**Web Application Proposal**

**MealMarvel**



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**MealMarvel**

1. Background

Students have insufficient information about the food menu. They often wonder about the menu that will be served to them. With this website, we hope that students can obtain sufficient information about their food. Additionally, for ordering meal coupons for those who do not reside in the dormitory, with this website, it can help in ordering dining coupons from anywhere and anytime.

1. Purpose

This website is expected to facilitate students in obtaining information about the dining menu and also booking coupons, where students do not need to find out about these matters through word of mouth.

1. Overview of Functionality

Students can view the dining menu that will be served on a particular day. Individuals who wish to dine and purchase coupons can also access this website to buy coupons.

1. Step-by-step Process

* Accessing the application

Users open the application through a web browser.

* Homepage

Users are directed to the application’s homepage, where they can view the available dining menus for a specific day.

* Date selection

Users choose a specific date to view the dining menu scheduled for that day.

* Dining menu display

After selecting the date, users can see the dining menu scheduled for that day. The displayed information includes the food items too be served and the serving times.

* Selection of coupon purchase option

If users are interested in dining and want to purchase coupons, they can select the "Buy Coupons" option available below the dining menu.

* Coupon purchase form completion

Users are directed to the coupon purchase form page where they are asked to fill in information such as the desired number of coupons, full name, shipping address, and payment method.

* Payment

After filling out the coupon purchase form, users choose their preferred payment method

* Purchase confirmation

Upon successful payment, users receive a confirmation of their coupon purchase via alert.

* Coupon usage

Users receive the purchased dining coupons and can use them according to the terms and conditions when they dine at the dining facility.

1. Features

* Menu Display

This feature displays the dining menu for a specific day. It allows users to see the food items that will be served. The menu display feature can be implemented using HTML, CSS, and JavaScript for the front-end.

* Date Selection

Users can select a specific date to view the dining menu for that day. This feature can be implemented using a date picker component in HTML and JavaScript. The selected date can be passed as a parameter to retrieve the corresponding menu from the database.

* Coupon Purchase

Users can purchase dining coupons directly through the website. The coupon purchase feature includes a form where users can enter their details such as the number of coupons desired, full name, and payment method. This feature can be implemented using HTML forms for user input, server-side scripting languages like Node.js for processing form data, and payment gateways like PayPal or Stripe for secure transactions.

* Payment Integration

This feature allows users to securely make payments for their coupon purchases. It involves integrating with third-party payment gateways to process credit card transactions or other payment methods.

* Responsive Design

The application should have a responsive design to ensure optimal user experience across various devices and screen sizes. Responsive design can be achieved using CSS frameworks like Bootstrap or Flexbox to create layouts that adapt to different screen sizes

1. User Interface and Experience

* Clean and Minimalistic Design

The UI features a clean and minimalistic design with ample white space, clear typography, and intuitive navigation elements. This design approach reduces clutter and distractions, making it easier for users to focus on the essential elements of the application, such as viewing menus and purchasing coupons.

* Responsive Design

The application is designed to be responsive across various devices and screen sizes, including desktops, laptops, tablets, and smartphones. Responsive design ensures that the application adapts seamlessly to different screen resolutions and orientations, providing a consistent user experience across all devices.

1. Conclusion

* The application will provide easy access to the menus that will be served on specific days in campus cafeterias, allowing users to select and purchase food coupons according to their needs.
* The potential impact and benefits of the application include:
* Ease of access to information about food menus for students.
* Reduction in time and effort required to find out about food menus.
* Ability to order food coupons online, enhancing convenience and efficiency.
* Challenges that may be encountered in developing this application include:
* Integration with existing cafeteria management systems on campus.
* Ensuring the security and reliability of food coupon purchase transactions.
* Plans to address these challenges include:
* Partnering with cafeteria service providers to integrate their information systems with the application.
* Implementing strict security and encryption standards to protect user data and purchase transactions.

Database Name:

1. meal\_marvel

Table Name:

1. user\_usage
2. menu\_display
3. menu\_schedule
4. coupon\_purchase
5. payment\_method

Table Names & Fields Names:

1. user\_usage

* user\_id
* user\_name
* email

1. menu\_display

* menu\_id
* dish\_name
* dish\_category

1. menu\_schedule

* schedule\_id
* day\_of\_week
* menu\_items

1. coupon\_purchase

* coupon\_id
* expiration\_date
* redeemed

1. payment\_method

* method\_id
* method\_name

Database

1. user\_usage

|  |  |  |
| --- | --- | --- |
| user\_id | user\_name | email |
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1. menu\_display

|  |  |  |
| --- | --- | --- |
| menu\_id | dish\_name | dish\_category |
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|  |  |  |

1. menu\_schedule

|  |  |  |
| --- | --- | --- |
| schedule\_id | day\_of\_week | menu\_items |
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|  |  |  |

1. coupon\_purchase

|  |  |  |
| --- | --- | --- |
| coupon\_id | Expiration\_date | redeemed |
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|  |  |  |
|  |  |  |

1. payment\_method

|  |  |  |
| --- | --- | --- |
| method\_id | method\_name | payment\_date |
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