

DESIGN SYSTEM INFORMATION CASHIERWEBSITE BASED SPIRAL METHOD SHOP VINNY KITCHEN MDO

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ABSTRACT

Cashier system in shop business entities Vinny Kitchen Mdo is still using Sales services are still done manually, namely cashiers only use calculations manual with a calculator and data collection of goods is still manual and resulted very ineffective and efficient in doing transaction. Facility And service to cashier expected can given in a manner automatic so that No bother intractions with customers, and if there is a cashier does not need to provide the same service in a manner manuals. Model implementation system cashier based web possible system used by cashiers and admins to automatically calculate orders for goods in transaction sale. Use system cashier based web This can see chart sales that are entered in the system so that store owners can monitor increases or a decrease in transactions. The method to be used is the Spiral Method that is, a software process model that incorporates the iterative form of the model prototyping aspect control And systematics. Design system information cashier sale product shop vinny kitchen mdo in do transaction, processing data, And Web-based automatic printing of reports when running will occur change system Which before manual be computerized.

Keyword : System Cashier, Application based web, Method Spiral

1. INTRODUCTION

Computer technology science which is currently developing, especially in the field system information Which the more proceed. Should A body business can utilise technology the with Good, like use A web Which can be used in a business, but there are still business entities that still implementing a product sales system and managing product inventory data such as manually entering incoming and outgoing product data, one of them Shop Vinny Kitchen Mdo .

Toko Vinny Kitchen is a company engaged in the culinary field sells a variety of donuts, bomboloni , and bread products. Currently the business entity is still using a sales service system that is still manual. Look at the process the use of inventory data processing manually is often experienced problems such as transactions that only rely on calculator calculations and recording from book big. With in help a employee on part cashier And another one in the service department, shop owners often experience being overwhelmed in

providing services. Even though it has been supported by a calculator, Transaction calculations still have weaknesses in the calculations because they occur factor misread the code goods to be for sale.

Shop Vinny Kitchen Mdo is Wrong One industry food. Will butat this store still uses a fairly simple cashier service system. By only being recorded in a book, service to customers becomes not maximal. Calculation of the results of transactions that only rely on a calculator and without the support of a computer. Shop owners often experience overwhelmed customers when the store is busy. Quite a long queue make happening buildup time payment process transaction.

System sale Which Still manuals own Lots weakness, most there is an error on recording, And search data Which difficult because every done look for data seller must look for on book big. There isn't any information specifically that informs about the number of stock items so it is not rare when stock Already finished owner shop new know when process occurs transaction so that disappointing customers.

Based on the identification of the problems described above, the intent and objective from writing study This is:

- a. Process transaction Which in count Already automatic from system based web And saved with good at in A *databases* so that make it easy in

do transaction.

- b. Shorten performance employee moment do transaction with consumer And so that not invite queue in shopping.
- c. Simplify in see And print report sale goods in a manner details.
- d.

2. IMPLEMENTATION METHOD

For data collection Document Which needed in writing This regarding the design of a Sales Information System at the Vinny Kitchen Store Mdo planning system cashier based *web* , writer use method as following:

2.1 Technique Collection Data

1. Observation

In matter This writer do observation direct on Shop Vinny Kitchen Which is at st. Great Delima no. 2, Griya Paniki Indah, Manado.

2. Interview

In this study, the authors conducted interviews with store leaders Vinny Kitchen Vinny Miranda's mother Maukar . to get information in a manner complete about all activities Sale product.

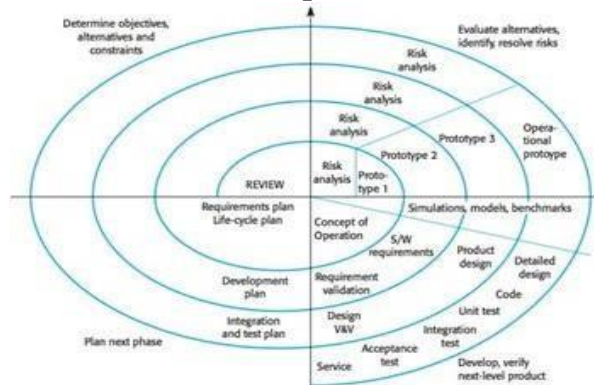
3. Studies References

In order to support in this writing, the author studied and obtained ingredients from books supporters,

reference data Which support in making study.

