



## Stable Power Excavator Sale and Service



HND SECTION (8)

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# Project Proposal

**Title of the project: Online Excavator selling and renting system for Stable Power Company**

## **1.1 Current business introduction**

### **a. History of Stable Power**

Stable Power company was established in November of last year. This company is excavator sell and rent company. It is located in Kabaraye Pagoda Road, Mayangone Township Yangon. At First, This company known only in Yangon. This company has three shareholders and five managers. This company has many staff to use to record the duty of the renting excavator. The future plan is year in year out success in work. Later, We hope it will be well-known all over Myanmar.

**Supplier:** Purchase the excavator from Thai company. This company is sale the various kind of excavator from around the world.

**Customer:** The customers can borrow and buy any kind of excavator what they want. Most of the customers borrow the excavator and they are from local area and regular customer.

**Competitors:** This business process is not popular than other kind of business. So, that has not many companies in Myanmar.

### **b. Current Process (Explain operation procedure at each process)**

Stable Power Company works excavator sale and rental service. This company has maybe 50 excavators for sale and 50 excavators for rent. When the new excavator arrived, the company staff recorded the required data with paper-base system. In this work, When the customer buys this excavator, firstly they will come to company and see this product. And then, they will ask the product information to staff. Then, they will decide to buy or not the product. If they like the product, they will be purchase it and staff will record the required data. If they don't like the product, they will see another one. When the customer rents the excavator, they will come to company and book the excavator. While booking for the excavator, the customer will ask for all the information that is necessary for him to know about the excavator. And then, the staff will record all the information of the customer with paper-base system. This company has set a few rule on rental. Duration of rental must be at least one duty. The excavator will not be delivered by the company. The customer must personally come to collect the excavator. The customer must provide the necessary diesel-oil for the excavator.

### **c. Issues**

There are some issues regarding sale and rental system.

#### **Selling & delivery**

When the customers want to buy a excavator, they must come to the company and ask the staff for the information about the product. For this reason, it will a waste of time for them and salary is paid to the staff to explain to customer about the product. So it is waste of money for the company.

#### **Purchasing**

When there are new arrivals of excavators, the staff will have to record them and in doing so there could be a some errors in paper-base recording. For example, the register book may get wet due to getting wet or being torn due to many year of storage, and loss of books.

#### **Payment**

In current payment process is cash down payment system. Staffs are record the payment data and give the vouchers to customers. Payment system is the important parts of the business, so those processes need to exact. But sometime staffs can make a mistake.

### **d. Proposed System**

**Purchasing:** This Company wants to improve their business system. They want to record the purchasing process with the computer system. They want to advertise their business and want to get the customers more than local area customers.

**Selling, Hire & delivery:** Some customers can buy and hire the excavator from display in online website. Customer can search any kind of excavator what they want and they can hire and buy. They can know about the product excavator's detail information in company website. When they finished buy or hire process, the company are delivery this product.

**Payment:** In online payment system, customer must pay the deposit amount from bank transfer.

## 1.2 Proposed System Scope

### 1.2.1 Estimate Duration

The Stable Power company project will take 3 months. The estimated duration of the process is as follow:

- The estimate duration of analyzing the project of Stable Power will take 6 days.
- The estimate duration of producing design for Stable Power website will take 7 days.
- The estimate duration of implementation for the coding of Stable Power application will take 16 days.
- The testing of the whole coding of Stable Power website will take 17 days.
- The process of data migration plan will take 3 days
- The estimate duration of process of training to the staff will take 6 days.

### 1.2.2 Estimate Cost

#### a) Developer Cost

| Developer              | Cost                     |
|------------------------|--------------------------|
| System Analyzer        | \$20 per hour            |
| Database Administrator | \$33 per hour            |
| Programmer             | \$70 x 2 per hour        |
| Tester                 | \$60 x 2 per hour        |
| Trainer                | \$7.99 her hour          |
| Project Manager        | \$30 per hour            |
| <b>Total</b>           | <b>\$350.99 per hour</b> |

**b) Software Cost**

| Software             | Cost         |
|----------------------|--------------|
| Window 10            | \$300        |
| Dreamweaver          | \$75         |
| Anti-Virus (Mac-Fee) | \$50         |
| Microsoft Office     | \$400        |
| Microsoft Visio      | \$70         |
| Microsoft Project    | \$70         |
| <b>Total</b>         | <b>\$965</b> |

**c) For Hardware Cost**

| Hardware           | Cost           |
|--------------------|----------------|
| Application server | \$15000        |
| A set of computer  | \$1000         |
| <b>Total</b>       | <b>\$16000</b> |

**d) For License Cost**

| License | Cost |
|---------|------|
| Hosting | \$28 |

**e) The whole total cost**

| Resource       | Cost           |
|----------------|----------------|
| Developer Cost | \$3750         |
| Software Cost  | \$965          |
| Hardware Cost  | \$16000        |
| License Cost   | \$28           |
| <b>Total</b>   | <b>\$20743</b> |

**Cost Estimate**

**Project: Online excavator sale and rental system for Stable Power Company**

| No.                           | Resource               | Direct Cost              | Reserve | Estimate       | Range            |
|-------------------------------|------------------------|--------------------------|---------|----------------|------------------|
| <b>Developer Cost</b>         |                        |                          |         |                |                  |
| 1.                            | System Analyzer        | 48hr x \$20 = \$960      | \$20    | \$1000         | \$960 - \$1000   |
| 2.                            | Database Administrator | 48hr x \$33 = \$1584     | \$33    | \$1600         | \$1584 - \$1600  |
| 3.                            | Programmer             | 48hr x \$70 = \$3360     | \$70    | \$3400         | \$3360 - \$3400  |
| 4.                            | Tester                 | 48hr x \$60 = \$2880     | \$60    | \$2900         | \$2880 - \$2900  |
| 5.                            | Trainer                | 48hr x \$7.99 = \$391.51 | \$7.99  | \$400          | \$391.51 - \$400 |
| 6.                            | Project Manager        | 48hr x \$30 = \$1440     | \$30    | \$1500         | \$1440 - \$1500  |
| <b>Total Development Cost</b> |                        |                          |         | <b>\$10800</b> |                  |

| No.                        | Resource          | Direct Cost        | Reserve | Estimate      | Range           |
|----------------------------|-------------------|--------------------|---------|---------------|-----------------|
| <b>Software Cost</b>       |                   |                    |         |               |                 |
| 1.                         | Window 10         | 3 x \$300 = \$900  | \$300   | \$950         | \$900 - \$950   |
| 2.                         | Dreamweaver       | 3 x \$75 = \$225   | \$75    | \$230         | \$225 - \$230   |
| 3.                         | Anti-Virus        | 3 x \$50 = \$150   | \$50    | \$200         | \$150 - \$200   |
| 4.                         | Microsoft Office  | 3 x \$400 = \$1200 | \$400   | \$1500        | \$1200 - \$1500 |
| 5.                         | Microsoft Visio   | 3 x \$70 = \$210   | \$70    | \$250         | \$210 - \$250   |
| 6.                         | Microsoft Project | 3 x \$70 = \$210   | \$70    | \$250         | \$210 - \$250   |
| <b>Total Software Cost</b> |                   |                    |         | <b>\$3380</b> |                 |

| No.                        | Resource           | Direct Cost           | Reserve | Estimate       | Range             |
|----------------------------|--------------------|-----------------------|---------|----------------|-------------------|
| <b>Hardware Cost</b>       |                    |                       |         |                |                   |
| 1.                         | Application Server | 1 x \$15000 = \$15000 | \$15000 | \$15050        | \$15000 - \$15050 |
| 2.                         | A set of computer  | 3 x \$1000 = \$3000   | \$1000  | \$3300         | \$3000 - \$3300   |
| <b>Total Hardware Cost</b> |                    |                       |         | <b>\$18350</b> |                   |

| No.                        | Resource    | Direct Cost       | Reserve | Estimate    | Range       |
|----------------------------|-------------|-------------------|---------|-------------|-------------|
| <b>License Cost</b>        |             |                   |         |             |             |
| 1.                         | Web Hosting | 1yr x \$28 = \$28 | \$28    | \$30        | \$28 - \$30 |
| <b>Total Hardware Cost</b> |             |                   |         | <b>\$30</b> |             |

## **1.3 Aim and Objectives (benefit gained by business)**

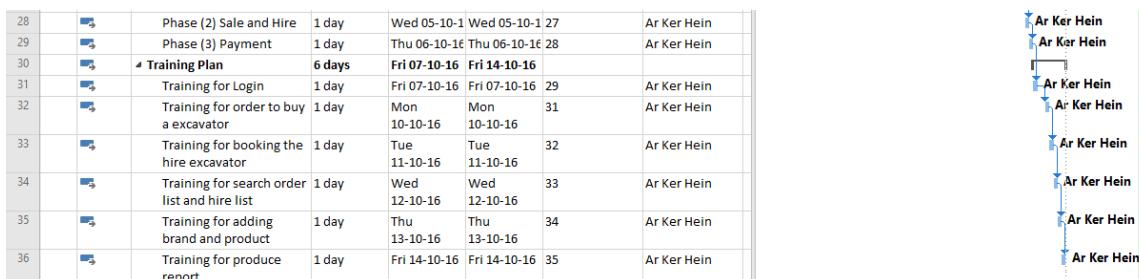
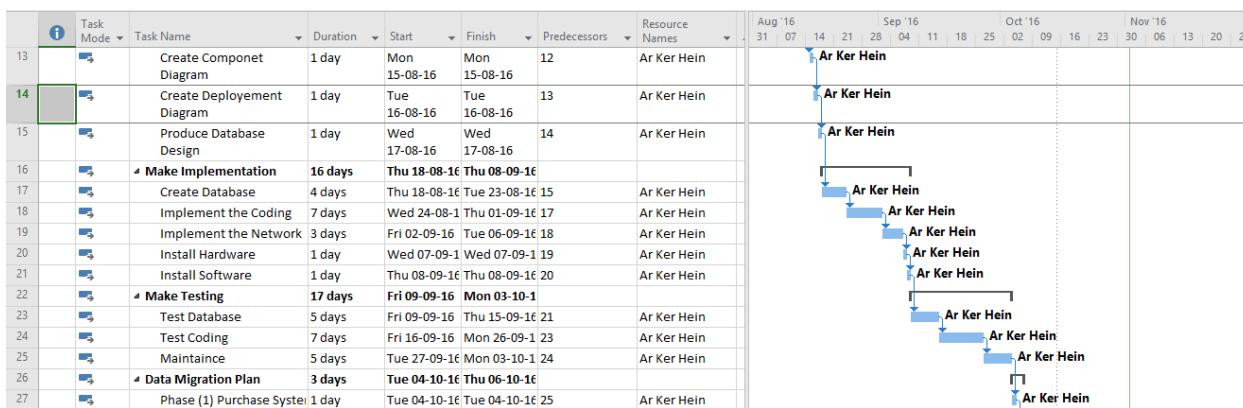
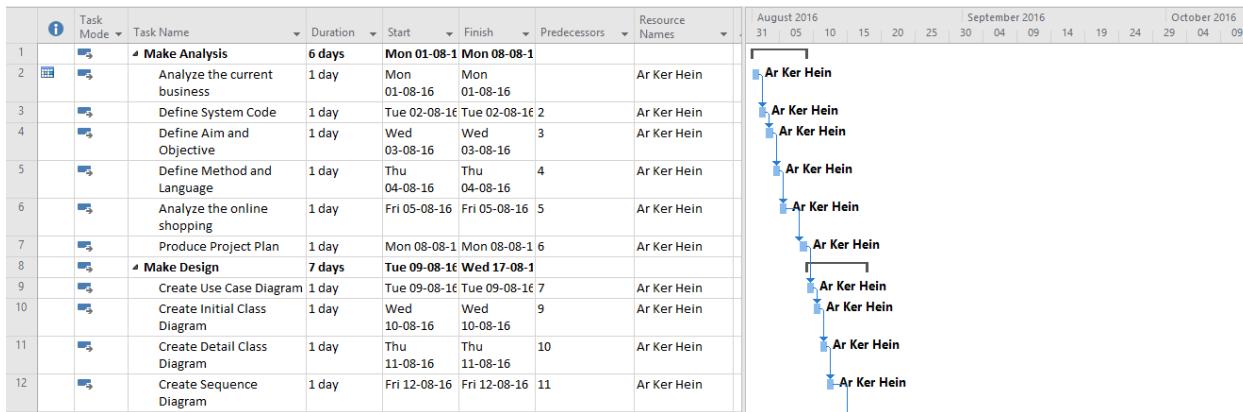
### **a) Aim**

