IT Computer Training Programming with PHPRad for Students of Politeknik STIBISNIS Tegal

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Abstract

The implementation of community service activities in the form of "IT Computer Programming Training with PHPRad for Students of Politeknik STIBISNIS Tegal." PHPRad is the name of a highly efficient and useful software in the category of web programming products. This software is for creating robust and flexible web-based software. This software provides a set of tools needed to design and build web applications to make building and programming easier than ever. In fact, this software has stipulated that in order to build a robust application with minimal programming knowledge. This product is a tool suitable for professionals as well as a tool suitable for beginners. To get started with the PHPRad software, you must first create a project and then connect it to the database. Then, in the next step, we will start configuring and building the product page. In addition, in the next step, you will be able to use various components and widgets to enhance the performance of your software. The hallmark feature of this software is its simplicity in working with this product. As you know, with the help of this software, you can build software only in the user environment without programming. PHPRad is one of the software/programs in producing web-based information systems that can significantly meet the needs of students and provide added value for achieving the goals and objectives for students. This information system was developed using several applications, namely PHP. Then, XAMPP V.3.2.1 was used to run the Apache web server and PhpMyAdmin as the database server and web browser. This architectural model is very important considering that the users of this system are all students and teachers who need ease in interacting during the teaching and learning process. The design of a Web-Based Information System Using PHPRad and MySql for students of Politenik STIBISNIS Tegal aims to facilitate the information process for all students who are experiencing difficulties in computer programming coding.

***Keywords*:** Xampp V.3.2.1, Web Browser, Notepad++, PHP

1. Introduction

Background

The PHPRad framework allows for the development and delivery of complete web applications with little or no coding experience. This requires the Model View Controller (MVC) method to ensure the creation of scalable industry-standard projects. PHPRad is a powerful rapid application development framework where models, views, and controller components can work together seamlessly, yet remain quite independent. This also allows developers to develop projects connected to their chosen database from any source, and also gives developers the option to create new database schemas from scratch within the framework. PHPRad allows you to easily create, configure, edit pages, and publish complete applications from within its framework in the shortest possible time. Politeknik STIBISNIS Tegal is one of the campuses in the Tegal City area. The quality of this Polytechnic is beyond doubt in the implementation of the learning conducted there. Most of the instructors at the Polytechnic are graduates from prestigious high schools and are specialized in their respective fields. In the environment of Politeknik STIBISNIS Tegal, the PHP programming is still done manually. By introducing the PHPRad application system to the students there, the students will develop the still manual system into a modern or automated one, as well as speed up the programming in creating or developing information systems.

Problem Statement

Based on the background above, the formulation of the problem is:

1. How does the PHPRad programming application work for rapid computer programming without coding?
2. What are the benefits obtained from the introduction of PHPRad programming for the development of schools in producing management information system programs?
3. How to make technological and informational advancements a supplier of knowledge
4. How to create a Web-based Information System at Politeknik STIBISNIS Tegal

Target and Output

The expected outcomes of this community service are as follows:

1. Introducing the workings of the PHPRad programming application to students of Politeknik STIBISNIS Tegal, so they can quickly develop and implement management information systems in the school environment.
2. Introducing the functions of the PHPRad programming application system to students of Politeknik STIBISNIS Tegal.

2. Method

Service Method

The methods used for training are the Classical Training Method and the Mentoring Method.

- **Classical Training**

  Provision of training materials in stages according to the needs of the BUMDes of Randusanga Village, Brebes District, Brebes Regency.

- **Mentoring**

  The assistance is provided for 3 years according to the initial plan, and gradually according to the needs and development of BUMDes, and this is the following year's assistance.

System Design

System Planning and Design To build an Information System, good preparation and planning, clear objectives, and repeated testing are necessary to achieve optimal results. System design is an effort by an organization or company to start having a new system. The purpose of system design is to provide a comprehensive overview to the user about the new system. Generally, system design identifies the components of the information system that will be detailed for computer programming and other engineering experts who will implement the system.

Activity Plan

As for the planned activities, they are as follows:

a. Conducting a practice session to introduce programming with PHPRad to students. Tim gave a presentation in front of the class. Then the team explained in detail what

PHPRad is. They explained how PHPRad functions and works to the students. The practice will be held at SMA Negeri 1 Brebes.

b. Conducting practice independently. Students, after seeing the instructions and explanations from the moderator, practice independently with the PHPRad prepared by the team. From this practice, they will understand how PHPRad works. The training conducted by the team will enable students to develop their own information systems.

Strategy

The strategy used in this community service is to conduct training to introduce programming with PHPRad to the students of SMA Negeri 1 Brebes. Based on meetings with the principal and the vice principal in charge of the curriculum, it was found that the problem is that the students of SMA Negeri 1 Brebes want to develop a management information system within the school environment, but they do not yet understand the functions and workings of programming with PHPRad. Therefore, we want to introduce the students to the functions and workings of PHPRad so that after understanding how it works, they can create a management information system application program for the advancement of the school.

College Eligibility

Here are some factors that can be considered in evaluating the feasibility of higher education institutions in the community service report for IT Computer Programming Training with PHPRad for Students of Politeknik STIBISNIS Tegal:

1. Expertise and experience of teaching staff: Higher education institutions must have teaching staff with adequate expertise and experience in the field of computer programming. They must be able to provide effective and relevant training for students.
2. Relevant curriculum: Higher education institutions need to have a curriculum that is relevant and related to graphic design. The curriculum must include appropriate materials and skills to enhance students' creativity in programming.
3. Adequate facilities and equipment: Higher education institutions must provide adequate facilities and equipment for the introduction of computer programming. This includes classrooms equipped with the necessary hardware and software, as

well as access to libraries and other resources that support learning.

4. Effective teaching methods: Colleges must use effective teaching methods to engage students in computer programming training. This may involve a combination of lectures, discussions, case studies, practical projects, and constructive criticism to enhance students' creativity.
5. Evaluation and feedback: Colleges must have a good evaluation and feedback system to track student progress and provide the necessary guidance. This may involve assignments, tests, and periodic reviews of students' work.
6. Involvement of the industry or graphic design practitioners: Colleges can collaborate with the industry or graphic design practitioners to provide practical insights to students. This collaboration can involve workshops, guest seminars, or joint projects that engage students with the real world of computer programming.

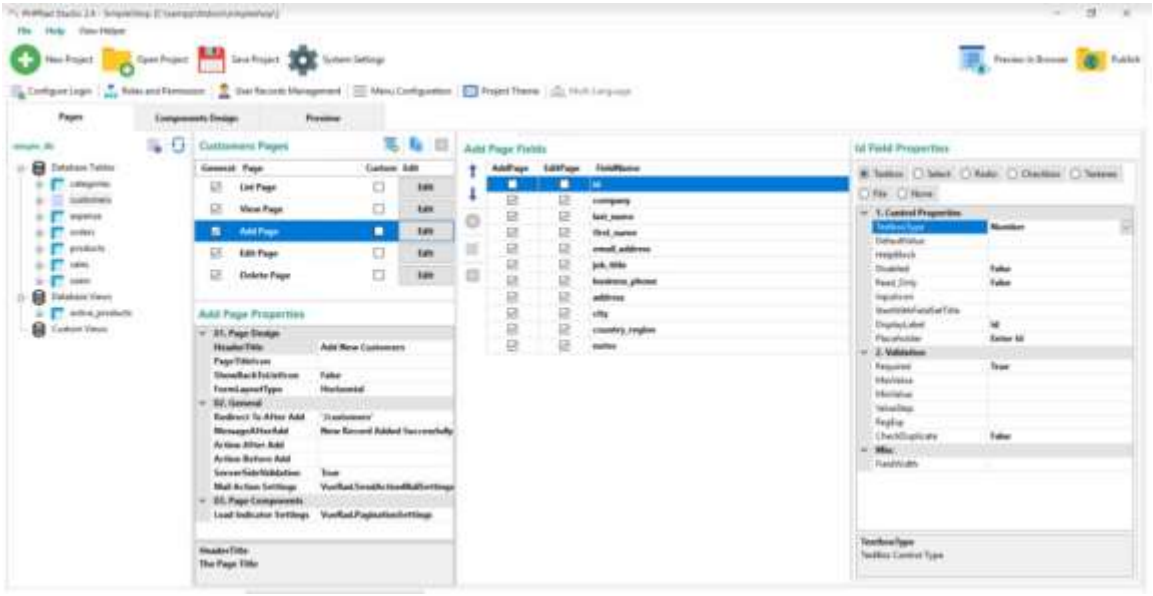
Results and Outcomes Achieved

The PHPRad framework enables the development and delivery of complete web applications with little or no coding experience. This requests the Model View Controller (MVC) methodology, which ensures the creation of scalable and industry-standard projects. PHPRad is an advanced rapid application development framework where models, views, and controller components work together seamlessly, yet remain quite independent. This also allows developers to develop projects connected to their chosen databases from any source and also provides the option for developers to create new database schemas from scratch within the framework. PHPRad provides the creation, configuration, page editing, and publishing of fully completed applications from within its framework in the shortest possible time, easily.