2.2 Model Development System

Picture 1 Spiral Model



The spiral model is an integrated software process model form of repetition of the *prototyping model* control and systematic aspects of *linear sequentially models* , with the addition of a new element, namely analysis risk. Model This own four activity important, that is:

1. Planning (*Planning*). Determination objective, alternative, And limitation. On stages planning, writer determine application Which will made after interview with owner shop and fit the shortage the store.
2. Risk analysis (*Risk analysis*). Alternative analysis and risk identification/solving. On stages analysis risk, do analysis How system way Work on shop moment This, with in accordance collection data can know lack Andthe problem.
3. Manipulation (*Engineering*). Development levels next from product.

On stages manipulation, build planning application Which will made like design and *codeprogram* which are made.

4. User Evaluation (*Customer Evaluation*). Evaluation of form engineering results spiral give description that the more big the iteration, so show the more complete the version of the software that is made. During the start of the circuit, objective, alternative and limitations defined as well as identified risks and analyzed .

If own uncertainty about necessity need will prototype, *prototyping* in the technical quadrant. Then it can use simulations and other models to define problem And increase need. owner propose For evaluate results manipulation (quadrant evaluation customer) And propose For increase. Based on contribution customer, steps following is planning And analysis

risk. Analysis risk always verify is project has passed and the risk is important, project can discontinued. Model spiral this is approach most realistic for a system of scale main [2].

2.3 Specification hardware And Software

As for specification minimum *hardware* And *Software* used For support system and Research Tools:

a. Device Hard

Laptops Toshiba Windows 10 with specifications :

1. Processor : Intel(R) Core (TM) i5-2410M CPUs @ 2.30GHz 2.30 GHz
2. Ram : 4gb
3. Hard disc : 500 Fig

b. Rank Soft

1. Visual CodeStudio
2. Xampp PHP Control Panel to run Apache , and PHP on Localhost without must using an internet connection
3. Browsers Google chrome For operate System And enter *databases* in in localhost / PhpMyadmin

2.4 Language Programming Which Used

Computers operate on binary code or code with two states 0 and 1. If specified in an explicit state, code 0 indicates an off state and code 1 show circumstances

active. On base This, programs beginning making computer executed in Language programming based on code binary And called language machine.

Language machine And Language assembly classified as Language level low Which machine oriented . It means, *programmer* must truly understand things about machine Which concerned For write program. For overcome these weaknesses, high-level languages were born. C, C++, Java, Python , and Ruby including in category Language level tall. Focus on Language level tall more in people. That is, orders are written using words in the language humans or in the form of code that is more easily understood by humans. In matter these, language words English Which general used.

a. PHP

Hypertext Preprocessor , also known as PHP, is a *scripting language* side *servers* designed for web development. PHP is referred to as a language *server-side* programming because it is processed on *the server* . It differs from language client-side programming such as Javascript , which is processed by *the web browser* . PHP Free to use and *open source* , PHP is released under the PHP license. This slightly different from GNU *General Public License* , which is commonly used in project

open source [4].

b. CSS

When defined in a manner free, CSS is bunch code For designing or enhance the look and feel of a web page. In other words, CSS can used For change design standard Which generated HTML become variation

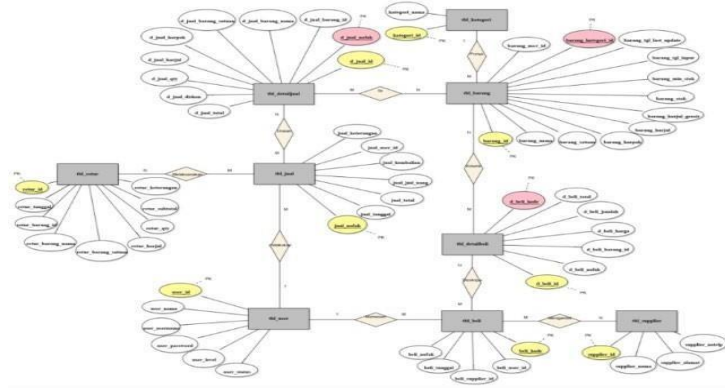
Which more complex [5].

