# Design and build Web-based helmet production data system PT. Citra Plastindo Indonesia

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***Abstract*** **-** ifan Prihandi (2019)The Advancement of Science and information technology has changed the way of view and lifestyle of Indonesians in carrying out its activity and activities. The human tendency to success makes it always move forward to become a better creation from day to day. One of the many dynamic movements of humans is reflected in the growing technology and information that helps human work to be more effective and efficient, in the management of data and finance using conventional methods will draw The offences that inflict harm to the organization, hence it is necessary to change the data management methods and the finances of the members they use today, namely from conventional methods into computerized methods Using PHP Mysql and Xampp.

**Keywords:** Design, analysis, system, service improvement.

## I. INTRODUCTION

Nia Rahma Kurnianda (2019)Sales are activities that aim to seek, influence and instruct buyers to be able to tailor their needs to the products offered and to enter into agreements on beneficial prices for both Parties [1]. The industrial world is a business world full of competition between one company and the other, so predictions are needed in any case to help the company implement policies and advanced strategies.

PT Citra Plastindo is a company engaged in the electronics and helmet components in the city of Jakarta, now has a customer that is growing in line with the development of PT. Image of Plastindo.

One of the things that is very concerned with increasing customers is in the service sector in the service sector still apply manually and conventionally so that employees are overwhelmed in the handle many orders.

Based on the problems then done research to obtain the necessary needs to facilitate customers in ordering products, design build a helmet production system started with the analysis of the needs of the system and in Continue with the system design process based on the results of the analysis of needs, the last stage of the process of drafting the system is the implementation of system design into a new system.

From the background, the following problems are obtained:

1. How to apply the Pieces method into a website of helmet production data?
2. How to design a site collection of helmet production using mock up?
3. Design a Web-based application

The discussion of the raised topic has the following limitation on problems:

1. In designing this website authors using mock up apps and draw.io.
2. As an implementation of the website program of the collection of the production of this helmet, authors use the methods of analysis Pieces.
3. This application discusses how to customer order the product from the login, the product catalog until completion of payment.

The research aims to:

1. Creating an online media sales information System as an information media that can be accessed anyone and anywhere as long as there is a connection.
2. Improving the quality of sales service to consumers.

## II. STUDY LITERATURE

**1. Design**

Vetran,(2012) The design is a process that aims to analyze, assessing improving and compiling a system, both physical and non systems optimum physical use for the future existing information.

**2. Build**

(Thohari, 2016) building a system is an activity of translating the analysis results into a software package then creating the system or improving the existing system

**3. Application.**

(Berlianty, 2015) a sub class of computer software that utilizes the ability of the

computer directly to perform a task desired by users.

4. **Data**
(Drs.Jhon J.Longkutoy (1996:, 2012)
"Data is a fact or part of facts that are not yet arranged has a meaning that is connected with the reality that actually happened, facts can be stated with pictures (graphs), words, numbers, letters and others".

5. **Production**
(Wulan, 2010) an activity transforms factors of production so that it can increase or add to the rules of the form, time and place of an item or service to meet human needs obtained through exchange.

6. **HTML**
(Binarso, Sarwoko, & Bahtiar, 2012) HTML **(**Hyper text mark up language) is actually not a programming language, because html is a mark up language. html is used for mark up markers) of a document text.

7. **PHP**
(Firman et al., 2016) PHP is a server-side scripting language, where data processing is done on the server side. Simply put, the server will translate the program script, new then the results will be sent to the client who did demand.

8. **CSS**
(Binarso et al., 2012) **CSS** is a document that is useful for making arrangements on web page components, the core of this document is to format standard web pages into web forms that have more beautiful and attractive qualities.

9. **Mock Up**
(Nurlaila & Hamdu, 2016) Mock-up is a three-dimensional form of media resembles the original form.
This website design mockup is needed to convince you when it comes to creating a custom-designed website. Through mock ups, you can see a real visualization of your prospective website so you can give feedback to the designer if the mock up display is not yet in accordance with the previous request. Therefore, it's no wonder that mock ups are an important part of creating a website with custom designs.

## III. RESEARCH METHODS

### Data Collection Techniques

A. Document study

Data collection that is not addressed directly to the subject of research. Document study is a type of data collection that examines a wide range of documents useful for analytical materials.

B. Observation

By means of direct observation over the research object.

C. Interview (interview

Which is to conduct interviews or questions directly to several parts related to the formulation of this study.