Customers want a computer base system for their company. In computer-base system, they want to register the product. While they are registering the product, they want to record the information of their products in database. Then, they want to show their services to customer (For example, if the customers want to buy the products, they can buy in this website and if the customers want to rent their products, they can also hire the product in this website). The customer must be registered in order to purchase the product. While the customer is viewing the products, they will see the navigation links which are named as "Detail" that are under every post of the products. If one of those links is clicked, there will be a form which are included with detail information of the product. If the customer wants to purchase the product, they can buy the products by clicking the button "Buy Now". After the customer has clicked that button, they will see the another form which is named as "Sale". There, they can see all of the products they have chosen to buy. If they are sure to purchase, they can click the button 'Check Out'. Hire part is also one of the parts of this business. If, they want to hire the product, they must book the product as how many duties they wish to hire. Prices will be indicated according to how many duties the customers hire. Admin must login to register the arrivals of new products and brands. The admin can manage the orders in Order Listing and there, the order date and time are available. The Admin can manage the ordered product by checking the order date and time.

### **b) Objective**

The objective of this projects are customer register that will allow to register to login, customer login that will allow to visit our pages and buy our products, buy excavator to buy our excavator from our pages and hire excavator that will allow to booking for hire excavator from our web site. And payment method that will allow to purchase by credit cards method. For admin, the objectives of the projects are admin login, add excavator, retrieve data from database and produce daily reports. Admin login will allow to admin to reach admin home. Then he can add excavator to database, retrieve data that admin want to search and produce daily reports for daily business. For retrieve data, admin can search by order date for hiring and sailing process.

## 1.4 Gantt chart



# **Chapter 1**

# **Introduction**

## **I. Introduction/ Background of the system**

### **a) Current business introduction**

Stable Power company works excavator sale and rental service. This company has maybe 50 excavators of sale and 50 excavators of rent. When the new excavator has arrived, the company staff records the required data with paper-base system. In the recording data, they are recorded as to which type of excavator, which brand of excavator. In this work, When the customer buys this excavator, they will come to company and see the product first. And then, they will ask the product information to staff. Then, they will decide to buy or not. If they like the product, they will purchase the product with document and staff records the required data i.e. the detail information: The name of purchaser, the product purchased, the price of the product, the brand of the product, and the date of purchase. When customers arrive for the rental of excavators, they will explain to the staff as to the kind of excavator required. If the excavator is available they will explain to the staff as to where the excavator will be delivered and how many duties they will need to use. The staff will then explain to the customer as to the cost of rental charges according to the number of duties needed to be used. Then, they will explain to the customer the rules that he will have to abide. Only after half the payment is accepted then the excavator will be delivered.

#### **a-1) Customer Registration**

If customer buy the product, they will purchase the product and staff is record customer's contact information (Customer Name, Address, Phone No, NRC Number). Reuse the customer's contact information when company have some problem or mistake to sale the customer. IF the customer has require to delivery, the staff use a customer's contact information for deliver the product.

#### **a-2) Order**

If the customer has order the excavator, the company have no order with phone call. Customer will come to company and require excavator information to tell the staff. When the customer has order the product, customer has pay deposit payment to company. In this process, staff has record customer information and order information and to give a Boucher to customer. To recording the order information, the staff has record the date, the customer who bought the excavator, which type of excavator and how much they pay a deposit amount to company.

#### **a-3) Hire**

If the customer has booking the excavator to hire the excavator, the company have accepted with phone call to booking. When the customer have calling to company for booking the excavator, the staff has recorded the customer information and booking information.

#### **a-4) Display Excavator**

If the customer has buy or hire the excavator, they will come to company and see the excavator. And then, they will ask the excavator detail information to staff.

#### **a-5) Report**

If the customer must be buy or hire the excavator, the staff has making the report to customer. In this report, which type of excavator, the customer who brought the excavator and how much it is. This report is giving to customer and the staff has keep the report.

### **b) Proposed System Scope**

In this system, 15 form are included. They are Add product, Brand, Customer Signin, Customer Signup, Home- page, sale product, sale product detail, sale, hire product, hire product detail, hire, admin home and admin login. When customer begins to use this system, he must check whether he has register or not. First of all, If he has not register, he must go to the Customer Signup form. After registering, he will reach the Customer Sign-in form. After the Signing-in, he will reach the home-page form. On the home-page form, he must choose whether to buy or hire. If he wishes to buy, he must click sale excavator to reach the sale product form. On the sale product form, product image together with brand name product name, price and detail button is displayed. If the customer finds the product of his choice, he must click detail button to reach the sale product detail form. On sale product detail form, all the detail information about the chosen product will be displayed. There will be two buttons: Buy Now and Back below the information. If the customer does not wish to buy, he must click back button to reach the sale-product form. If he wishes to buy, he must click Buy Now button to reach the sale form. On the sale form, the image, product name, brand name, Serial No, Amount and Order Date of the product to be sold will be displayed. Add Credit card for payment and click the checkout button to reach the home page again. On the home-page form, If the customer wishes to hire, he must click the hire excavator to reach the hire product form. On the hire product form,

product image together with brand name, product name, price and detail button. If the customer finds the product of his choice, he must click detail button to hire product detail form. On hire product detail form, all the detail information about the chosen product will be displayed. There will be two buttons: Book Now and back button.

#### **b-1) Customer Registration**

If the customer has buy the excavator with online system, they need registration for buy or rent the excavator. First, the developer create the customer registration form to record the customer contact information. In Registration form, customer name, address, email, password and phone number are included. Customer registration process cannot include in system, we cannot recorded the customer's contact information.

#### **b-2) Order**

If the customer has order the product with online system, they choose their favorites excavator and order the product. Before order the product, they must be login first because they will buy the excavator, the company know who brought the excavator. Then, they will buy or order the excavator.

#### **b-3) Hire**

If the customer has booking the excavator for hire the product with online system, they choose their favorites excavator and booking the product. Before booking the product, they must be login first because they will hire the excavator, the company know who brought the excavator. Then they insert which date they will hire in booking form. And then, they will booking to hire the excavator.

#### **b-4) Display Product**

This process is excavator sale or hire with online system. In this system, the company must be show the product in website. To show the product on website, they admin must be registration the product. To registration process, admin was inserting the product detail information in product registration form. And then admin recognized the sale product or hire product.

### **b-5) Check-Out**

This process is check-out process in sale system. Customer must be decided to buy the excavator, they have to pay the payment from online. Our business of payment system is cash with credit card from website.

### **b-6) Report**

This process is making report with computer system. Admin can be making the report by searching with date to date. And then they have made the report with excel file. This process is one of the main important of this system.

## **Conclusion**

Chapter 1 Introduction includes analysis of current business system and process film exhibition.

# **Chapter 2**

# **Literature**

# **Review**

## 1. Methodologies

### SSADM

SSADM is Structure System Analysis and Design Method is widely-used computer application development method. This method is often specified and required for government computing project in UK. It's improve project management and make more effective use of experienced. SSADM is evolved from structure programming and component of the system are derived for data flow diagram. SSADM uses combination of three techniques. There are Logical Data Modeling, Data Flow Modeling and Entity Behavior Modeling. These three techniques are different viewpoint of the same system.

### OOAD

Object- orient analysis and design (OOAD) is one of a popular method for analyzing, designing for a software project by applying the object-orient and unified modeling language throughout the development life cycles to improve product quality and stakeholder communication.

#### a) Comparison in a table

| SSADM   | OOAD   |
|---|--|
| SSADM evolved from Structure Programming.                                 | OOAD evolved from Object Orient Programming.                   |
| SSADM is process orient and breakdown the system using data flow diagram. | OOAD is data orient and breakdown the system using Use case.   |
| The Component of the system are derived for data flow diagram in SSADM    | Class Diagram and UML Diagram are derived in OOAD              |
| SSADM is system data and process are separated.                           | OOAD is system data and process are encapsulated into objects. |

**b) Strengths and Weaknesses of each**

AS SSADM follows the waterfall approach, each phase of the project can be clearly identified. So it's easy for project management. OOAD breaks complex system into objects. OOAD use different type of analysis from the traditional functional decomposition approach and structured programming methods. So for project development teams that have a long history of using the SSADM methodology, the transition to the OOAD will be difficult and consume lots of time and money.

**c) Recommendation of one methodology to be used**

SSADM methodology is high cost, difficulty in changing requirement and it can take long time. The advantages of OOAD methodology are high quality, maintainable, reusable and low risk. Using this methodology can also reduce time and get high quality software. So, this methodology is more adorable than SSADM in order to use for Stable Power Website because our project requirement is clearly defined and OOAD is more suitable for this situations.

## **2. Languages**

### PHP

PHP is a open source software and it's can be use free. It's use for creating web application. PHP works with any kind of platform and server. PHP was lunched by Rasmus Lerdorf in the year 1995. PHP is use with MySQL database and it's also free. PHP can be run any operation system. For example (Windows, Mac OS, Linux). PHP use in built memory space.

### ASP.NET

ASP.NET is Microsoft technology software and it's very expensive. It's use only internet information server(IIS). ASP.NET is lunched by Microsoft in the year 2002. ASP.NET works with MS-SQL database and it's not available for free. It's similar with Visual Basic. It's cannot be use in any operation system and it's only use in Windows platform.

**a) Comparison in a table**

| PHP                                 | ASP.NET                         |
|-------------------------------------|---------------------------------|
| Open Source Software                | Microsoft technology software   |
| It's Free                           | It's very expensive             |
| It's work with any kind of platform | It's work only windows platform |

|  |   |
|--|---|
| PHP use any kind of operation system                             | ASP.NET cannot use any kind of operation system, it's only use in Windows OS. |
| PHP use built in memory  | ASP.NET use server space during execution                                     |
| PHP is very easy and compared to other programming languages     | ASP.NET is hardly to learning and effort.                                     |
| PHP work with MySQL database and it's free download for website. | ASP.NET is work with MS-SQL database and it's not available for free.         |

**b) Strengths and Weaknesses of each**

PHP is an open source technology which can be used for free. So PHP is free cost. PHP work well with MySQL database. MySQL database is also available for free. ASP.Net is a Microsoft technology that is expensive in price. ASP.net mostly works with MS-SQL database, which also belongs to Microsoft and MS-SQL is not available for free.

**c) Recommendation of one language to be used**

I recommend the PHP language because it's use easily and it's can be download for free. And then, it's open source software and it's use in any kind of operation system and work with any platform. I think PHP is better than the ASP.NET.