PHPRad's Amazing Features

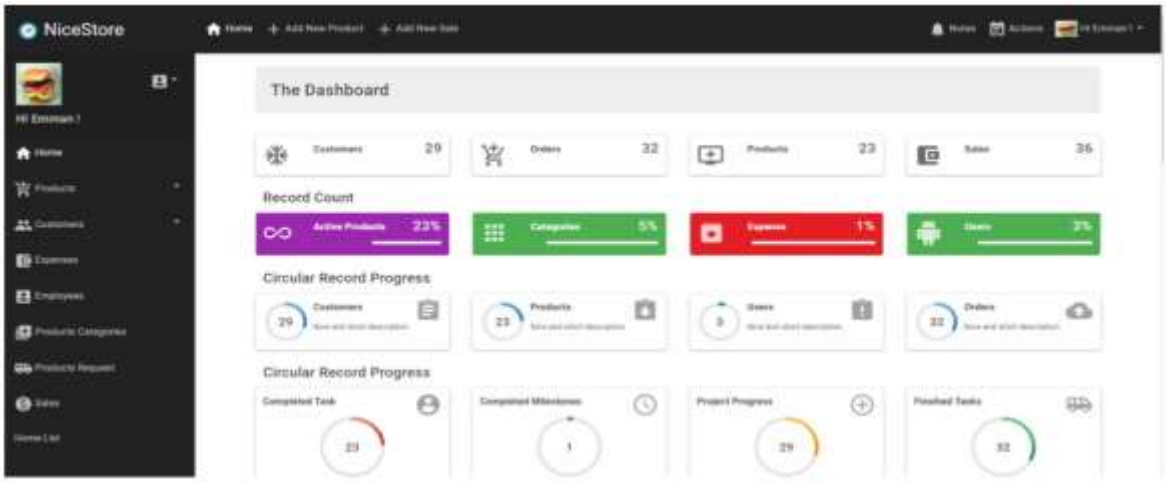
Drag and Drop Approach

Designed to allow developers to drag and drop components onto any page, the components dragged onto the page can be configured to meet the functional needs of the developers. Drag and Drop Components onto any page.



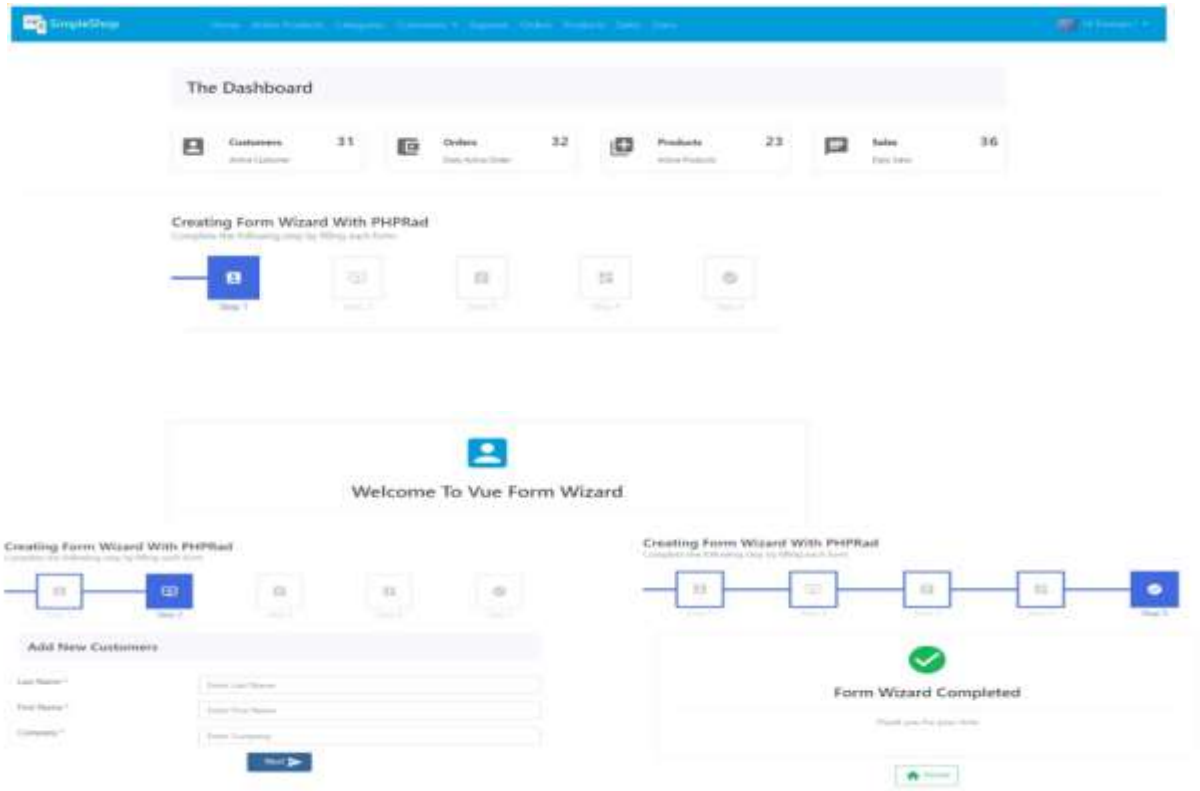
Components and Dashboard

Users can add additional components such as record counts, charts, dynamic multi-level menus, sub-pages, and more to any page.



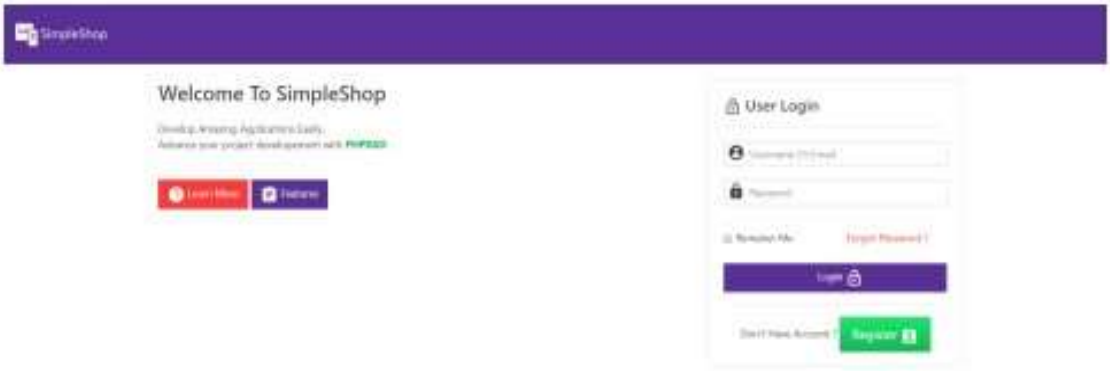
Form Wizard

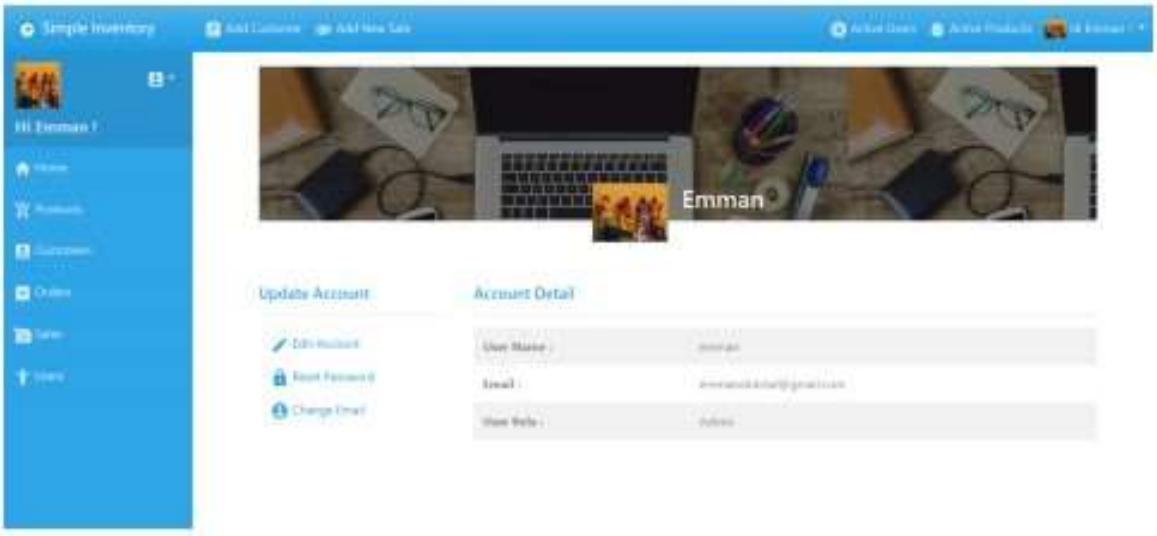
Allows users to build different styles from the form guide and can submit each form at the next step or submit all forms together at the final step, other components can be dragged to any step..