3. RESULTS AND DISCUSSION

1. ERD (Entities Relationships Diagram)

Form ERD (*Entities Relationships Diagram*) Which describe model base data system made are as follows:

Picture 2 ERD Shop Vinny Kitchen



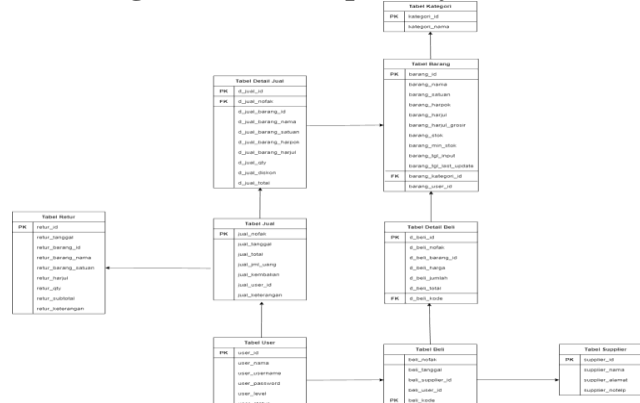
2. LRS (Logical Records Structure)

Form LRS (*Logical Records Structure*)

Which describe model transformation from ERD made are as follows:

Figures 2 and 3 show the flow or diagram of something in it transaction sale And purchase, And produce system Which quality And caused with benefit

Figure 3 LRS Shop Vinny Kitchen



3. Users Interfaces

Users Interfaces or screenshot is one component of system Which designed to function as means communication between *user* And program system Which later will

used.

a. Page System *Login*

Page This function as page For *login* , useful For process enter to in the admin room and cashier for make

transactions.

Picture 4 Users Interfaces Login



b. Page System *Dashboards*

Dashboard page is the main page for cashier and user admin Where There is a number of menu that is

Dashboard, Re -stock, Cashier, Products, suppliers , Report Finance And Arrangement.

Picture 5 Page System *Dashboards*

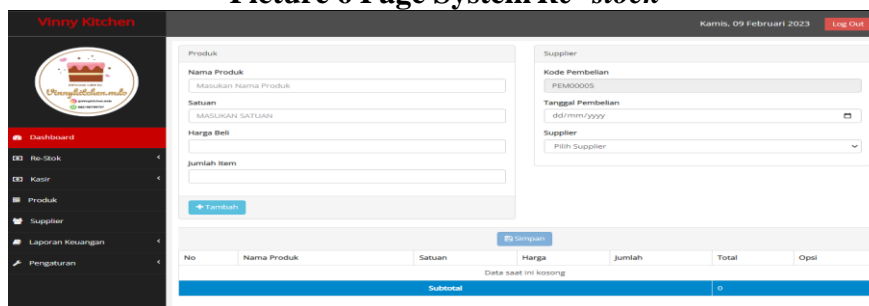


c. Page System Re -stock Product

Re -stock page is a page for recording purchase reports material raw

materials for making products in stores vinny kitchen .

Picture 6 Page System *Re -stock*

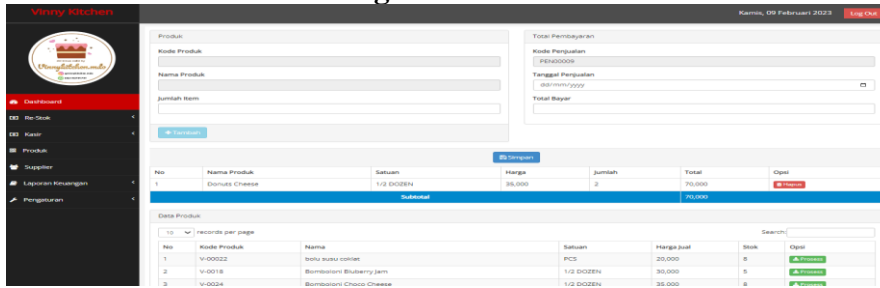


d. Page System Transaction Cashier

Page transaction cashier is page For cashier And customers For do transaction sale product vinny kitchen . System will calculate the total

payment to be paid by the customer then if process Already finished will appear note sale product Which bought customer .