### 3. Database

#### MySQL

MySQL is open source software and it's available for free. MySQL offer updateable view but it's cannot be support with XML. MySQL is provide the only table security. Trigger does not support in earlier version but support in MySQL 5.0. User define function is does not support. MySQL is limited support for import and export and function. MySQL is limited support in transaction. Job scheduling and profiling are not use in MySQL.

#### SQL Server

SQL Server is not open source software and it's not available for free. SQL Server is more powerful wise. It's support XML. It's provide column level security. SQL Server provide

trigger. SQL Server is support for user defined function. It's support for online backup and job scheduling and profiling is available in SQL Server.

**a) Comparison in a table**

| MySQL   | SQL Server  |
|---|---|
| MySQL is open source software.  | SQL Server is not open source software.                                       |
| It's available for free.  | It's not available for free.  |
| MySQL support XML.  | SQL Server does not support XML.  |
| MySQL is limited support for import and export function.                    | SQL Server is extensively support for import and export function.             |
| MySQL is limited support for transaction.                                   | SQL Server is extensively and fully offer for transaction support.            |
| MySQL cannot be supported for OLAP Service, Data Reporting and Data Mining. | SQL Server can be supported for OLAP Service, Data Reporting and Data Mining. |

**b) Strengths and Weaknesses of each**

MySQL is aimed at the target market of Internet servers and open source software.

MySQL can store Maximum table size 256 TB. SQL server is platform dependent. That cannot run on OSX, Linux and etc. SQL server (2005) can store Maximum table size 524272 TB.

**c) Recommendation**

I recommend the MySQL Database because it's open source software and it's can be easily download from internet. It's not expensive. It's supported for import and export function and transaction.

**Conclusion**

Chapter 2 includes Methodology comparison, Language comparison and database comparison.

# **Chapter 3**

# **Comparison**

# **Of Similar**

# **Website**

## I. Name of Website

<http://www.jssr.co.th> : This website one of the popular online excavator auction in Thailand.

The screenshot shows the homepage of JSSR Auction. At the top, there's a navigation bar with links for HOME, LOCAL (K.M.32 SITE), FREE ZONE (K.M.35 SITE), TENDER, FINANCE, HELP, BLOG, and a language switcher (TH, JP, EN, CH). There's also a login section and social media links for Facebook and YouTube. A banner at the top right says "New!! Bid online (real time) on miscellaneous items from JSSR auction sites (km.32 & km.35)" with a phone number Tel. +66 2708 6800 (KM.32), +66 2704 9555 (KM.35). Below the banner, there's a "Auction Brochure" button with a thumbnail of the brochure and a "Click" button. To the right, there's a link to "Unreserved Public Equipment Auction" with a "See more details" button and the RITCHIE BROS. logo. On the left, there's a "SEARCH" section with a search input field and a "Search" button, followed by an "ADVANCE SEARCH" section with dropdown menus for CATEGORY, TYPE, MAKER, and a "Search" button. Below these are buttons for "VIEW ALL ( 171 )", "ALL UNUSED ITEM ( 0 )", and "MACHINES ( 77 )". Under "MACHINES ( 77 )", there's a category for "BULLDOZER" with a "+" sign. The main content area is titled "EQUIPMENT LISTING" and shows a table for "EXCAVATOR - HYD.EXCAVATOR FOUND 13 ITEMS". The table has columns for LOT NO., YEAR, TYPE, MAKER, MODEL, SERIAL, and VIEW ( 0 ). It lists three items, each with a thumbnail image and a note: "E/NO. 4M40-GB0789 EXCLUDE 5% THAI IMPORT DUTY". The first item is a Caterpillar 308CSR excavator, the second is a Caterpillar 308CSR, and the third is a Caterpillar CRW00916.

- This website is search with only product name.
- This website provide not only excavator but also other equipment is showed.
- This website is showed only. Purchase system not included in this website.
- This website includes showed sale excavator. Hire system not including.
- This website is divided with category.
- User Interface is complicated.

<http://www.saha.co.th> : This website one of the popular online excavator sale and rental system in Thailand.

The screenshot shows the homepage of the SAHA CRANE AUCTION CO., LTD. website. At the top, there is a logo for 'SAHA CRANE Auction' and text in Thai and English. Below the header, there is a navigation bar with links for HOME, Stock Auction, AUCTION RESULT, Term & Regulation, Stock For Sale, Contact, and Activity. There are also links for ABOUT US, CONTACT, Rental Service, and AUCTION CAR. A login form with fields for Email and Password is present, along with links for Login, Forgot password?, ไทย, 日本, ENGLISH, 中文, and Download.

Three main auction categories are displayed:

- UNRESERVED AUCTION Free Zone** (October 15-16, 2016) - [CLICK HERE](#)
- UNRESERVED AUCTION Domestic** (October 15-16, 2016) - [CLICK HERE](#)
- TENDER AUCTION** (Free Zone And Domestic) (October 12-16, 2016) - [CLICK HERE](#)

A message below the auctions states: "The pictures are only preliminary information only. You should check with your own product lineup."

The search results section shows filters for EXCAVATOR (53), HYD. EXCAVATOR (10), and ALL (10). It displays 10 units found, with details for three listed:

| LOT NO. | TYPE           | MAKER       | MODEL | SERIAL/ENGINE       | YEAR | Actions                      |
|---------|----------------|-------------|-------|---------------------|------|------------------------------|
| FP119   | HYD. EXCAVATOR | CATERPILLAR | 308C  | *CAT0308CECPE01613* | 2004 | <a href="#">MORE DETAILS</a> |
| FP120   | HYD. EXCAVATOR | KOBELCO     | SK60  | LE-14934            |      | <a href="#">MORE DETAILS</a> |
| FP121   | HYD. EXCAVATOR | KOBELCO     | SK100 | YW-09342            |      | <a href="#">MORE DETAILS</a> |

- This Website is search with category and brand.
- This website is provide not only excavator but heavy machinery car to sale or rent.
- This website include sale and rent system.
- User Interface is clear but not beautiful.
- This website is displayed only. Purchase system not included in this website.

#### a) Strengths and Weaknesses of each

| Website Name | <a href="http://www.jssr.co.th">www.jssr.co.th</a>  | <a href="http://www.sahaauc.com">www.sahaauc.com</a>  |
|--------------|---|---|
| Strength     | <ul style="list-style-type: none"> <li>Translate a languages such as Thai, Japanese,</li> </ul> | <ul style="list-style-type: none"> <li>Translate a languages such as Thai, Japanese,</li> </ul> |

|          |  |   |
|----------|--|---|
|          | <p>English and China</p> <ul style="list-style-type: none"> <li>• Product image and information showed detail.</li> <li>• Company location are display in this website with a picture.</li> <li>• Search with only product name</li> </ul> | <p>English and China</p> <ul style="list-style-type: none"> <li>• Product image and detail information are easily to download with pdf file.</li> <li>• Company location are display in this website with Map.</li> <li>• Search with category and brand</li> </ul> |
| Weakness | <ul style="list-style-type: none"> <li>• User Interface is complicated.</li> <li>• This website is not include purchase system.</li> <li>• Display a product image is small.</li> </ul>  | <ul style="list-style-type: none"> <li>• User Interface is clear but is not beautiful</li> <li>• This website is not include purchase system.</li> <li>• Display a product image is small and text size is small.</li> </ul>  |

### b) Comparison between Online website excavator company

Comparison between two company website, shaauc company website is more advantages in product display page. In this page, customer can search product category and brand. And then user can download the PDF file and they describe exactly the company location

### Conclusion

It includes comparing two website that is easier to use, simple interface design and company information and product information in this chapter.

## Overview

### 1. The Following Chapters

## Chapter 1 - Introduction

- **Introduction/ Background of the system**
  - Current Business Introduction
  - Proposed System Scope
- **Literature Review**
  - Methods
  - Languages
  - Database
  - Comparison of Similar Products
  - Overview

## Chapter 2 – Analysis

- **Analysis**
  - Functional Requirements
  - Non Functional Requirements
    - ✓ Individual Function
    - ✓ Global Functions
  - MOSCOW prioritization
- **Reasons for function**
  - Use cases
- **Architecture**
  - Initial Class Diagram
  - System Architecture – Component Diagram:

## Chapter 3 – Design

- **Structural Model**
  - Draw Completed Detailed Class Diagram
- **Behavioral Model**
  - Draw Sequence Diagram or Collaboration Diagram

## Chapter 4 – Risk Management and Configuration Management

- **Risk Management**
  - Critical Success factors of a project
- **Risk Matrix**
- **Configuration Management – Directory Structure**
  - Program

- Project Documentation

### Chapter 6 – Testing

- Test Plan

### Chapter 7 – Implementation

- Deployment Diagram (Implementation)
- Data Migration
- Training

### Chapter 8 – Conclusion

- Evaluation
- Problems Encountered
- Future Amendments
- References
- Appendix
  - Requirement Catalogue
  - Use case Description
  - Detail Class Definitions
  - Test Scripts
  - User Guide
  - System Code

2. Each chapter and a brief description

3.

# **Chapter 4**

# **Analysis**

## I. Analysis

### a) Functional Requirements

**Customer Registration:** The customers need to register for record the customer information and when they buy the product, they need to log in for security.

**Admin Login:** admin need to register for record and need to login for security.

**Sale:** The customers can buy the any kind of excavator what they want.

**Hire:** The customers can hire the any kind of excavator what they want.

**Display Sale excavator:** Customers can see and search the excavator product in this page.

**Check-out:** Customers must pay the deposit amount from bank account.

### Report

### b) Non Functional Requirements

#### b.1. Individual function

Order

- Volume: No. of orders (40 – 60 ) per day accepts in the business
- Response Time:
- Frequency :

#### b.2. Global

- Performance

Our system should be fast respond time. Transaction will be 1000 time per second.

- Security

Our system will allow to permission or authorized user to more secure the website.

- Maintainability

After maintaining the website, user can easy to use on any operation system and devices.

## II. MOSCOW prioritization

### a) MOSCOW Prioritization for each function

| Function Name                        | Must Have | Should Have | Could Have | Won't Have/Would |
|--------------------------------------|-----------|-------------|------------|------------------|
| Order                                | ✓         |             |            |                  |
| Sales                                | ✓         |             |            |                  |
| Purchase                             | ✓         |             |            |                  |
| Payment                              | ✓         |             |            |                  |
| Sales Report                         |           | ✓           |            |                  |
| Sales KPI(Key Performance Indicator) |           |             |            |                  |

### b) Reasons for function

#### Order

Without this function, the system would not be affected because main function of the business is to order the product. So, business can face with lost.

#### Sale

This function is not included, the system would not be affected because the product have to sale to the customer. Therefore this system is also important.

#### Purchase

Purchase function is not included, the system would not be affected because purchase function is main function of our business. So, Purchase function is also important. If the purchase function is not included, our business will be lost.

#### Payment

Without the payment function, the system would not be affected because payment function is one of the main function of our business. If the customers want to buy a product, they will be payment to company. If the payment system is not included in the system, our business will be lost.