Securities

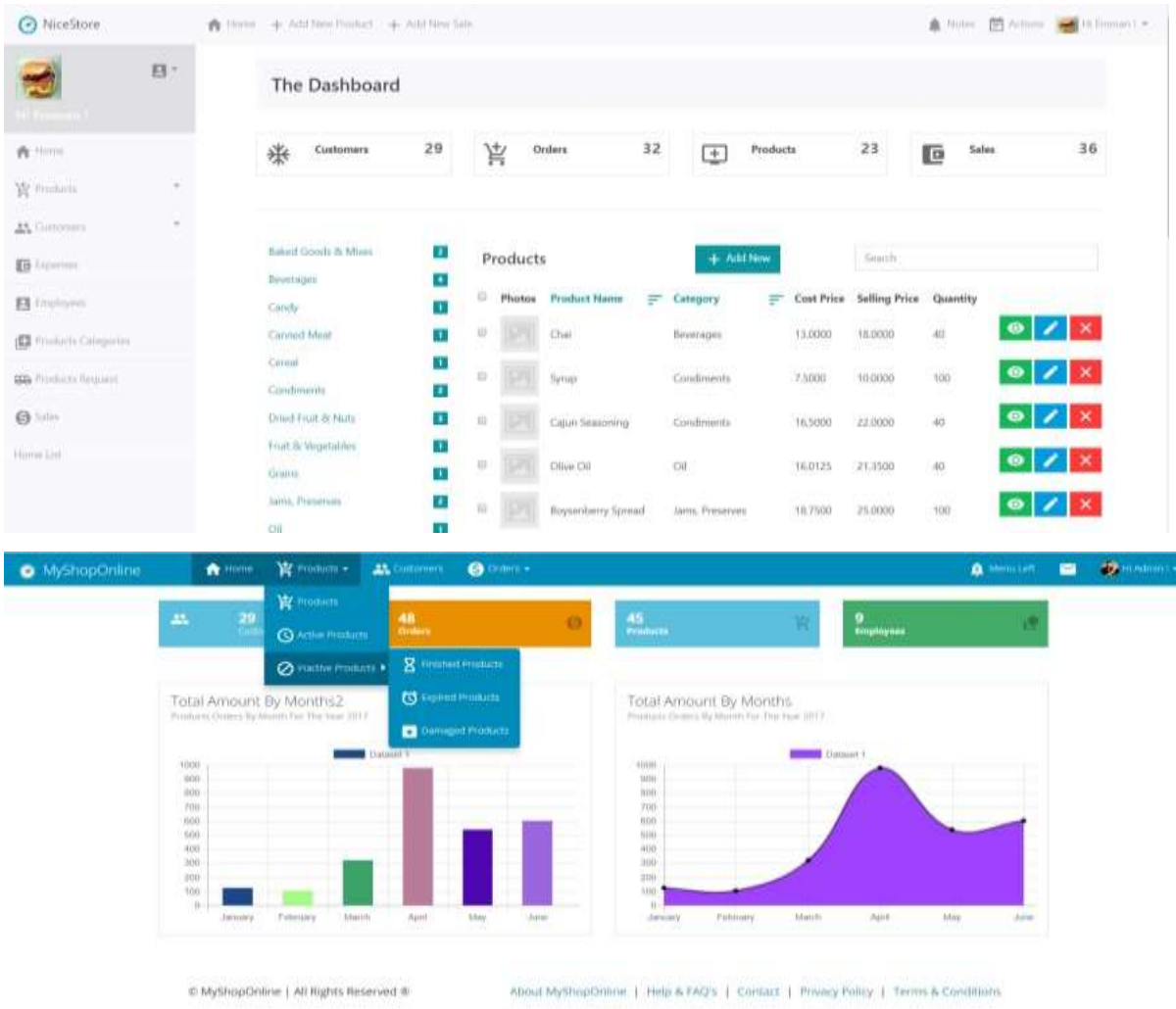
Security issues such as: SQL Injection, CSRF, XSS, ... etc. have been addressed. User Registration and User Account Management (Pembaruan Profil, Perubahan Email, Reset Kata Sandi).





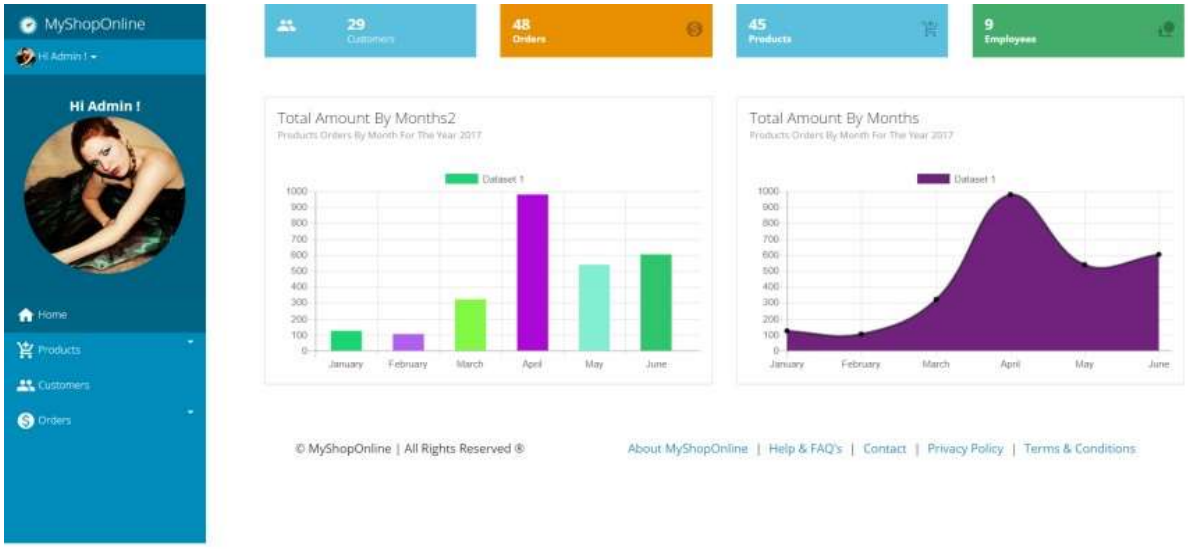
Application Menu Style

Offering different styles and positions of the application menu for users to choose from.