Picture 7 Page Transaction Cashier



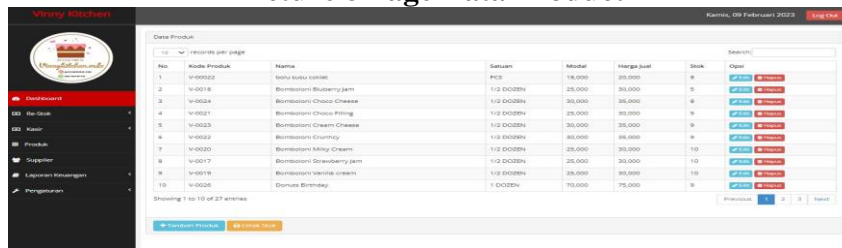
e. Page System Data Product

The product data page is a page for

admins change, add or delete product

Which available in vinny kitchen .

Picture 8 Page Data Product

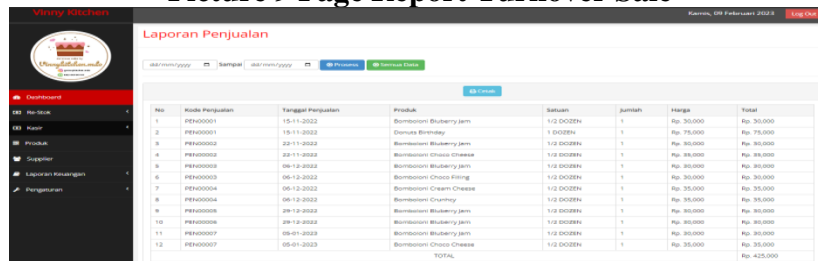


f. Page System Financial statements

The financial report system page is a page for the admin to check monthly

sales report so the owner can find out turnover and profit sale at the vinny's shop kitchen monthly .

Picture 9 Page Report Turnover Sale



3.2 Discussion

1. Usecase Diagram

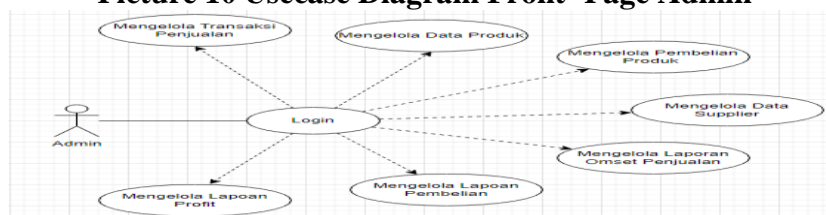
Use Case Diagrams work by describing between an admin and a system, with this we describe Use case as following:

a. Use case Front- Page diagram

Admin

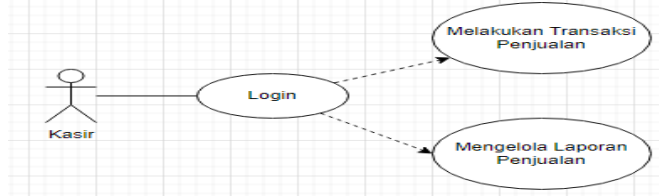
case diagram is an admin who can manage transactions, data product, purchase product, data suppliers , report turnover sale, report purchase, and profit reports.