## Conclusion

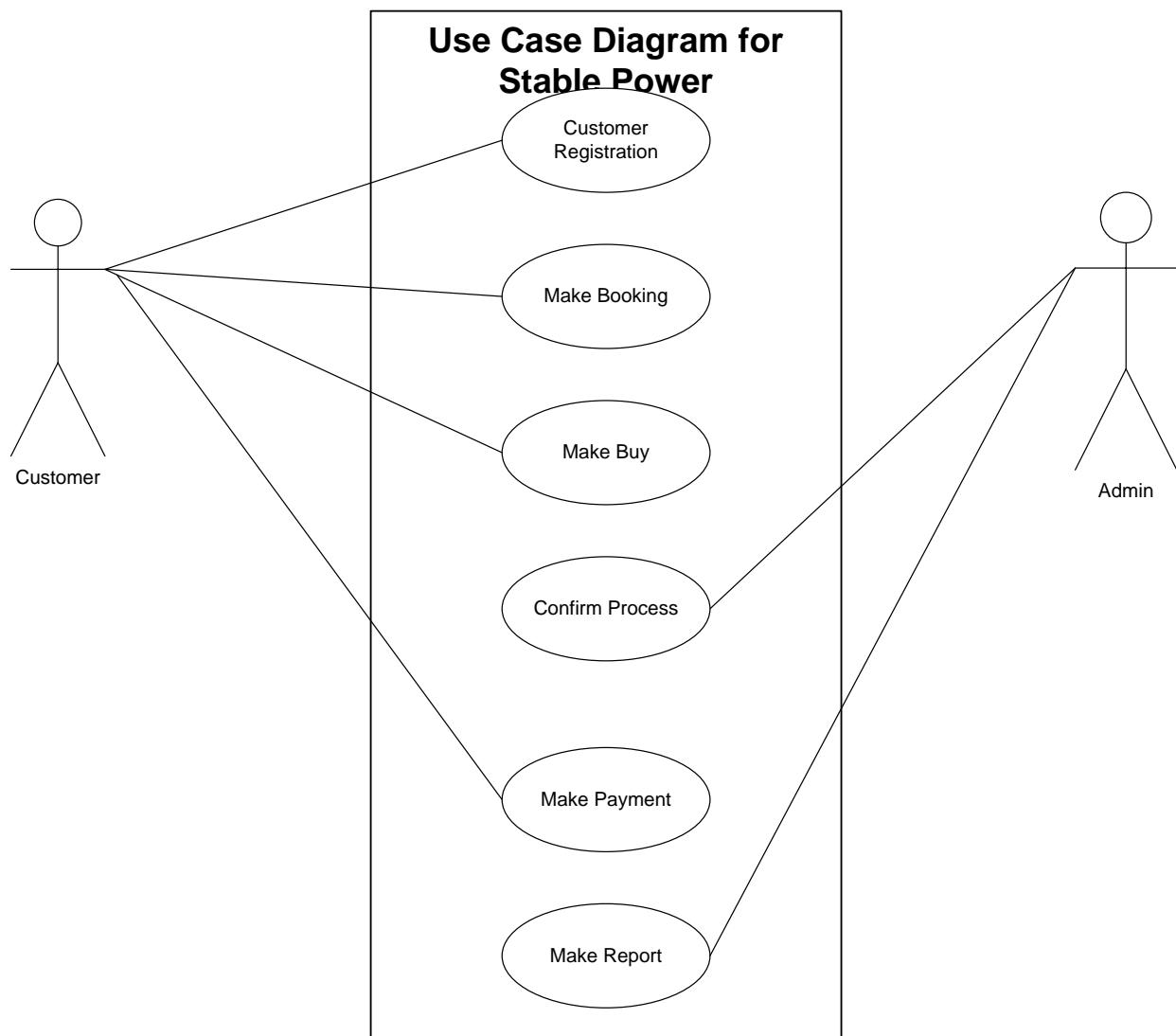
This chapter includes functional & non-functional requirement and descript about MOSCOW prioritization. Descript the functional and non-functional description.

# **Chapter 5**

## **Use Case and Architecture Design**

## I. Use Cases

### a) Use Case Diagram for Stable Power



**b) Use case descriptions**

|                   |   |
|-------------------|---|
| Brief Description | Customer make register  |
| Actor             | Customer  |
| Pre – Condition   | Before customer use our website, they need internet connection, Browser, PC or Laptop and run our website ( <a href="http://www.stablepower.com">www.stablepower.com</a> )<br>.   |
| Flow or event     | If the customers use our website, first they will open the browser and type <a href="http://www.stablepower.com">www.stablepower.com</a> in link bar. And then, they will go to registration form and inserting their contact information and successfully to registration. |
| Alternative Flow  | In the registration process, they have some error maybe occur. There are browser is not up to date, internet connection is very slow and hardly to run our website.   |

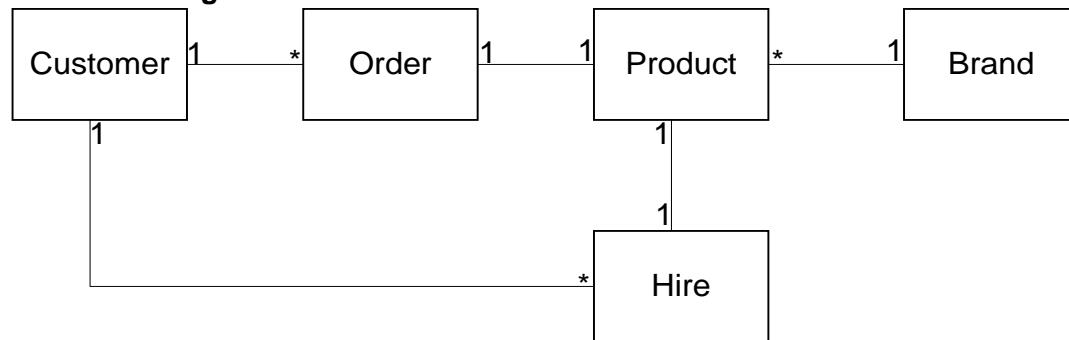
## **II. Requirement Catalogue**

| <b>ID</b> | <b>Name</b>           | <b>Description</b>   | <b>Acceptance Criteria</b>                          |
|-----------|-----------------------|--|---|
| 1         | Customer registration | Customers need to register for record the customer information pages. The customers login email and password to made login for security. | Want to get many customer by using computer system. |
| 2         | Admin Registration    | Make need to register for security. Admin can register the product and accept the order and produce daily report.                        | Admin need to reports for daily business.           |

**Remark:** Other requirement catalogues are in the appendix b.

### III. Architecture

#### a) Initial Class Diagram



**Purpose:** Demonstrating the initial design class diagram for developing websites for sale and hire excavator.

**Summary:** This initial class diagram describes the class and relationship.

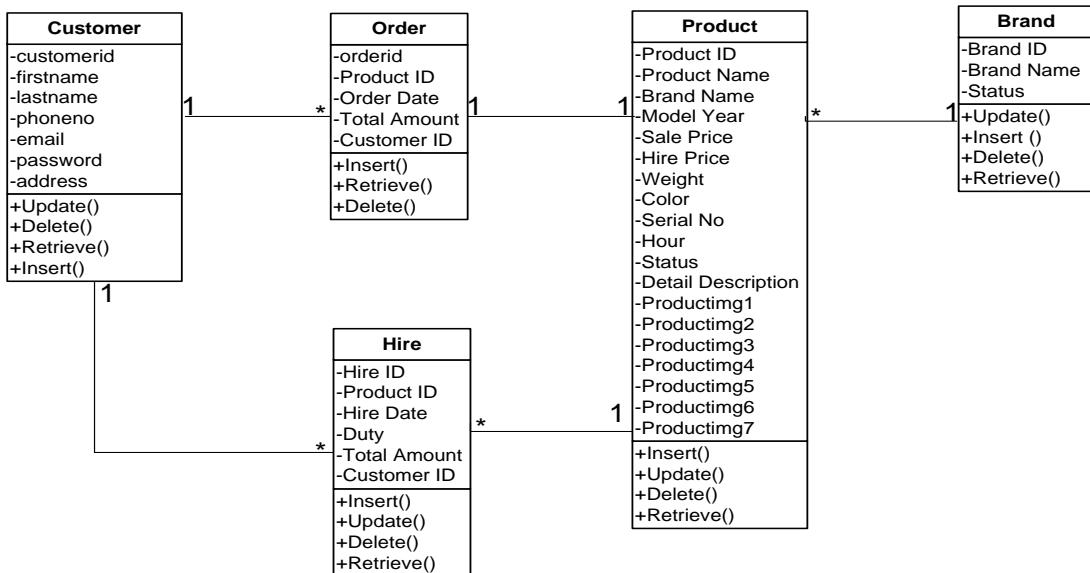
#### Conclusion

In this Chapter 5 use cases and architecture diagram for the owner of Stable Power they are included. And also they include class diagrams and initial class diagram.

# **Chapter 6 – Design**

## I. Structural Model

### a) Detailed Class Diagram



Class Diagram Name

: Customer

Attributes

: Customer ID, FirstName, LastName, Phone No, Email,

Password, Address

Operations

: Update(), Delete(), Retrieve(), Insert()

<<The Customer table is registration to store customer information and buy or hire excavator to login their username and password >>