Just Stay Up

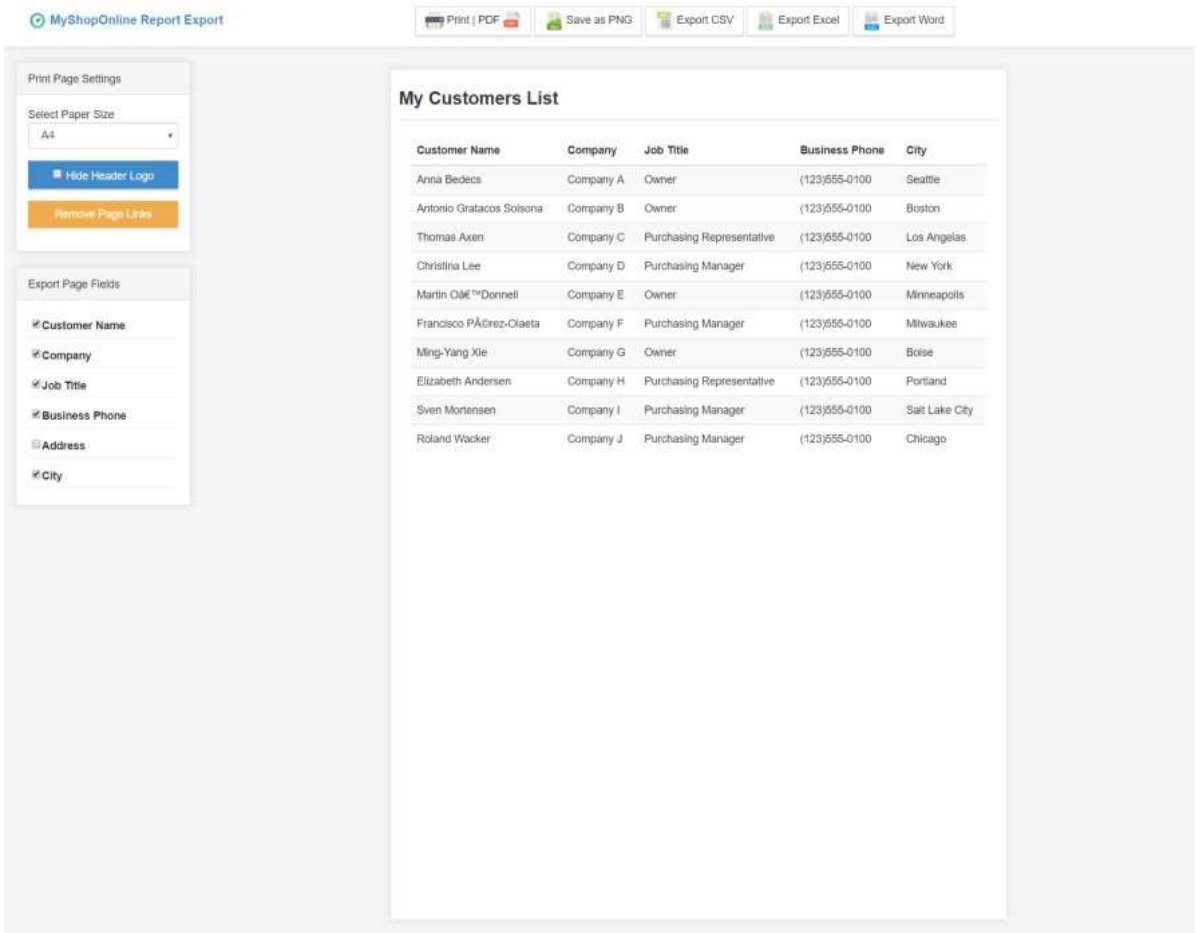
The Left and Right Sides



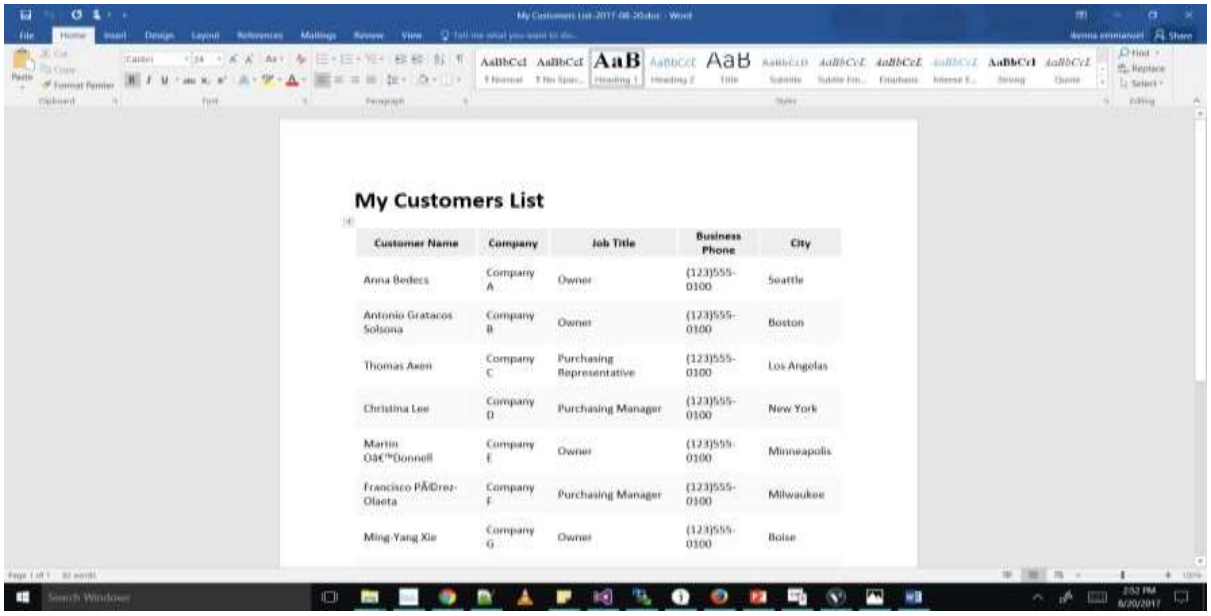
Static and Just Stay Left

Automatically Generated Report Page

Can automatically generate report pages with various export options such as PDF, IMAGE, WORD, EXCEL, and others.



Generated Report Page



Report Page Exported in Word

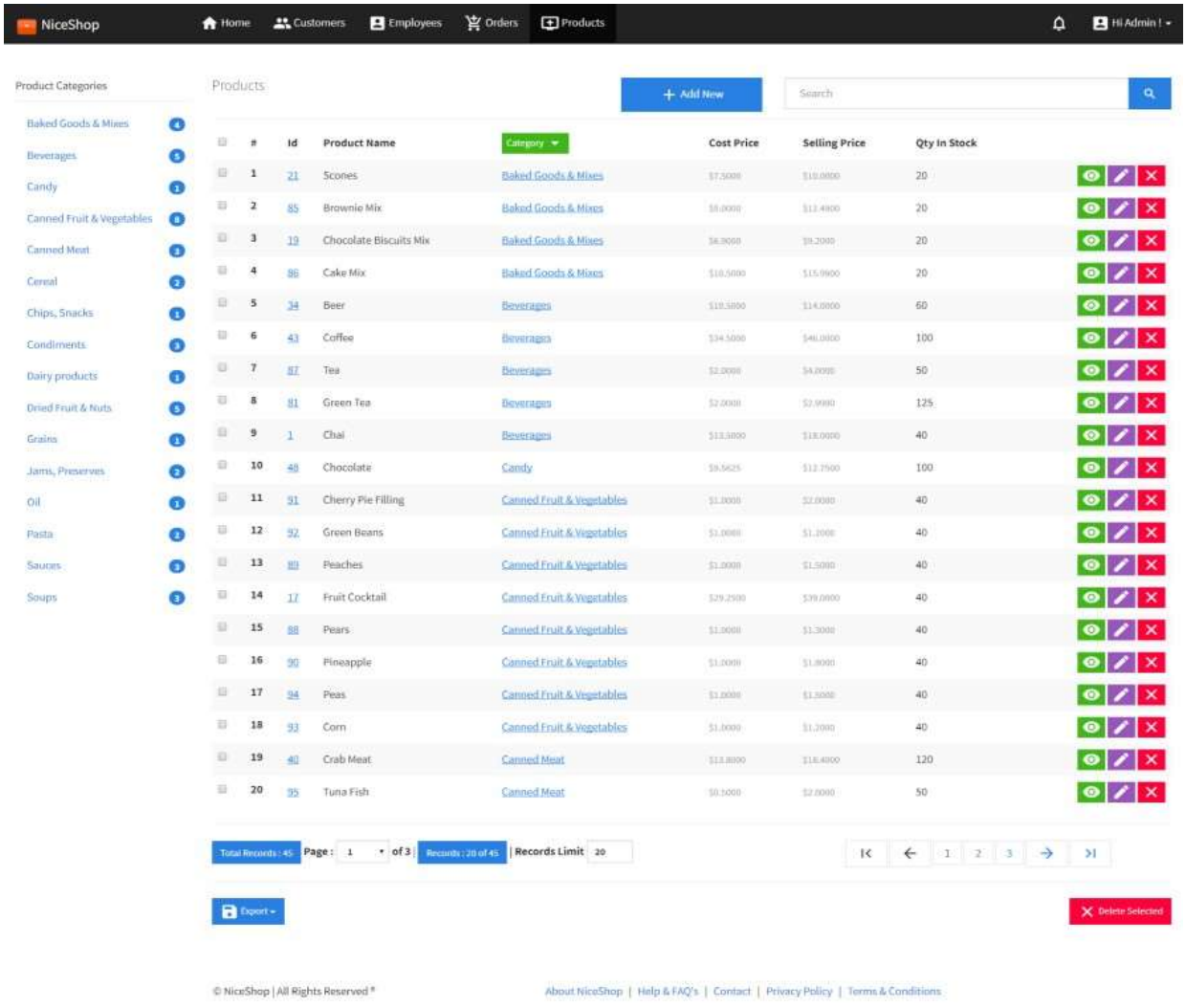
Responsive Mobile Application

The applications generated by PHPRad are automatically scalable and responsive to mobile devices.