D. Data Collection

This data collection is done by direct consultation with the supervisor of the part where the author is placed.

### System development Methods

The development method used in this study was the Prototypingl method. Prototyping stages consist of:

**Communication**

Analyze the needs of the software and collect data by meeting the relevant parties.

• **QuickPlan**

Create a document user requirement or data related to the wishes of the user in the creation of software.

• **Modelling Quick Design**

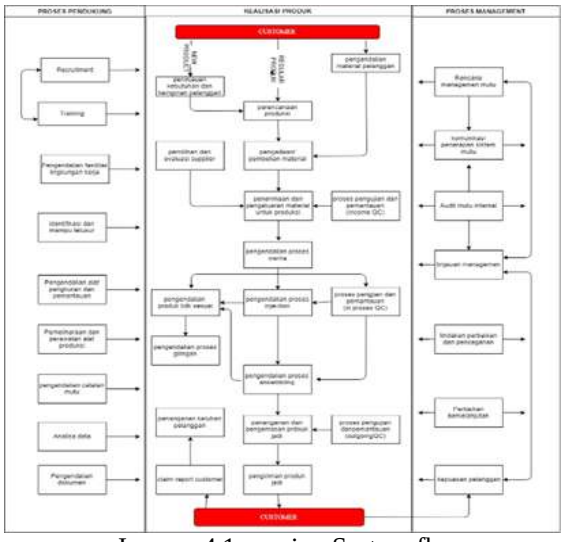
At this stage, modeling the program's design using Unified Modeling Language (UML), in the form of chart case, chart sequence, activity diagram, and class diagrams. Then create user interface design, form design, report design, and application system architecture

• **Construction of Prototyping**

Development with programming languages or coding to create application programs required. The development of the application uses the PHP programming language and uses MySQL as the database management system as well as testing it using the black box.

## IV. RESULTS AND DISCUSSION

### Running System Analysis



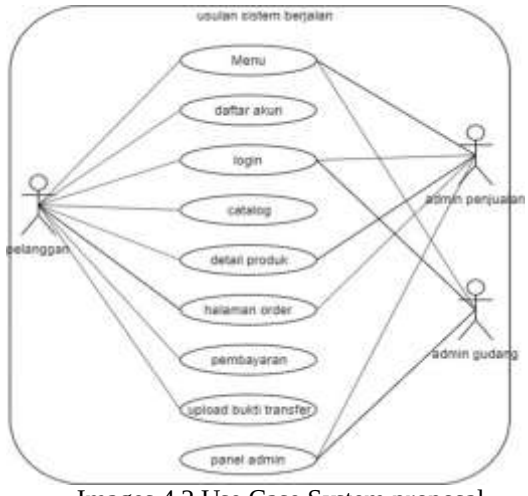
Images 4.1 running System flow

### PIECES Analysis

(Dewi, 2018) PIECES is a method of analysis as a basis for obtaining points more specific problems. In analyzing a system, it will usually be done on several aspects including analysis of performance, information, economy, control, efficiency and service. Analysis of the problems that are present in the system can be done by analysis of the following:

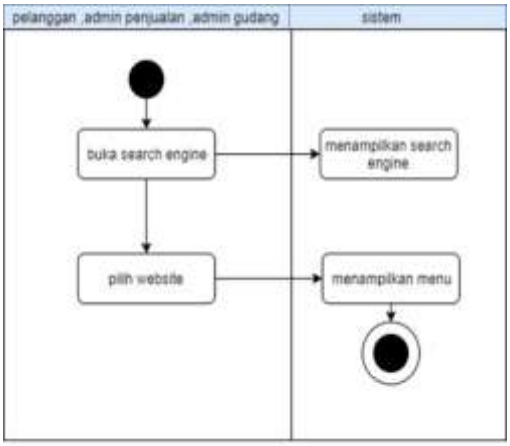
- *Ti Performance*
- *Information*
- *Economics*
- *Control*
- *Efficiency*
- *Service*