Class Diagram Name

: Order

Attributes

: Order ID, Product ID, Order Date, Total Amount,

Customer ID

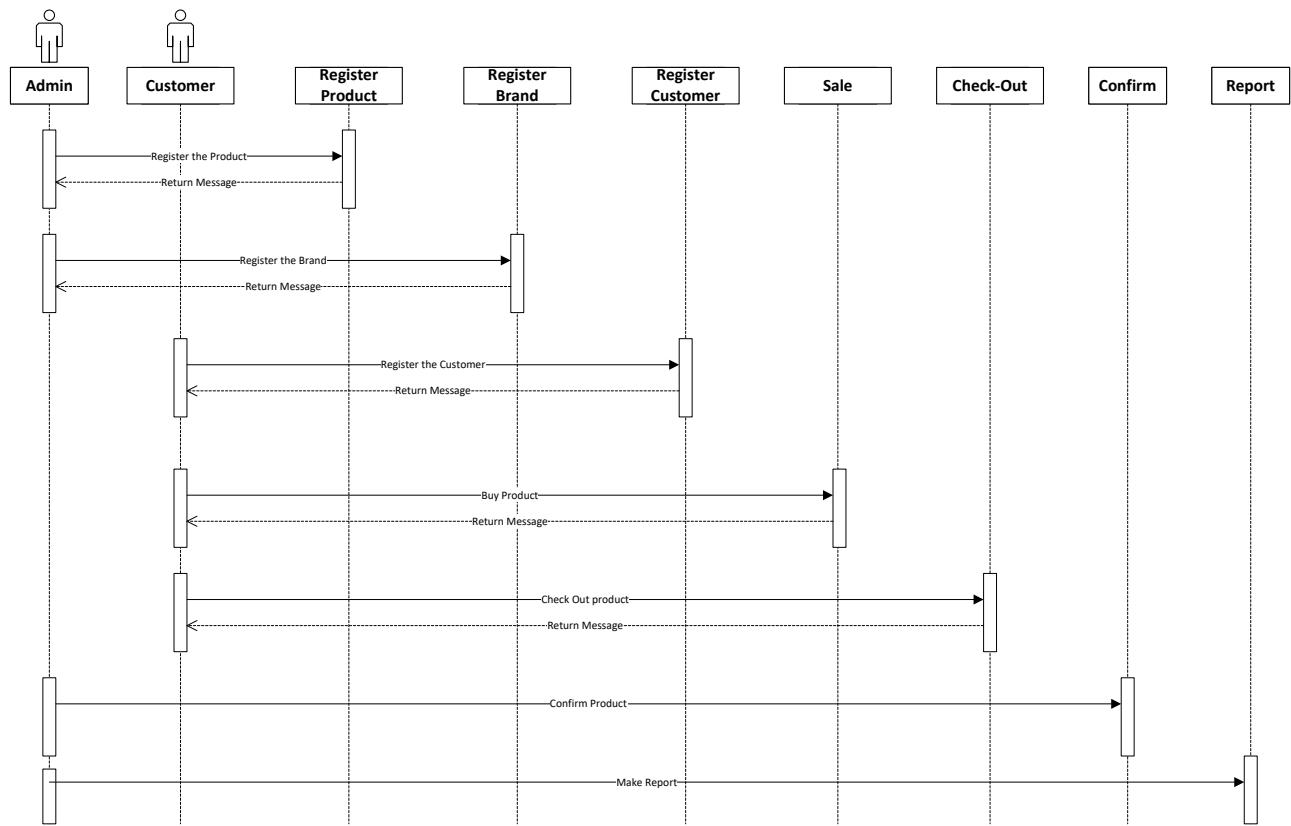
Operations

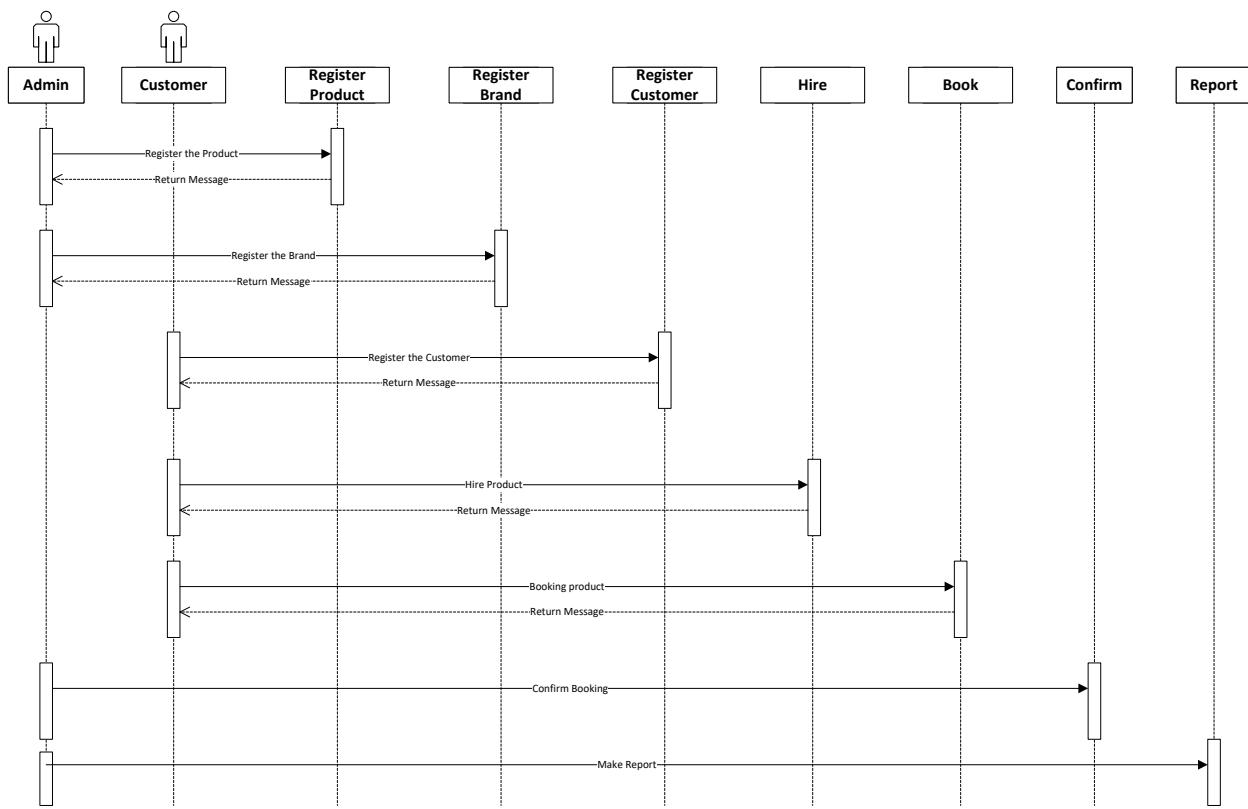
: Update(), Delete(), Retrieve(), Insert()

<<The Order Table is which customer order the excavator, which time they order, which product they order and how many total amount to store.>>

## II. Behavioral Model

### a) Sequence Diagram or Collaboration Diagram





## Conclusion

This chapter includes the detail class diagram and sequence diagram for the Stable Power business.

# **Chapter 7 Risk Management and Configuration Management**

## I. Risk Management

### a) Identify Critical Success Factors of a project – to measure the success of the project

Factors are the most essential parts to be a successful project. There are a lot of factors within the industrial projects. Among them, these following factors are important to create this project.

- **Plan How the project will be managed**

Before the program is created, the developer and the business have to make the plan how the project will be managed. First, they have to estimate the scope duration budget and resources. Also, they must manage unexpected bugs or errors. Schedule must also be managed before the program start. The business is necessarily needed to co-operate with the developer.

- **Define agree upon the project scope**

The developers need to pre show every completed steps they had made to the business. Thus, the business will be satisfied as they understand how the project is being created. There won't be a problem like unsatisfying between the business and the developer.

- **Development and Management of the schedule**

Before the program start, the schedule must be created in order to manage the steps. In the process of creating the program, first the developer need to analyze the current business. Then, they have to make proposal about the information they collected. They are the first parts of the schedule. Second part of the schedule is creating design such as use case, initial class diagram, detail class diagram, sequences diagram and component diagram in order to create the stable power website. Third part of the schedule is testing. The program need to be tested to know the unexpected bugs. The final part of the schedule is maintenance and it is also an extra schedule. If the problems are occurred in the end, there will be enough time and cost. This is the target of the final schedule.

- **Management of the issue list**

The developer need to prepare unexpected issue while they are creating the program such as virus, code error, database error and system error can be occurred at any time. Before the problem occurs, the

developer need to care or manage the program. Therefore, the unexpected error can be less occurred.

- **Solid Testing**

Testing is important after the program had been created. The purpose of testing is not to occur the problem late when the developers exchange the program to the business. Maintenance is also a part of testing. Being maintenance part is to maintain the program errors after the tester had detected the bug.

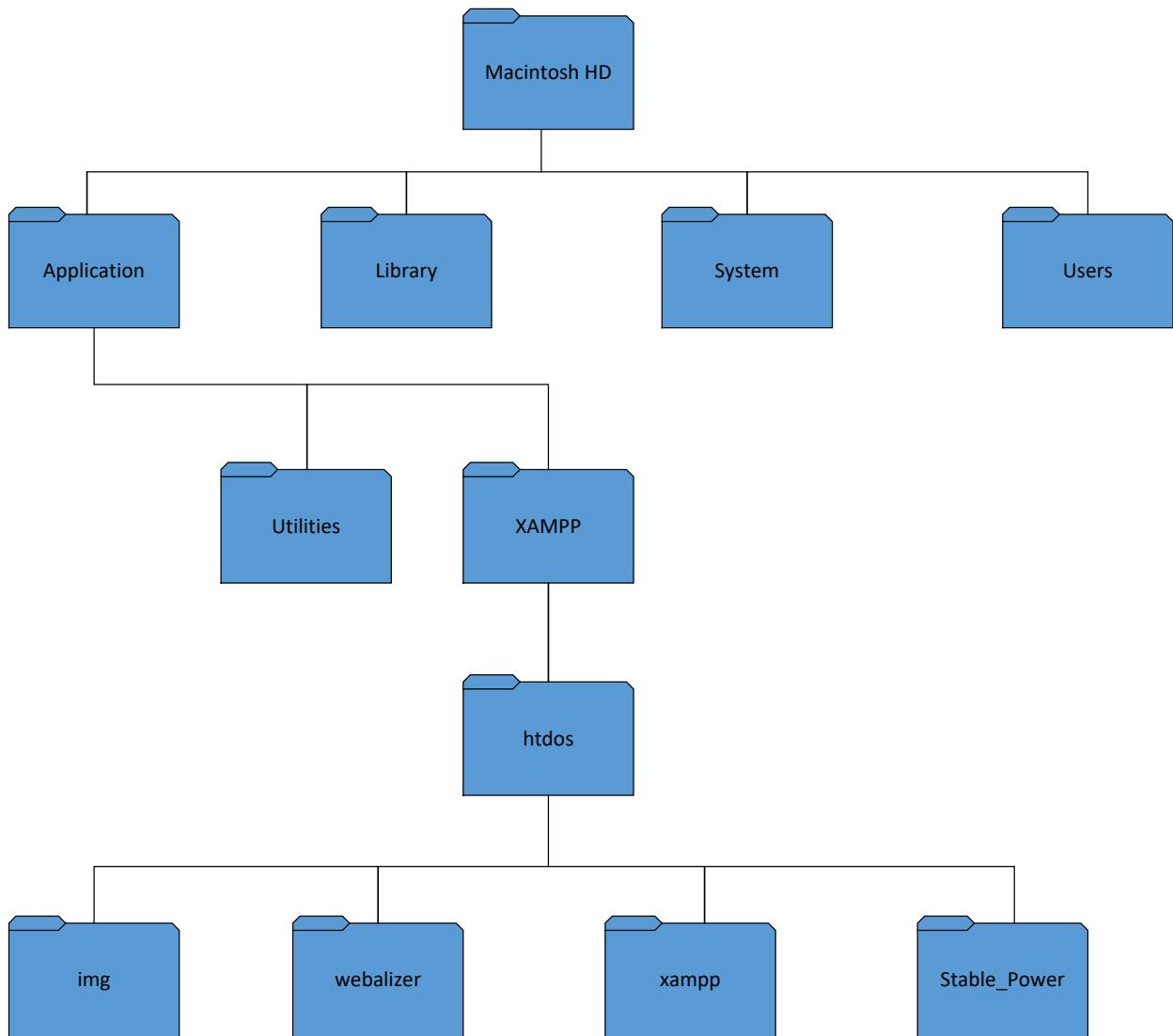
b. Risk Matrix

| Title and description | Risk Status | Potential impact | Risk owner  | Actions  | Action Log |
|-----------------------|-------------|------------------|-------------|--|------------|
| Malware               | High        | High             | Ar Ker Hein | 1. Install anti-virus software.<br>2. Update anti-virus software<br>3. Scan Disk<br>1.1 Re-install the backup data |            |
| Code Error            | Medium      | Medium           | Ar Ker Hein | 1. Search the error<br>2. Analysis the error.<br>3. Fix the error  |            |
| Hardware error        | Low         | Low              | Ar Ker Hein | 1. Analysis the hardware error.<br>2. repair or replace the hardware.  |            |
| Software error        | Low         | Low              | Ar Ker Hein | 1. Analysis the software.<br>2. repair or re-install the software.<br>3. If the project file                       |            |

|  |  |  |  |   |  |
|--|--|--|--|---|--|
|  |  |  |  | is remove, recover<br>from backup file. |  |
|--|--|--|--|---|--|