Creating a Data Table

This IDE tool helps users create advanced and simple data tables, with record sorting and various pagination options. Can create record action buttons (edit, delete, update) with different display styles. Can perform several CRUD operations in a modal or page.


MyShopOnline
Home
Products
Customers
Orders
Record Details
Photos :
Product Name :
Description :
Standard Cost :
List Price :
Quantity in Stock :
Category :
Beverages
Edit
Delete
Export
© MyShopOnline | All Rights Reserved ®
About MyShopOnline | Help & FAQ's | Contact | Privacy Policy | Terms & Conditions


NiceShop
Home
Customers
Employees
Orders
Products
Hi Admin !
Product Categories
Baked Goods & Mixes 4
Beverages 5
Candy 1
Canned Fruit & Vegetables 8
Canned Meat 3
Cereal 2
Chips, Snacks 1
Condiments 3
Dairy products 1
Dried Fruit & Nuts 5
Grains 1
Jams, Preserves 2
Oil 1
Pasta 2
Sauces 3
Soups 3
Products
+ Add New
Search
Id Product Name Category Cost Price Selling Price Qty in Stock
1 21 Scones Baked Goods & Mixes 20
2 85 Brownie Mix Baked Goods & Mixes 20
3 19 Chocolate Biscuits Mix Baked Goods & Mixes 20
4 86 Cake Mix Baked Goods & Mixes 20
5 34 Beer Beverages 60
6 43 Coffee Beverages 100
7 87 Tea Beverages 50
8 81 Green Tea Beverages 125
9 1 Chai Beverages 40
10 48 Chocolate Candy 100
11 91 Cherry Pie Filling Canned Fruit & Vegetables 40
12 92 Green Beans Canned Fruit & Vegetables 40
13 89 Peaches Canned Fruit & Vegetables 40
14 17 Fruit Cocktail Canned Fruit & Vegetables 40
15 88 Pears Canned Fruit & Vegetables 40
16 90 Pineapple Canned Fruit & Vegetables 40
17 94 Peas Canned Fruit & Vegetables 40
18 93 Corn Canned Fruit & Vegetables 40
19 40 Crab Meat Canned Meat 120
20 95 Tuna Fish Canned Meat 50
Total Records : 45 Page : 1 of 3 Records : 20 of 45 Records Limit 20
Export
Delete Selected
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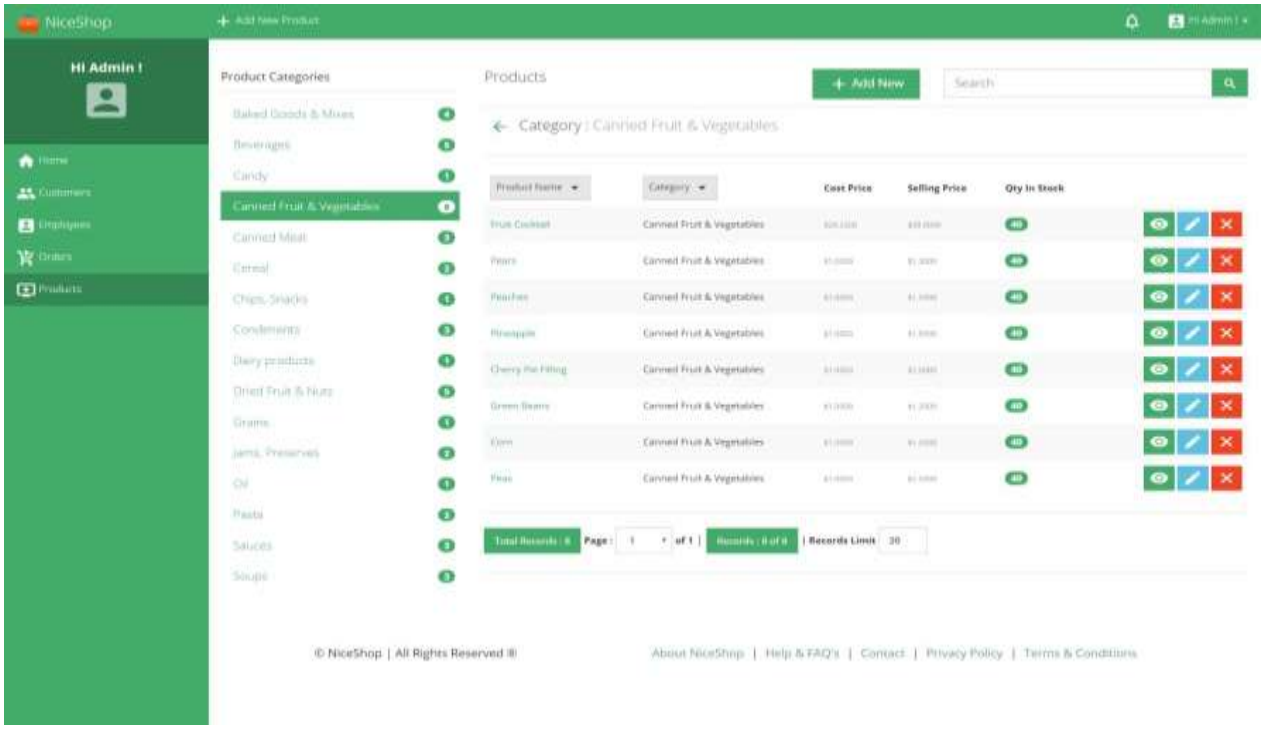
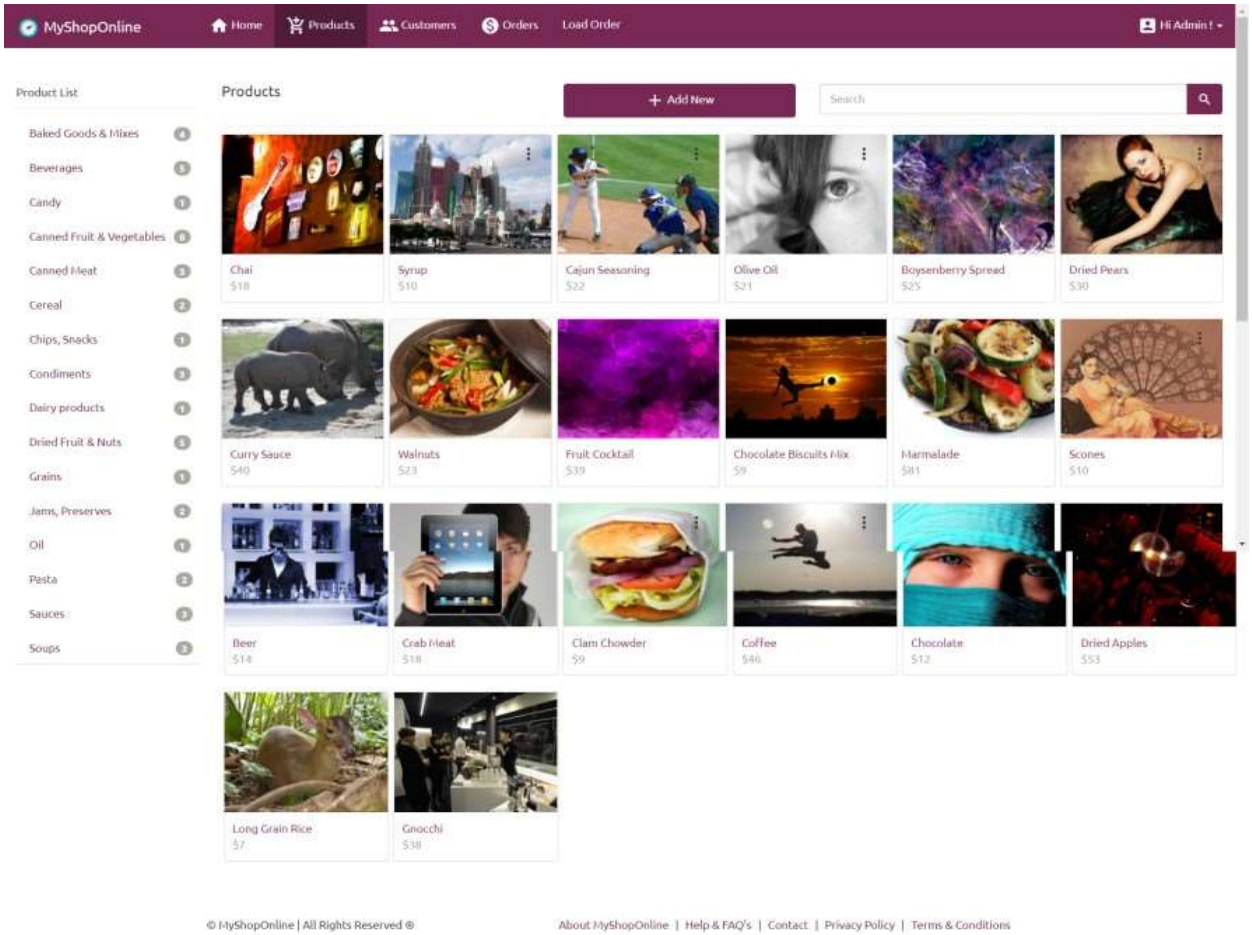
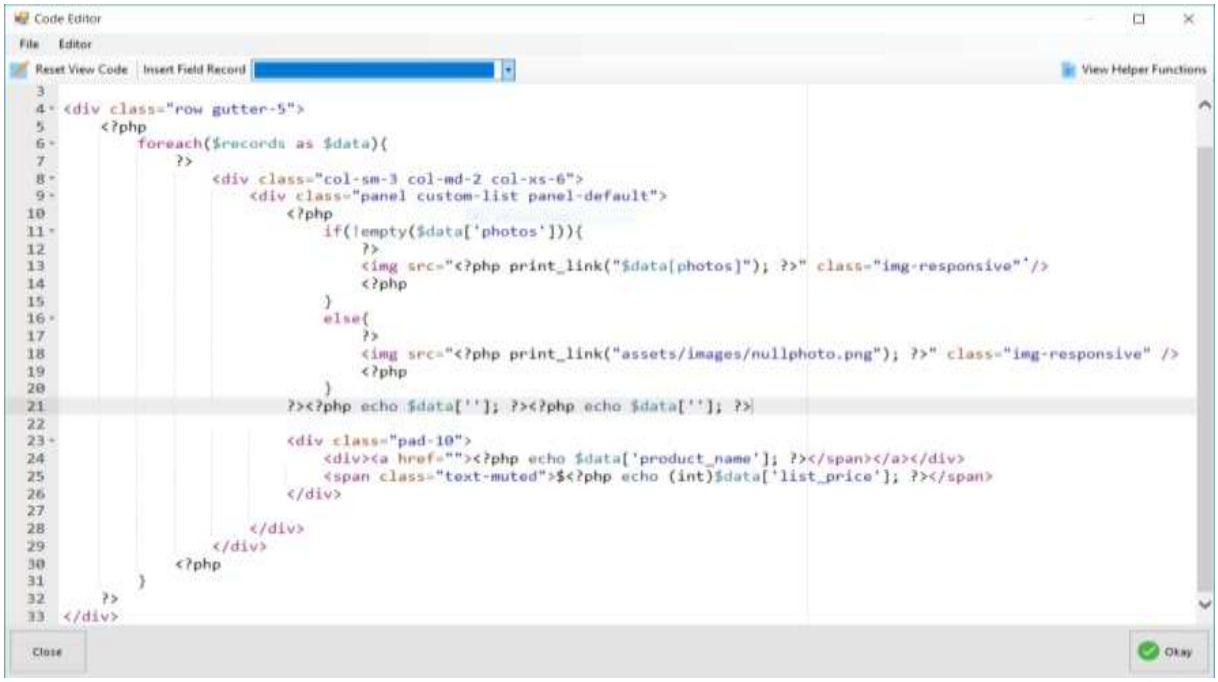