### *Usecase Diagram*

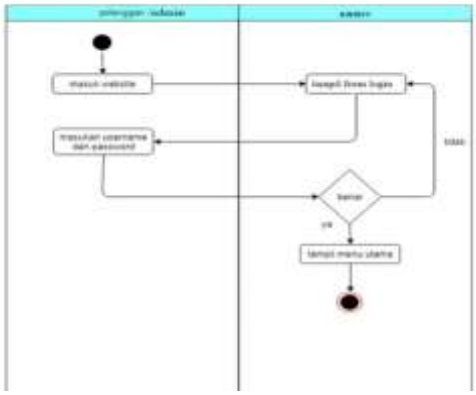



Images 4.2 Use Case System proposal

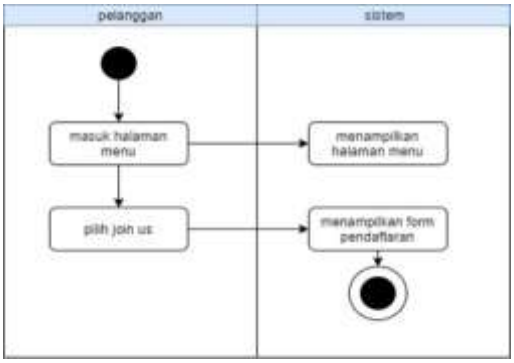
### *Activity Diagram*



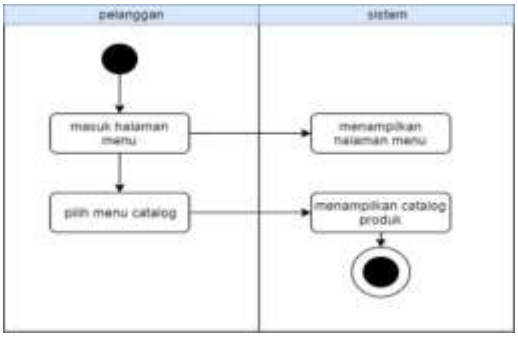

Images 0.1 Activity Diagram Menu



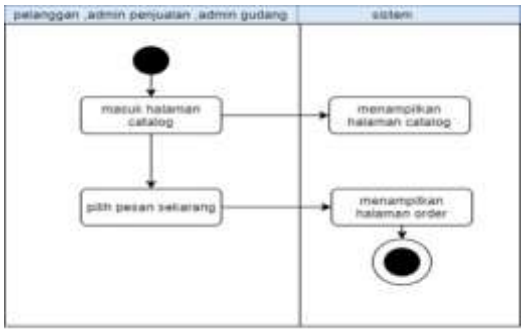
images 0.2 Activity Diagram Login



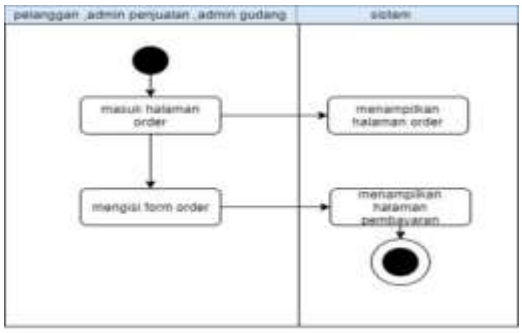

Images 0.3 Activity Diagram Daftar Akun



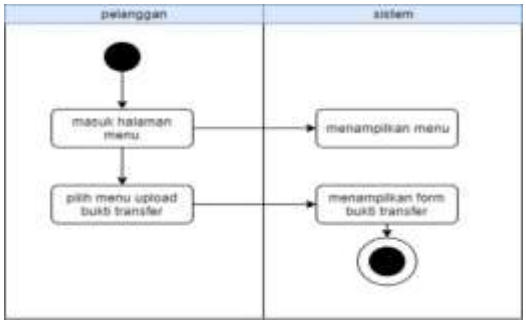

Images 0.4 Activity Diagram Catalog



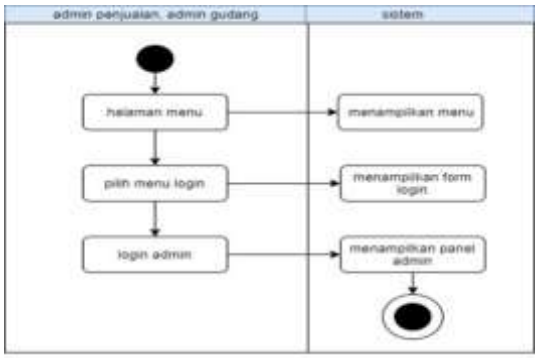

Images 0.5 Activity Diagram Detail Product




Images 0.8 Activity Diagram Purchase order




Images 0.9 Activity Diagram Upload payment Transfer



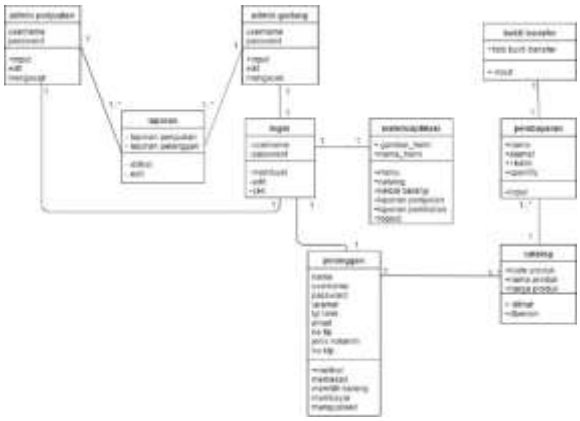

*Images 0.10 Activity Diagram Panel Admin*

**Database designing**

(ITA ROSITA WATI, 2013) Database design is a step in design a database in accordance with the applications specified in fulfill user information needs.

In designing the database researchs use the diagram class as in the images :

**Class Diagram**



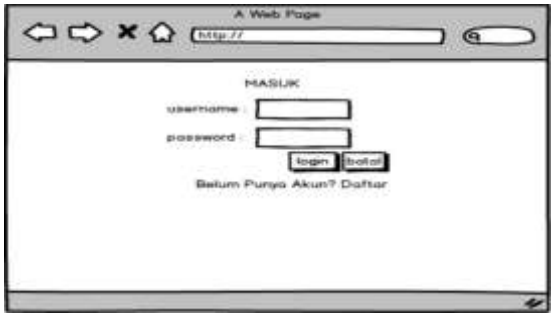
Images 4.11 Class Diagram Sistem Proposal

***Design Output***

(Rahayu & Aditya, 2012) The design stage in making the program is a very important thing, because in the design there are elements which represents the content or the contents therein. Architecture in designing a website must have a construction which is good, right data processing and accurate has its own value and has a basis for the development of the next system.