## I. Configuration Management – Directory Structure (ឧបករណ៍គម្រោង)

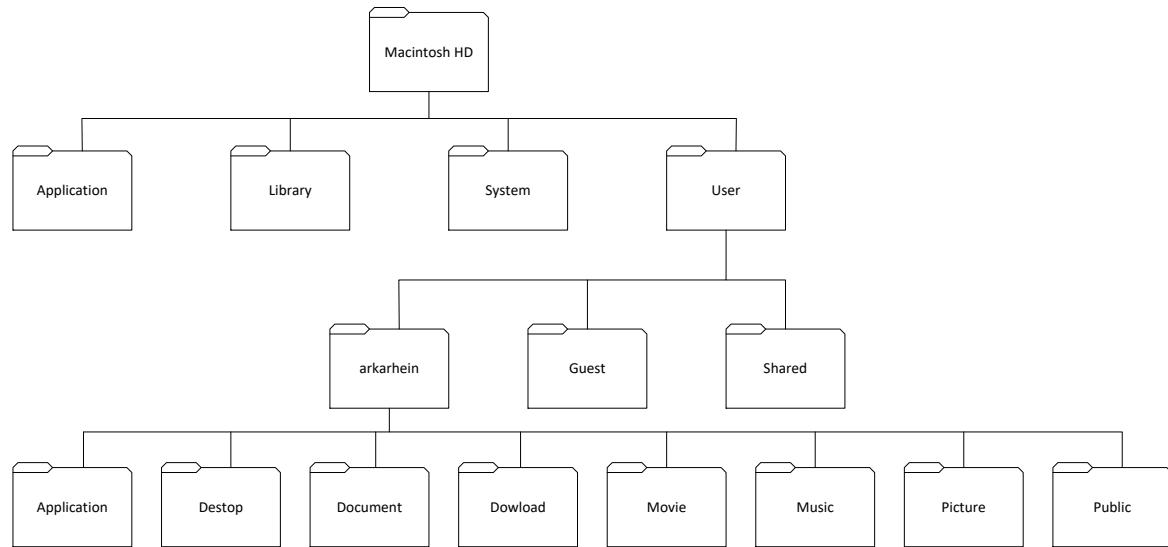
Program  
Macintosh HD/Application/XAMPP/xamppfile/htdocs/SP





## Project documentation

- ❖ Project Deliverables – Proposal, Draft, Final
- Macintosh HD/Users/arkarhein/Documents



# **Chapter 8**

# **Database**

# **Design and**

# **System code**

## I. Database Design

### i) Entry Forms – Customer table

To save new customer information and update customer information

| # | Name              | Type         | Collation         | Attributes | Null | Default | Extra | Action  |
|---|-------------------|--------------|-------------------|------------|------|---------|-------|---|
| 1 | <b>customerid</b> | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 2 | <b>firstname</b>  | varchar(50)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 3 | <b>lastname</b>   | varchar(50)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 4 | <b>phoneno</b>    | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 5 | <b>email</b>      | varchar(50)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 6 | <b>password</b>   | varchar(50)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |
| 7 | <b>address</b>    | varchar(200) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  More |

### ii) Transition Forms – Customer table

In order to keep order data information

| # | Name               | Type        | Collation         | Attributes | Null | Default | Extra | Action   |
|---|--------------------|-------------|-------------------|------------|------|---------|-------|--|
| 1 | <b>orderid</b>     | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 2 | <b>productid</b>   | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 3 | <b>orderdate</b>   | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 4 | <b>totalamount</b> | varchar(50) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 5 | <b>customerid</b>  | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |

## II. System Code

### i) system code of customer\_register.php

| Form                  | Function  | Purpose   |
|-----------------------|-----------|---|
| Customer_register.php | AutoID () | It will auto increase the customer ID number in text box. |

## III. Conclusion

This chapter include about database design and system code. And the next chapter will descript about testing.

# **Chapter 9**

# **Testing**

## Test Plan

| Test Script | Description            | Date            | Tester      |
|-------------|------------------------|-----------------|-------------|
| 1.1         | Insert Wrong User Name | 07-October-2016 | Ar Ker Hein |
| 1.2         | Insert Wrong Password  | 07-October-2016 | Ar Ker Hein |
| 1.3         | Click Login            | 07-October-2016 | Ar Ker Hein |

## II. Test Script

### a) Test Script: Customer Entry

| Unit Test 1                      |   | Test Case Log In with wrong user-name and password   | Designed by: Ar Ker Hein   |                         |
|----------------------------------|---|--|--|-------------------------|
| Data Source: Customer Login Form |   | Objective: To test the log in with wrong user-name and password                                  | Tester: Ar Ker Hein  |                         |
| Test Case                        | Description   | Test Procedure   | Expected Result  | Actual Results          |
| 1.1<br>1.2<br>1.3                | Testing the Customer Login form with wrong user-name and password | Inserting the wrong user-name 'abcd@gmail.com' with password "00000" and click the login button. | The login form is unsuccessfully login and show the error message. | See Fig.1.1 and Fig 1.2 |

Before Testing

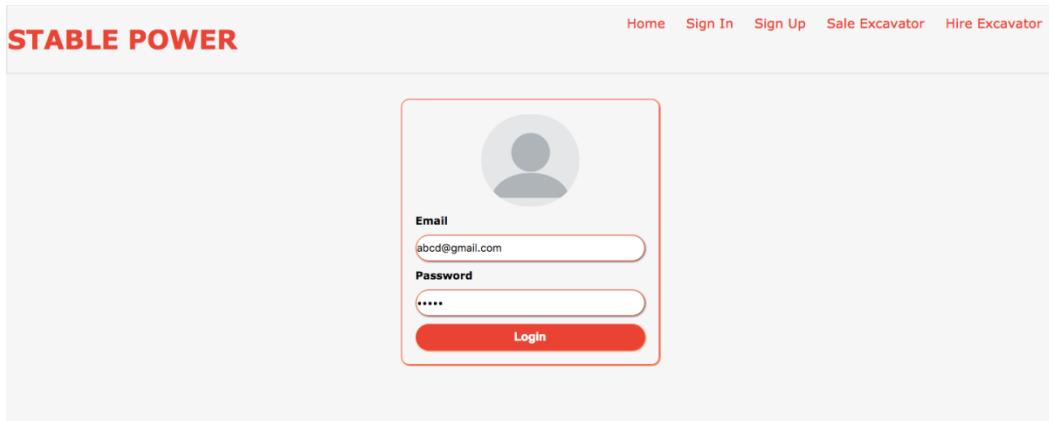


Fig 1.1

After Testing

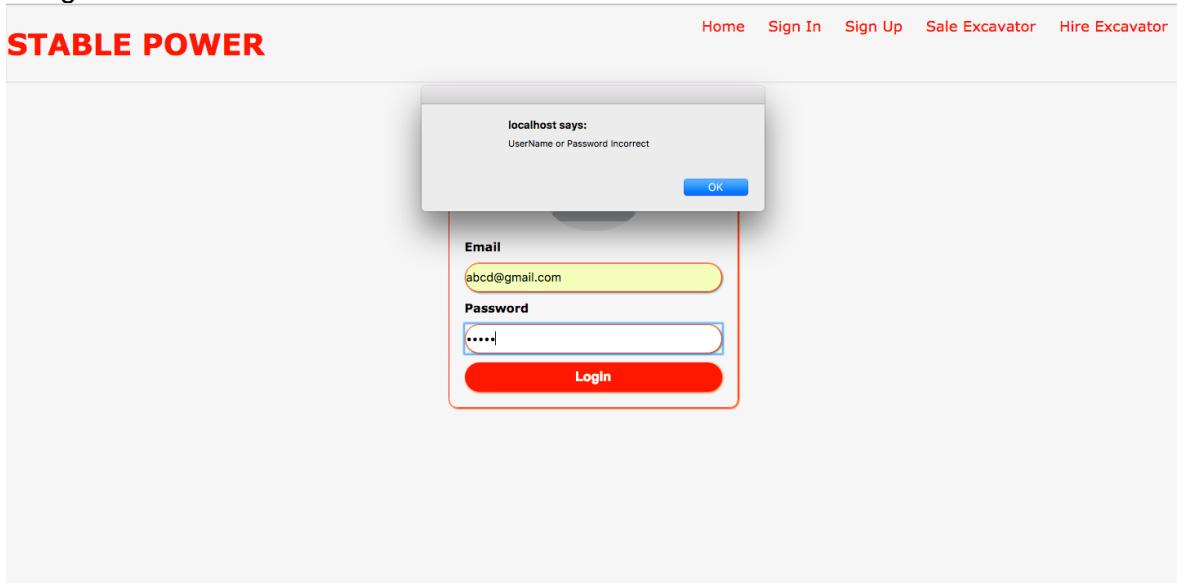


Fig 1.2

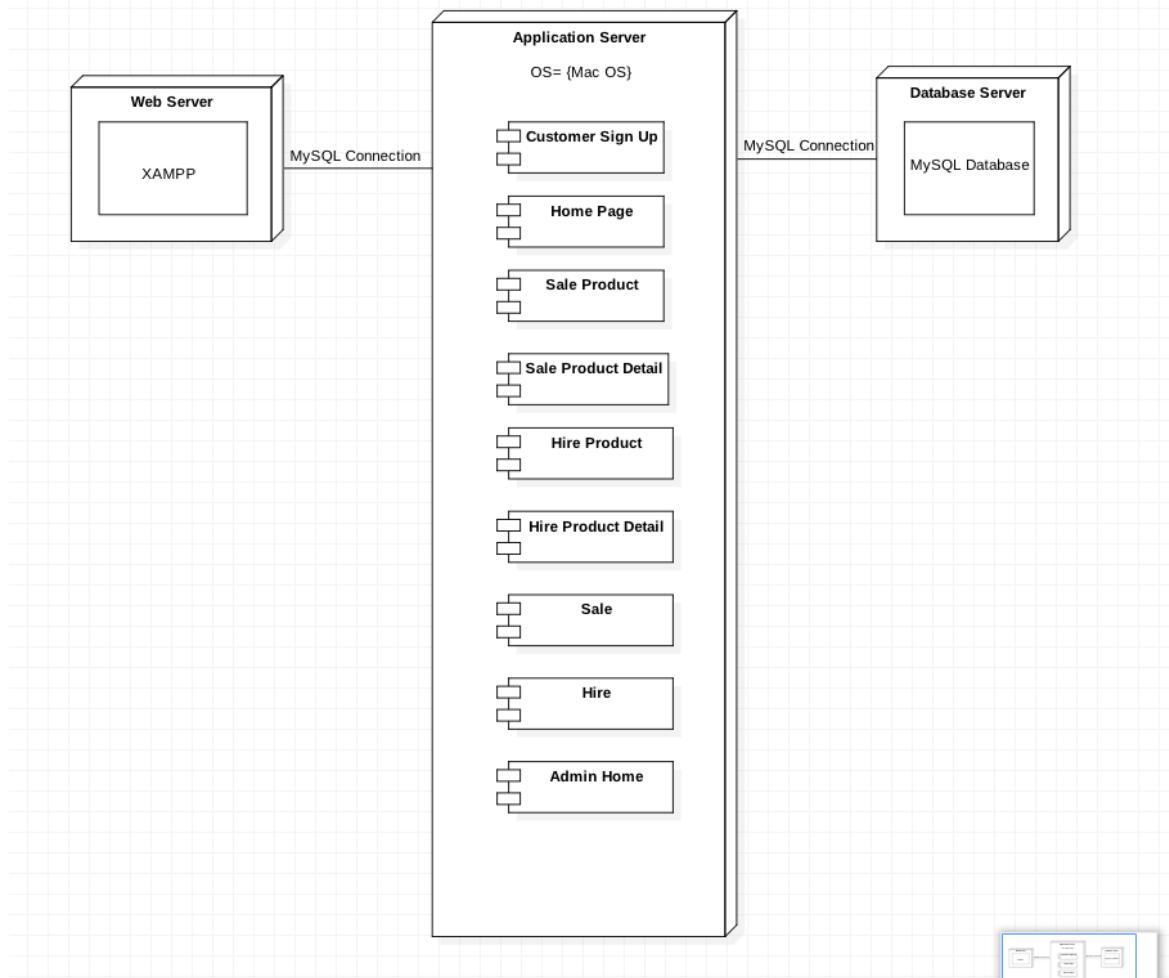
## Conclusion

This chapter includes the testing for the website page process.