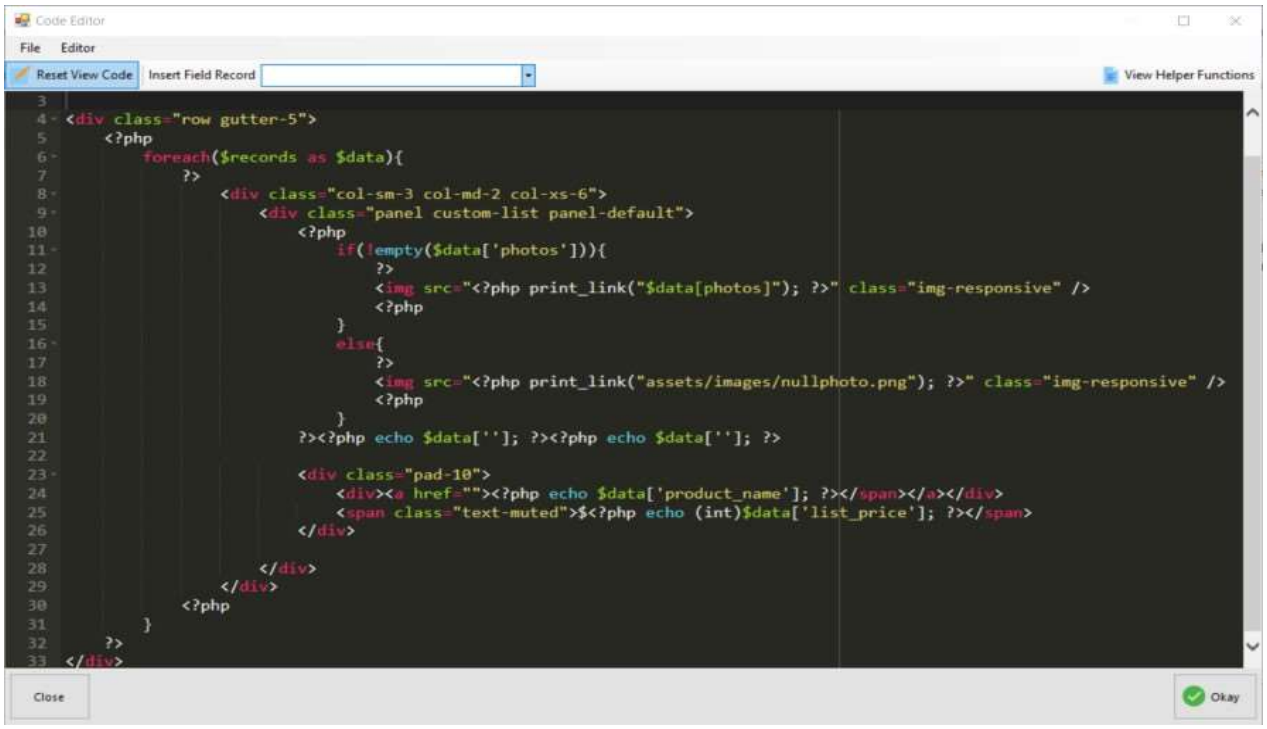
Custom Box Page

Users can create and edit custom grid components according to their appearance/functionality needs.



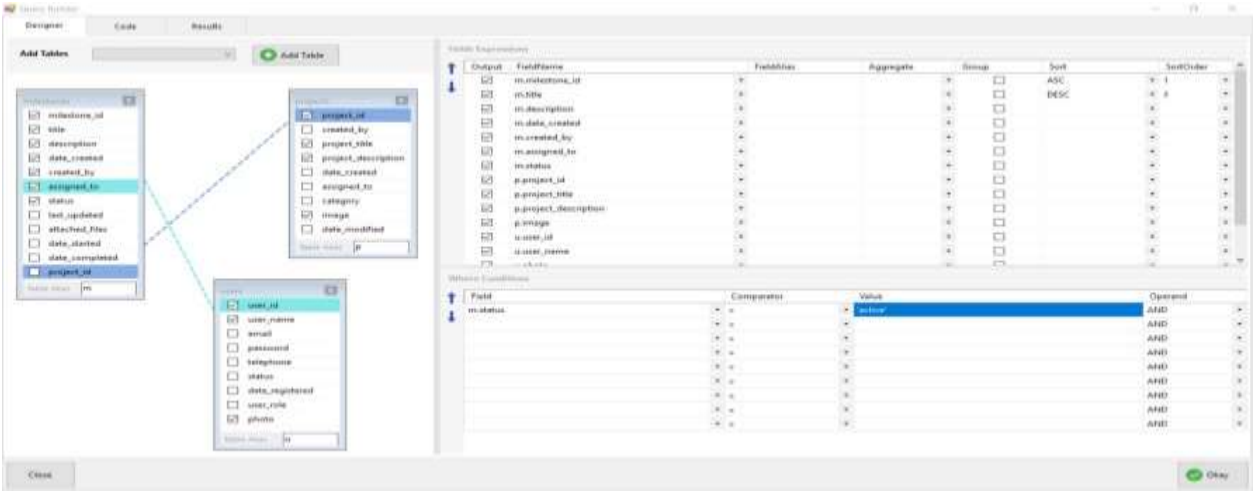
You can also edit the grid page with our advanced code editor with different themes. (Versi Lite dari SUBLIME TEXT EDITOR).