Picture 10 Usecase Diagram Front- Page Admin



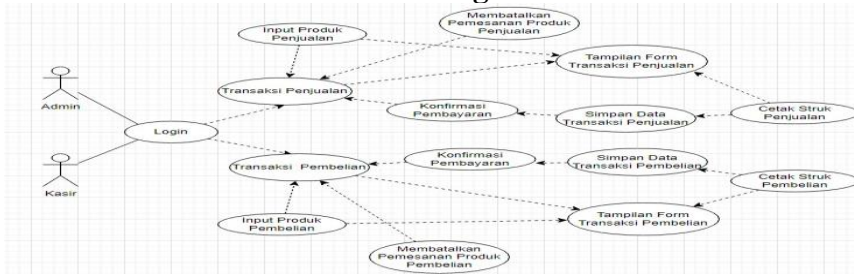
- b. Use case Front- Page diagram Cashier can only manage transactions product sales, and sales reports, in contrast to Use Case diagram is a cashier who all admins Can accessed.

Picture 11 Usecase Front- Page diagram Cashier



- c. Use case Transaction Diagrams becometwo namely sales transactions and purchase transactions. Admin And cashier Which Can access transaction, transaction in for

Picture 11 Use case Diagram Transaction



2. **Black Box Testing** run in *browser* google chrome Which Xampp has been activated . Results *Black box testing* This is results from test try direct from system Which in

Table 1 Results *Black box testing* Forms login

No	Scenario	Testcase Which Filled	Results Which Expected	Conclusion
1	<i>Emails</i> and Words Password No filled Then click knob <i>login</i>	E-mail: (blank) Say Password: (blank)	The system will refuse <i>user</i> access And displays warning "Please content field This"	Valid
2	<i>usernames</i> filled and <i>password</i> not filled Then click knob <i>login</i>	E-mail: (admin@gmail.com) Word Password: (blank)	The system will refuse <i>user</i> access And displays warning "Please content field This"	Valid
3	<i>usernames</i> not filled And <i>password</i> filled Then click knob <i>login</i>	E-mail: (blank) Say Password: (123)	The system will refuse <i>user</i> access And displays warning " Please content field This"	Valid

4	<i>usernames</i> or <i>password</i> filled wrong Then click <i>login</i>	E-mail: (admin@ gmail.com) Say Password: (Wrong)	The system will refuse <i>user</i> access And displays warning "Username or password Wrong"	Valid
5	<i>usernames</i> or <i>password</i> filled correctly Then click <i>login</i>	E-mail: (admin@ gmail.com) Say Password: (123)	System will accept access And enter into the <i>login</i> page admin	Valid

Table 2 Results Black box testing Forms Plus Data Suppliers

No	Scenario	Test case Which Filled	Results Which Expected	Conclusion
1	Whole column not filled in later click save button	Name: Supply r (blank) Address:(blank)	System will reject access <i>users</i> and displays warning "Please fill in the fields This"	Valid
2	Only fill isome column	Name: Supply r (Rudi) Address: (blank)	System will reject access <i>users</i> and displays warning "Please fill in the fields This"	Valid
3	All fields are filled with data Which Correct Then click save button	Name:Supply r (Rudi) Address:(jl. batuampar)	System will receive access admin	Valid

Table 3 Results Black box testing Updates User admin

No	Scenario	Test Cases Which Filled	Results Which Expected	Conclusion
1	Entire column not filled Then click knob save	E-mail: (blank) Password (blank) Name: (blank)	System will reject access <i>user</i> And displays warning "Please fill this field"	Valid
2	Just filling a number of column	E-mail: (admin@ gmail.com) Password (blank) Name: (blank)	The system will refuse <i>admin</i> access and displays a warning "Please content field This"	Valid
3	All fields are filled with that data right then click knob save	E-mail: (admin@ gmail.com) Passwords (123) Name: (Andreas Sugiharto)	The system will accept access admin	Valid

4. CONCLUSION

From the results of designing a cashier

information system at the Vinny Kitchen

Store mdo ,conclusion obtained:

- a. With this web-based cashier information system, you can create a shop Vinny Kitchen Mdo makes it easier for cashiers and admins to obtain data product appropriate And neat.
- b. System information For give convenience administration in data storage and processing in order to facilitate cashier performance on Shop Vinny Kitchen Mdo .
- c. With *databases* makes it easier to create a security system so that unauthorized people cannot access important data with using *passwords* admin.
- d. Simplify admin in give reports sale norsupply For reduce error as well as give data with accurate Andfast.

5. LIST REFERENCES

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