# **Chapter 10**

# **Implementation**

## Deployment Diagram (Implementation)



## Data Migration

The definition of data migration is to change over the project to the business. Another thing is that the database must be officially hosted to the web server in order to use. To host the database, first the developers need to ask the hosting service to buy the storage for posting the database in the web. After that, the database which are concerned with this program must be exported from MySQL database server. To export that, all of the data from "spdb" have to be selected. Then, export all of the selected data. After the database has been exported, there will be a downloaded database file in download file. To exchange that database to the

business, copy that downloaded file to the business computer system and then, that downloaded file will be imported to the database of the business. After all of the processes is done, the data exchanging is meant to be succeed.

## Training

| <b>Training Title</b> | <b>Login</b>  |
|-----------------------|---|
| Type of User          | HR Staff  |
| Location              | Stable Power Company                                      |
| Date                  | October 7, 2016   |
| Time                  | 8:00 am to 10:00 am                                       |
| Tool                  | PC or Laptop on which is install user guide.              |
| Description           | How to login with user name and password in registration. |

| <b>Training Title</b> | <b>Order to buy a excavator</b>              |
|-----------------------|--|
| Type of User          | HR Staff                                     |
| Location              | Stable Power Company                         |
| Date                  | October 10,2016                              |
| Time                  | 8:00 am to 10:00 am                          |
| Tool                  | PC or Laptop on which is install user guide. |
| Description           | How to order a excavator in this website.    |

| <b>Training Title</b> | <b>Booking the hire excavator</b>                   |
|-----------------------|---|
| Type of User          | HR Staff  |
| Location              | Stable Power Company                                |
| Date                  | October 11,2016                                     |
| Time                  | 8:00 am to 10:00 am                                 |
| Tool                  | PC or Laptop on which is install user guide.        |
| Description           | How to booking a excavator to hire in this website. |



|                       |   |
|-----------------------|---|
| <b>Training Title</b> | <b>Search the order list and hire list</b>                  |
| Type of User          | HR Staff  |
| Location              | Stable Power Company  |
| Date                  | October 12,2016   |
| Time                  | 8:00 am to 10:00 am   |
| Tool                  | PC or Laptop on which is install user guide.                |
| Description           | How to search the order list and hire list in this program. |

|                       |  |
|-----------------------|--|
| <b>Training Title</b> | <b>Adding the brand and product</b>                  |
| Type of User          | HR Staff   |
| Location              | Stable Power Company                                 |
| Date                  | October 13,2016                                      |
| Time                  | 8:00 am to 10:00 am                                  |
| Tool                  | PC or Laptop on which is install user guide.         |
| Description           | How to adding the brand and product in this program. |

|                       |  |
|-----------------------|--|
| <b>Training Title</b> | <b>Report</b>                                |
| Type of User          | HR Staff                                     |
| Location              | Stable Power Company                         |
| Date                  | October 9,2016                               |
| Time                  | 8:00 am to 10:00 am                          |
| Tool                  | PC or Laptop on which is install user guide. |
| Description           | How to produce the report in this program.   |

## Conclusion

In this chapter – 10 includes deployment diagram, data migration and training.

# **Chapter 11**

# **Data**

# **Protection**

## I. Social, Legal, Ethical Issues

### Legal Issue

#### Data Protection Issues

Our website will need to prevent the internet criminal with legal concept. Buy domain name in order to get legal website. Our website install a web application firewall (WAF) for prevent the hacker. Firewall prevent by blocking all hacking attempts and also filtering out other type of unwanted traffic.

#### Copy right issues

Stable Power company register the copyright in order to prevent fake website and get customer trust. To prevent a data such as product image and product information from our website site, our website register the privacy law held by copyright. This privacy will also prevent our customer's information. Write term and service about our company in website in order to get a customer trust.

#### Social and Ethical Issues

The aim of implement of stable power website is to need a lot of customer and to attract the customer. Customer can be use 24 hours. Our website can't be unsuccessful if the website is unfamiliar for the customer. If customer have lacking knowledge for general IT education is impossible to use this website.

## II. Security for each function

### Password

## III. Security for websites

# **Chapter 12**

# **Evaluation**

## **for the**

## **project**

## Evaluation

The program is successfully done just as the business expected. Before the program was created, there were many plans to create the functions such as customer registration, login, logout, product display, product detail, check out, booking and delivery which depends on location. Unlike the current version, the business wanted to have a feature that will divide the products with category. Also, this program was planned to have the mobile version. Other plan was the admin part. The business has planned to manage the orders that will make total of income and outcome per year. There were another plans to have more services for repairing the products. While the developers were creating the program, there were not match with the plan they made but they could create the registration part, login and log out parts, product display, product detail, check out and booking parts. The developers could create the main parts of the functions. However, the business could use this program as it is included the main functions.

## Problems Encountered

- Requirement changes: customer want to change the background of all web pages. He wants to customizes the theme of the web sites.
- Problem error detected: customer complain for missing component that is hiring process.
- Maintenance: We have not enough time for customer request, So, we fix the project with enough programmer.
- Wrong Training: In training process, some customers are poor experience in their business. So they can't follow very well and slowing the training time.

## Future Amendments

In this application, the search box is not satisfied. It should be search by category. So in feature we will let to search by category. We will add the next function for delivery service that will support for a person who make booking with our products. The next adding function is maintenance function. We will accept the excavator for maintaining. For admin, admin can calculate for profit and loss for daily business in next update.

## References

(www.jssrco.ph, 2013)

## Bibliography

*www.jssrco.ph.* (2013, 4 14). Retrieved from www.jssrco.ph: <http://www.jssrco.ph>

# Appendix

## Use case descriptions

|                   |  |
|-------------------|--|
| Brief Description | Customer make booking  |
| Actor             | Customer   |
| Pre – Condition   | Before customers has booking the product, they need internet connection, browser, PC or Laptop and company have a customer's require product.  |
| Flow or event     | If the customer has booking with our website, first they will create a user account to registration. After registration, they will login with their user account. After login, they will choose the require product. And then, they will booking to product. |
| Alternative Flow  | In this booking process, they have some error maybe occur. There are when the customer booking the product, company have no product in this time, internet connection is very slow and hardly to make the booking process.                                   |

|                   |  |
|-------------------|--|
| Brief Description | Choose make buy  |
| Actor             | Customer   |
| Pre – Condition   | Before customers has buying the product, they need internet connection, browser, PC or Laptop and company have a customer's require product. |
| Flow or event     | If the customer has buying the product, first they will login with their user account.   |

|                  |  |
|------------------|--|
|                  | Then, they will choose the require product. And then, they will click the buy button and buy the product.  |
| Alternative Flow | In this process, they have some error maybe occur. There are when the customer has buy the product, company have no product in this time, internet connection has maybe slow, customers has hardly to buy the product and preview the product image. |

|                   |   |
|-------------------|---|
| Brief Description | Admin make confirm process  |
| Actor             | Admin   |
| Pre – Condition   | Before making the confirm the process, they need internet connection, browser and admin user account and password and PC or Laptop.   |
| Flow or event     | If the admin has confirm the process, they will login with their admin user account and choose order list or hire list. If they confirm the order, click the order list button to confirm the order. If the admin has confirm the booking process, click the hire list and make the confirm the hire. |
| Alternative Flow  | In this process, they have some error maybe occur. There are when the internet connection has slow in this time, they will confirm to customer will be late.  |

|                   |   |
|-------------------|---|
| Brief Description | Customer make payment   |
| Actor             | Customer  |
| Pre – Condition   | Before making the payment , they need internet connection, browser and sufficient |

|                  |  |
|------------------|--|
|                  | money for require product in their credit card.  |
| Flow or event    | Customer have decided to buy the excavator with online system, they must be pay the payment with credit card.<br>Customer has inserting their credit card information in website to buy the product.         |
| Alternative Flow | In this process, they have some error like there is an error of payment code password, number, etc. then the other like there is no any amount in the credit card or may be there is no internet connection. |

|                   |   |
|-------------------|---|
| Brief Description | Admin Make Report   |
| Actor             | Admin   |
| Pre – Condition   | Before admin has making the report, they need internet connection, browser, admin user account and password, PC or Laptop and Excel application will be installed in admin's PC.        |
| Flow or Event     | If the admin has making the report, first they will login with their user account. Then, they will click the make report button to make the report.                                     |
| Alternative Flow  | In this process, they have some error maybe occur. There are when is internet connection is very slow, they will be hardly to download the excel spreadsheet file to making the report. |

## Requirements Catalogue

### Functional requirement

| ID | Name                     | Description   | Acceptance Criteria  |
|----|--------------------------|---|--|
| 1  | Customer Registration    | Customer must need register for using this website and order or hire the product. The customer insert their information email and password to registration. | Want 20 customer in month  |
| 2  | Admin Login              | Admin need login for confirm order and hire customer. Then, adding the product and brand.   |  |
| 3. | Order                    | After registration the customer can make order the excavator in this website.   | Between 8:00 am to 7:00 pm to accept the order. This company has 30 excavators for sell. |
| 4  | Hire                     | After registration the customer can make booking the excavator for hire.  | At least 1 duty for hire the excavator. This company has 30 excavators for hire.         |
| 5. | Display Sale Excavator   | Sale Excavator will showed with detail information in this website.   | This company has 30 excavators for sell.   |
| 6. | Display Hire Excavator   | Hire Excavator will showed with detail information in this website.   | This company has 30 excavator for hire.  |
| 7. | Booking for Hire Product | If the customer require to hire the excavator, they will booking the excavator in this website.   | At least 1 duty for hire the excavator.  |
| 8. | Check-Out                | If the customer require to buy the excavator, they will check-out the excavator in this website.  | Customer can make check-out when they are liked.   |
| 9. | Report                   | Admin must be make a report to daily order list and hire list.  | Making the daily report in process.  |

### Non –functional requirement

| ID | Name        | Description  | Acceptance Criteria |
|----|-------------|--|---------------------|
| 1  | Security    | Prevent for hacking the customer privacy and company information | Must be secures.    |
| 2  | Performance | For customer satisfied   | Must be improve.    |

## Detailed Class Definitions

Class Diagram Name : Product  
Attributes : Product ID, Product Name, Brand Name, Model Year, Sale Price, Hire Price, Weight, Color, Serial No, Hour, Status, Detail Description, ProductImg1, ProductImg2, ProductImg3, ProductImg4, ProductImg5, ProductImg6, ProductImg7  
Operations : Update(), Delete(), Retrieve(), Insert()  
<<This product class is store product information and image when admin is registered the product. When the new excavator is arrive to company, admin register the new product to store information and image.>>

Class Diagram Name : Brand  
Attributes : Brand ID, Brand Name, Status  
Operations : Update(), Delete(), Retrieve(), Insert()  
<<This class is store brand name and status.>>

Class Diagram Name : Hire  
Attributes : Hire ID, Product ID, Hire Date, Duty, Total Amount, Customer ID  
Operations : Update(), Delete(), Retrieve(), Insert()  
<<This hire class is store which customer hire the excavatore, which product they will hire which date do they hire, how many duty they will hire and how much it is.>>