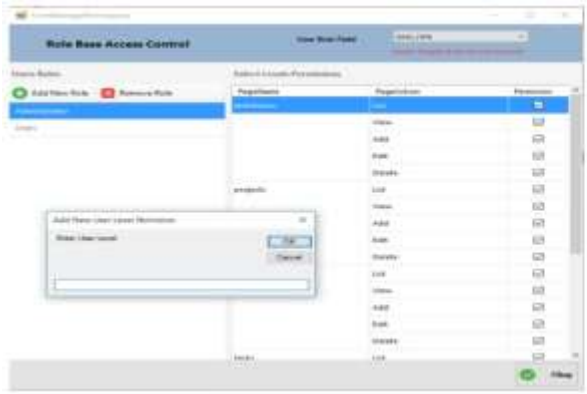
Advanced Query Builder

Advanced query builder with SQL code editor.



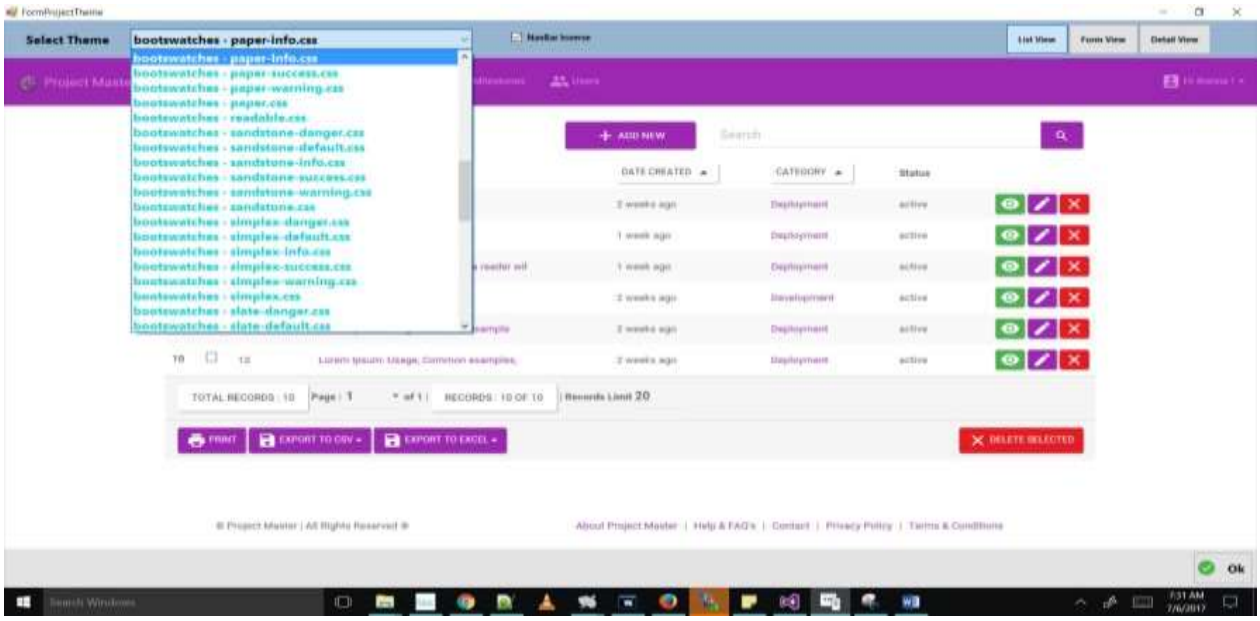
RBAC Business Logic Model

Apply the RBAC business logic model into your application.



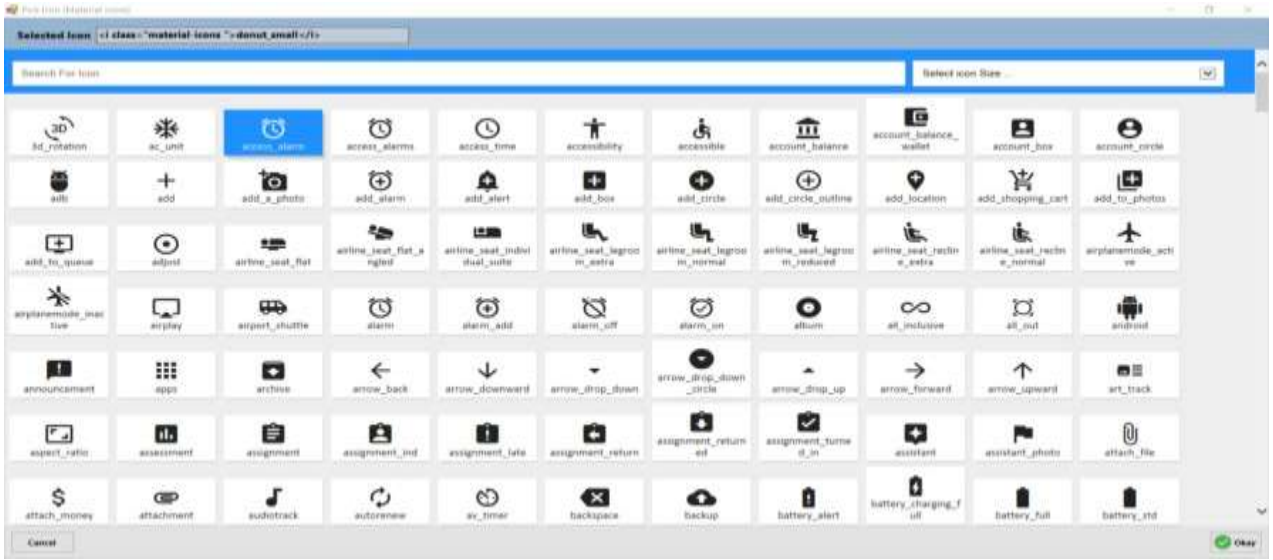
Modern Template Bootstrap

More than 60 modern bootstrap template designs are available for your project theme.