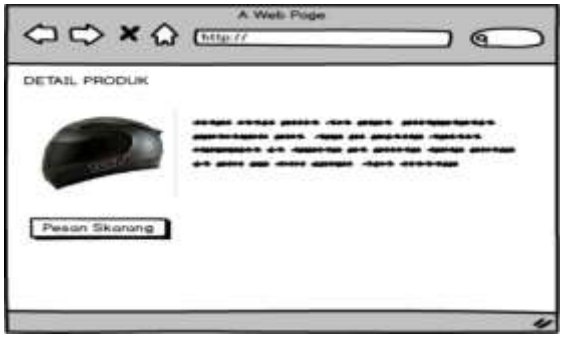

Images 0.12 Design Menu


*Images 4.13 Design Registrasi akun*

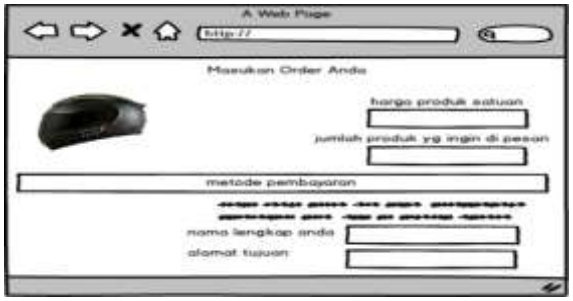



*Images 4.14 Design login*

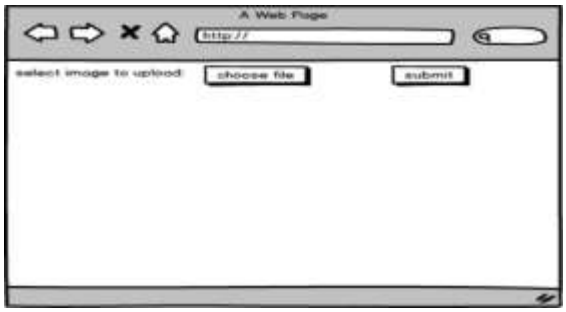

*Images 4.15 Design Catalog*



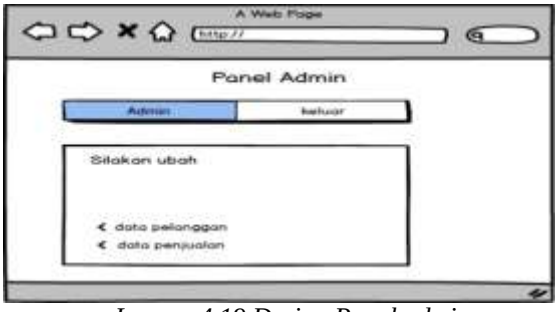

*Images 4.16 Design detail product*



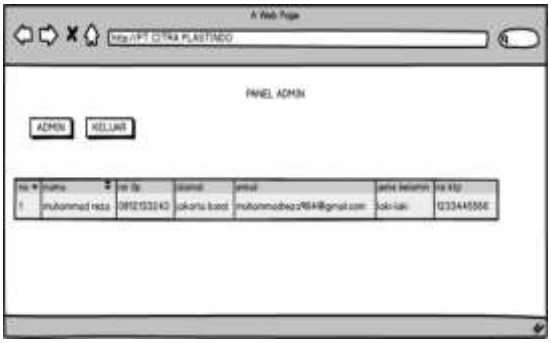

*Images 4.17 Design purchase order*



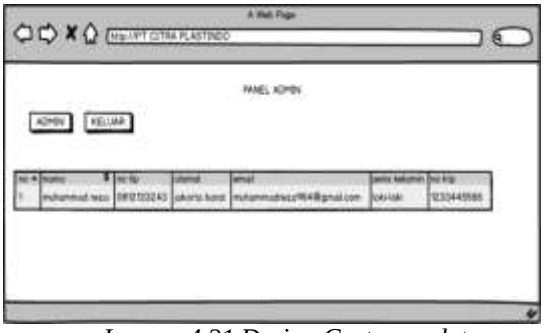

*Images 4.18 Design Upload Payment transfer*




*Images 4.19 Design Panel admin*




*Images 4.20 Design Sales data*



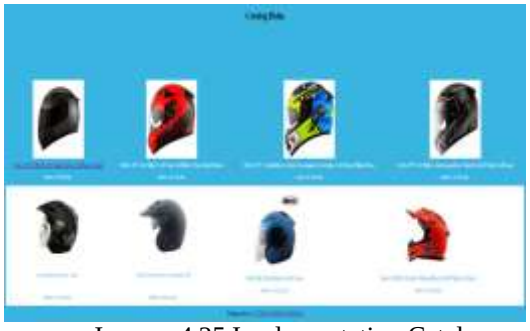

*Images 4.21 Design Customer data*

***Implementation Sistem***


Images 0.22 Implementation Menu

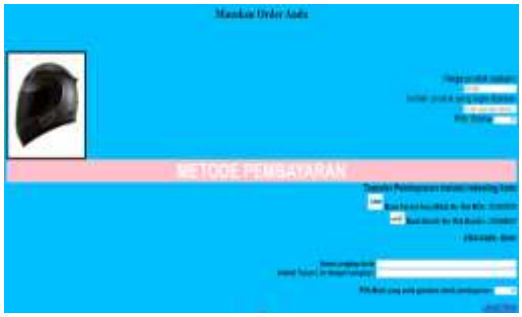
Images 4.23 Implementation Registration akun

Images 4.24 Implementation login

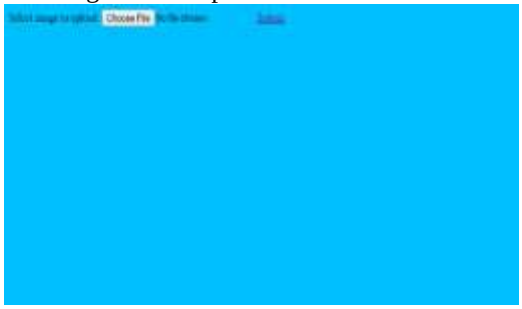


Images 4.25 Implementation Catalog

Images 4.26 Implementation Detail product



Images 4.27 Implementasi Purchase Order



Images 4.28 Implementation Upload Payment transfer

Images 4.29 Implementation Panel admin

Images 4.30 Implementation Customer data

Images 4.31 Implementation Sales Data

## V. CONCLUTIONS

Based on the result of analysis and design discuss in the previous chapters, it can be draw some conclusion as follow:

1. Customers can make a reservation until payment through the application that has been created.

2. In this application is provided an upload proof transfer feature which aims as a report of every product that is already paid.

3. This application is expected to be useful in making the process of sales and purchasing transactions more effective, in addition to this information system is also expected to present information on the stock of accurate goods and up to date.

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