00; 0.006 is rounded to 0.01; 1.9993 is rounded to 2)*

## 4. CONSTRAINTS

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C1. F S P A (SPA) .

C2. F V . - .

C3. R API L .

C4. W S ( ) N . .

C5. M M SQL.

C6. A .

C7. T . A (L ) -

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## 5. NON-FUNCTIONAL REQUIREMENTS

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NF2. T - R API ( L )  
L .

NF3. T R API REST .

NF4. V .

NF5. A .

NF6. A . T  
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NF7. D ,

NF8. A . F ,  
( HTTP R HTTP R )  
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NF9. A

## 7. DELIVERY AND PUBLISHING

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( ). The functional evaluation will be made exclusively in the published application, so publication is not optional.

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simulates real life application usage ( C7).  
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*Note: replace GG with your group number and NNNNNNN with your student number*

## 8. EVALUATION

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**Weight of all evaluation criteria:**

	Criteria	Weight
1	N -	25%
2	T	25%
3	Q ,	50%