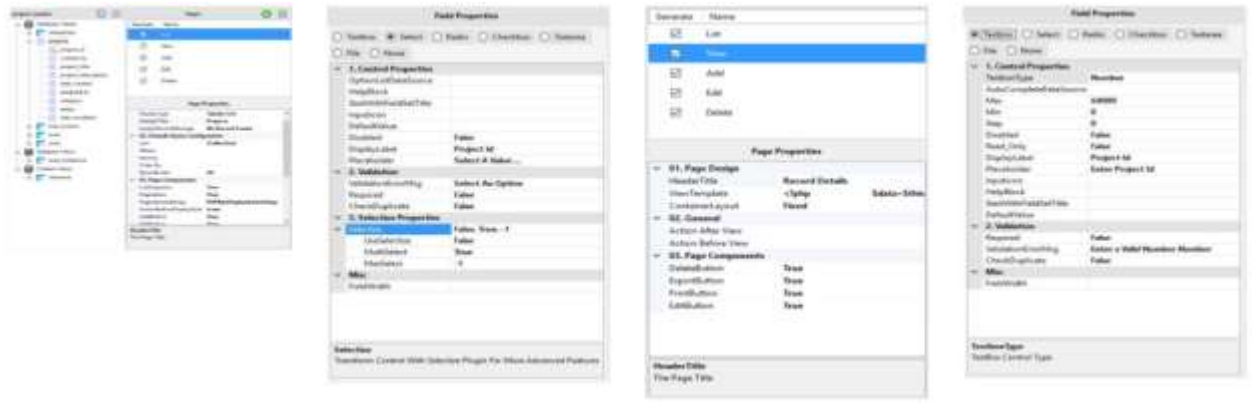
Material Design Icon

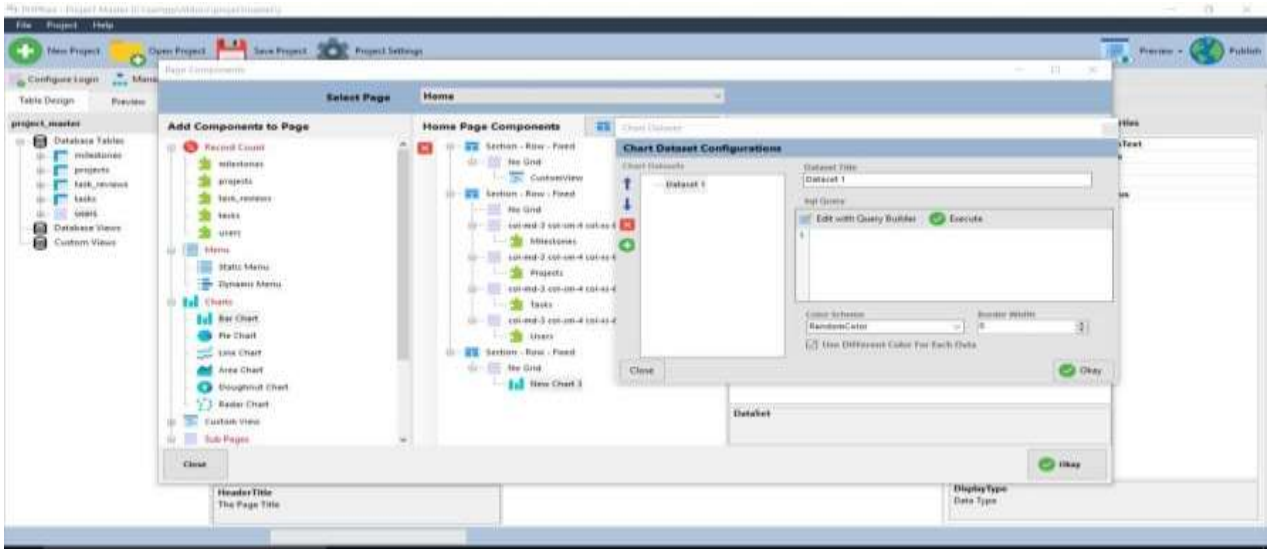
Choose from over 2000 material design icons that can be used on any page.



Component Designer

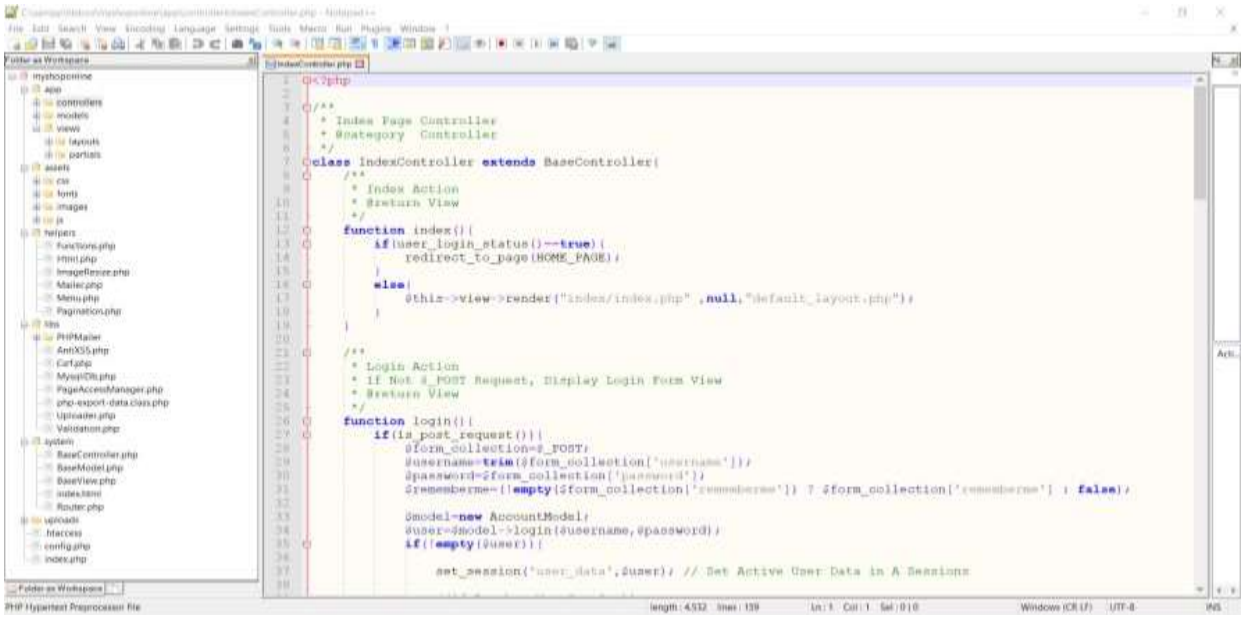
Intuitive component designer with help descriptions and instructions. Many flexible options to help you build an application that best fits your specifications.





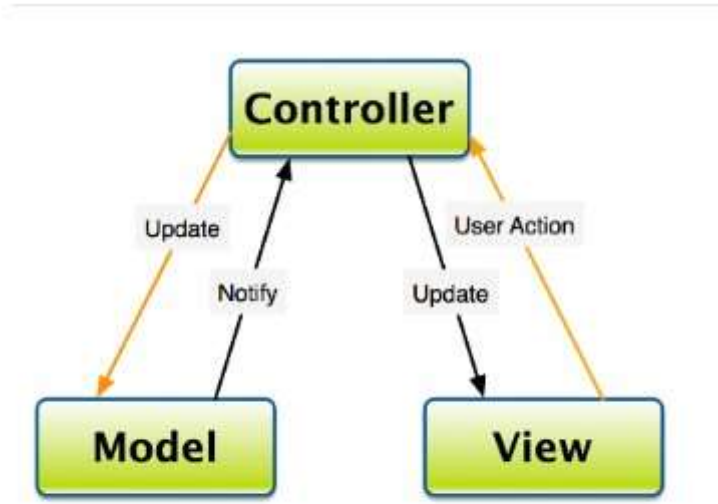
Clean and Simple Code

Well-structured and professional commented code. Using a Simple and Strong MVC Framework.



MVC Pattern

Developed using the MVC (Model View Controller) Design Approach, ensuring the separation of user actions (Controllers Models) and views (Template), implementing a clean separation of concerns between models, views, and controllers in the application.



Maintaining a clean separation of concerns makes the development, maintenance, and testing of large complex applications easier, as the contracts between different application components are defined and articulated more clearly.

Next Steps Plan

Here are some factors that can be considered in evaluating the feasibility of the university in the service report for IT Computer Programming Training with PHPRad for Students of Politeknik STIBISNIS Tegal:

1. Expertise and experience of teaching staff: Higher education institutions must have teaching staff with adequate expertise and experience in the field of computer programming. They must be able to provide effective and relevant training for students.
2. Relevant curriculum: Higher education institutions need to have a curriculum that is relevant and related to graphic design. The curriculum should include materials and skills that are appropriate to enhance students' creativity in computer

programming.

3. Adequate facilities and equipment: Higher education institutions must provide adequate facilities and equipment for the introduction of computer programming. This includes classrooms equipped with the necessary hardware and software, as well as access to libraries and other resources that support learning.
4. Effective teaching methods: Colleges must use effective teaching methods to engage students in computer programming training. This may involve a combination of lectures, discussions, case studies, practical projects, and constructive criticism to enhance students' creativity.
5. Evaluation and feedback: Colleges must have a good evaluation and feedback system to track student progress and provide the necessary guidance. This may involve assignments, exams, and periodic reviews of students' work.

Involvement of the industry or graphic design practitioners: Colleges can collaborate with the industry or graphic design practitioners to provide practical insights to students. This collaboration can involve workshops, guest seminars, or joint projects that engage students with the real world of computer programming.

3. Conclusion

The introduction of PHPRad can be an effective tool to enhance the creativity of students at Politeknik STIBISNIS Tegal. By providing an understanding of design principles, programming, technical skills, and opportunities to practice through practical programming projects, this training can inspire students to develop their creative ideas and produce engaging computer application programs. Additionally, involving students in practical activities and providing constructive feedback can help them improve their skills and enhance their work.

Suggestions

1. Improving collaboration with the industry: Colleges or institutions that conduct Arduino introduction programs can enhance collaboration with the industry or programming practitioners. This collaboration will provide practical insights, up-to-date information, as well as internship opportunities or project collaborations involving students. This will help students experience the real world of programming and enhance their readiness for a career in this field.
2. Providing access to devices and software: Ensure that students have adequate access to the hardware and software used in computer programming. Providing computer labs equipped with the latest programming software will allow students to practice hands-on and enhance their technical skills.

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