SOFTWARE REQUIREMENT SPECIFICATIONS

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ABSTRACT

A web application, that deals with payment interface under the organizing administrator. That is, it deals with a third party interface called Autharized.Net for school fee payment for registered users.

MODULES

1. Admin

Admin can monitor the databases. Admin have the authority to add, remove or update the website information.

2. Organization (School)

User and organizations are the two ends of the transaction. A merchant account has to be created for an organization in Authorized.Net, towards which user will make the card payments.

3. User (Parents)

User can register into the page and by providing further details of their cards and account they can receive the token that can further be used in the payment, thus avoiding the use of card details. This particular tokens can be used in every payment.

DESIGN

1. User Login and Sign up Page

The first page has buttons for login and sign up. On clicking these buttons, it will open up a modal for their respective use cases.

The login modal will have the following text boxes and the login button:

- **Username:** to enter the username. Username can be alphanumeric.
- **Password:** to enter the password. Password can be alphanumeric, can contain special characters and must be at least 8 characters in length.

There is also a provision to reset your password, in case the user forgets it. On login, the user will be redirected to the Home Page.

The sign up modal will have the following textboxes for the user to sign up to our website:

• **First_name:** to enter the first name. First_name must be entirely alphabetic.

- Last_name: to enter the last name. Last_name must be entirely alphabetic.
- **Email_id:** to enter the email address. Email can be alphanumeric and it must contain '@' symbol.
- **Password:** to enter the password. Password can be alphanumeric, can contain special characters and must be at least 8 characters in length. The password will be saved using encryption methods for security.
- **Phone number:** to enter the phone number. It must be entirely numeric and must be at least 10 characters long.
- The user will also have to verify a captcha to prevent bots from signing up to our webpage.

This registration will provide the user with customer profile id.

2. Home Page

The home page will have a navigation bar. In the navigation bar, a hyper-link to card registration page will be provided. The school list can be found in another hyper-link, where the user can see the list of schools they are providing.

3. Card Registration Page

Card registration page consist of the following text boxes to be filled:

- Customer_profile_id: to enter customer profile id provided after user registration
- Card number: to enter card number
- Expiry date: to enter expiry date of the card
- Cvv: to enter cvv number of the card

This registration will provide the user with payment profile id.

4. Payment Page

The payment page will have the website logo and the following fields.

- **Select School:** The School name can be selected from the drop-down list.
- **Student Name:** Textbox to enter the name of the student. It must be alphabetic.
- Class: class can be selected from the drop-down list
- **division**: division can be selected from the drop-down list
- **Amount:** Textbox to enter the amount to be remitted to the school.
- **Pay:** Button to make payment.

4. Payment history page

here user can view his payment details as a list.

5. Admin Page

The Admin page can only be accessed by the super user. The admin can add other users in admin page if required. The admin can access through the payment information of schools and users. Admin also has the authority to approve or reject a particular user registration request. Admin can access particular transaction information and even contact the user.

Database design

1. School

Field Name	Data type	Constraint
school_id	int	Primary key
School_name	Varchar(50)	
phone_number	int	

2. Student

Field Name	Data type	Constraint
student_id	int	Primary key
school_id	int	Foreign key(school)
Student_name	Varchar(25)	
class	int	
division	varchar	
roll_number	int	
parent_id	int	Foreign key(Parent_info)

3 Parent_info(customer)

Field Name	Data type	Constraint
customer_id	int	Primary key
First_name	Varchar	
Last_name	Varchar	
Email_id	Varchar	
phone_number	int	
User name	Varchar	
password	Varchar	
salt_value	Varchar	
create_date	date	

4. Payment info

Field name	Data type	Constraint
id	varchar	Primary_key
customer_id	int	Foreign key (parent_info)
customer_profile_id	varchar	
Payment_profile_id	varchar	
Card_number	int	

5. Payment_history

Field name	Data type	Constraint
id	varchar	Primary_key
customer_id	int	Foreign key (parent_info)
Transaction_id	varchar	
Amount	int	
student_id	int	Foreign key (Student)
Description	varchar	
Payment_date	datetime	