## Entry Form

### i-a) Entry Form- Excavator product table

To save the new product information and edit the product information

| #  | Name              | Type         | Collation         | Attributes | Null | Default | Extra | Action   |
|----|-------------------|--------------|-------------------|------------|------|---------|-------|--|
| 1  | productid         | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 2  | productname       | varchar(50)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 3  | brandname         | varchar(30)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 4  | modelyear         | varchar(10)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 5  | saleprice         | int(11)      |                   |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 6  | hireprice         | int(11)      |                   |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 7  | weight            | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 8  | color             | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 9  | serialno          | varchar(30)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 10 | hour              | varchar(10)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 11 | status            | varchar(20)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 12 | detaildescription | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 13 | productimg1       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 14 | productimg2       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 15 | productimg3       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 16 | productimg4       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 17 | productimg5       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 18 | productimg6       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 19 | productimg7       | varchar(255) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 20 | productsituation  | varchar(30)  | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |

### i-b) Entry Form- Admin table

To save the admin user name and password

| # | Name      | Type        | Collation         | Attributes | Null | Default | Extra | Action   |
|---|-----------|-------------|-------------------|------------|------|---------|-------|--|
| 1 | adminid   | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 2 | adminname | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 3 | password  | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 4 | role      | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |

### i-c) Entry Form- Brand table

To save the brand information and edit the brand information

| # | Name      | Type        | Collation         | Attributes | Null | Default | Extra | Action   |
|---|-----------|-------------|-------------------|------------|------|---------|-------|--|
| 1 | brandid   | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 2 | brandname | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 3 | status    | varchar(10) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |

### e) Transaction Form

In order to record hire information and update

| # | Name               | Type        | Collation         | Attributes | Null | Default | Extra | Action   |
|---|--------------------|-------------|-------------------|------------|------|---------|-------|--|
| 1 | <b>hireid</b>      | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 2 | <b>productid</b>   | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 3 | <b>hiredate</b>    | varchar(30) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 4 | <b>duty</b>        | int(11)     |                   |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 5 | <b>totalamount</b> | int(11)     |                   |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |
| 6 | <b>customerid</b>  | varchar(20) | latin1_swedish_ci |            | No   | None    |       | Change  Drop  Primary  Unique  Index  Spatial  Fulltext  Distinct values |

## System code

| Form      | Function  | Purpose                                     |
|-----------|-----------|---|
| Movie.php | AutoID () | It will increase auto Movie ID in text box. |

තුළා පිටපතේ page තුළු functions නෑතුවූ යුතු මෙහෙයුම් සඳහා නොමැතිවායි

## Test Case

| <b>Test Script</b> | <b>Description</b>          | <b>Date</b>     | <b>Tester</b> |
|--------------------|-----------------------------|-----------------|---------------|
| 2.1                | Insert Customer's User Name | 07-October-2016 | Ar Ker Hein   |
| 2.2                | Insert Customer's Password  | 07-October-2016 | Ar Ker Hein   |
| 2.3                | Click Login                 | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 3.1                | Testing the Home page form to choose sale excavator button. | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 4.1                | Testing the sale product form and click the detail button | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>         | <b>Date</b>     | <b>Tester</b> |
|--------------------|----------------------------|-----------------|---------------|
| 5.1                | Testing the buy excavator. | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>              | <b>Date</b>     | <b>Tester</b> |
|--------------------|---------------------------------|-----------------|---------------|
| 6.1                | Testing the Check-Out excavator | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 7.1                | Testing the Home page form to choose hire excavator button. | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 8.1                | Testing the hire product form and click the detail button | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>         | <b>Date</b>     | <b>Tester</b> |
|--------------------|----------------------------|-----------------|---------------|
| 9.1                | Testing the book excavator | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                    | <b>Date</b>     | <b>Tester</b> |
|--------------------|---------------------------------------|-----------------|---------------|
| 10.1               | Testing the confirm Booking excavator | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                                   | <b>Date</b>     | <b>Tester</b> |
|--------------------|--|-----------------|---------------|
| 11.1               | Check Customer ID with AutoID function               | 07-October-2016 | Ar Ker Hein   |
| 11.2               | Insert Customer First Name and Last Name in text box | 07-October-2016 | Ar Ker Hein   |
| 11.3               | Insert Customer Email and Re-email and Password      | 07-October-2016 | Ar Ker Hein   |
| 11.4               | Insert Customer's Phone Number and Address           | 07-October-2016 | Ar Ker Hein   |
| 11.5               | Click Sign Up button                                 | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                            | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 12.1               | Testing the customer email and re-email check | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                              | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 13.1               | Testing the registration with registered email. | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                                  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 14.1               | Testing the searching by brand in sale product form | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>   | <b>Date</b>     | <b>Tester</b> |
|--------------------|--|-----------------|---------------|
| 15.1               | Testing the searching by product name in sale product form | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                                  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 16.1               | Testing the searching by price in sale product form | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                                  | <b>Date</b>     | <b>Tester</b> |
|--------------------|---|-----------------|---------------|
| 17.1               | Testing the searching by brand in hire product form | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>       | <b>Date</b> | <b>Tester</b> |
|--------------------|--------------------------|-------------|---------------|
| 18.1               | Testing the searching by | 07-October- | Ar Ker Hein   |

|  |                                   |      |  |
|--|-----------------------------------|------|--|
|  | product name in hire product form | 2016 |  |
|--|-----------------------------------|------|--|

| <b>aTest Script</b> | <b>Description</b>                                  | <b>Date</b>     | <b>Tester</b> |
|---------------------|---|-----------------|---------------|
| 19.1                | Testing the searching by price in hire product form | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>      | <b>Date</b>     | <b>Tester</b> |
|--------------------|-------------------------|-----------------|---------------|
| 20.1               | Testing the admin login | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                | <b>Date</b>     | <b>Tester</b> |
|--------------------|-----------------------------------|-----------------|---------------|
| 21.1               | Testing the search the order list | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>               | <b>Date</b>     | <b>Tester</b> |
|--------------------|----------------------------------|-----------------|---------------|
| 22.1               | Testing the search the hire list | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>       | <b>Date</b>     | <b>Tester</b> |
|--------------------|--------------------------|-----------------|---------------|
| 23.1               | Inserting the brand name | 07-October-2016 | Ar Ker Hein   |
| 23.2               | Click Save Button        | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                     | <b>Date</b>     | <b>Tester</b> |
|--------------------|--|-----------------|---------------|
| 24.1               | Testing the edit brand name and status | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>                   | <b>Date</b>     | <b>Tester</b> |
|--------------------|--------------------------------------|-----------------|---------------|
| 25.1               | Testing the delete brand information | 07-October-2016 | Ar Ker Hein   |

| <b>Test Script</b> | <b>Description</b>          | <b>Date</b>     | <b>Tester</b> |
|--------------------|-----------------------------|-----------------|---------------|
| 26.1               | Testing the add new product | 07-October-2016 | Ar Ker Hein   |

## Test Script

| Unit Test 2                      |   | Test Case : Log In by data entry Customer   | Designed by: Ar Ker Hein  |                         |
|----------------------------------|---|---|---|-------------------------|
| Data Source: Customer Login Form |   | Objective: To test the log in of data entry staffs  | Tester: Ar Ker Hein   |                         |
| Test Case                        | Description   | Test Procedure  | Expected Result   | Actual Results          |
| 2.1<br>2.2<br>2.3                | Testing the Customer Login form with correct user-name and password | Inserting the user-name 'jonny@gmail.com' with password '12345' and click the login button. | The login form is successfully login and reached the Home Page. | See Fig.1.3 and Fig 1.4 |

Before Testing

The screenshot shows the 'STABLE POWER' website. At the top, there is a navigation bar with links: Home, Sign In, Sign Up, Sale Excavator, and Hire Excavator. Below the navigation bar, there is a large rectangular input field containing a placeholder user icon. Inside this field, there are two input boxes: one for 'Email' containing 'jonny@gmail.com' and another for 'Password' containing '.....'. Below these input fields is a red 'Login' button.

Fig 1.3

After Testing

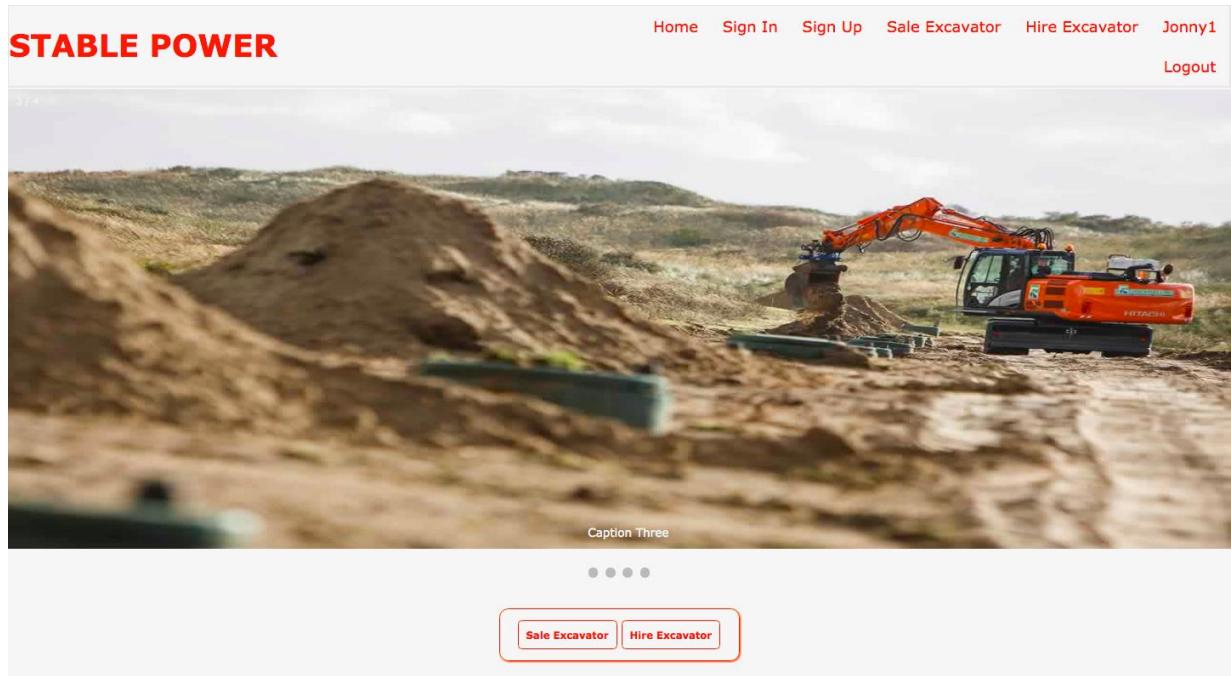


Fig.1.4

| Unit Test 3            |   | Test Case : Choose Sale from Home Page   | Designed by: Ar Ker Hein  |                         |
|------------------------|---|--|---|-------------------------|
| Data Source: Home Page |   | Objective: To Test the clicking the Sale Excavator button to reached the Sale Product form | Tester: Ar Ker Hein   |                         |
| Test Case              | Description   | Test Procedure   | Expected Result   | Actual Results          |
| 3.1                    | Testing the Home page form to choose sale excavator button. | Clicking the sale excavator button and reached the sale product form                       | This process is successfully and reached the sale product form, | See Fig.1.5 and Fig 1.6 |

Before Testing

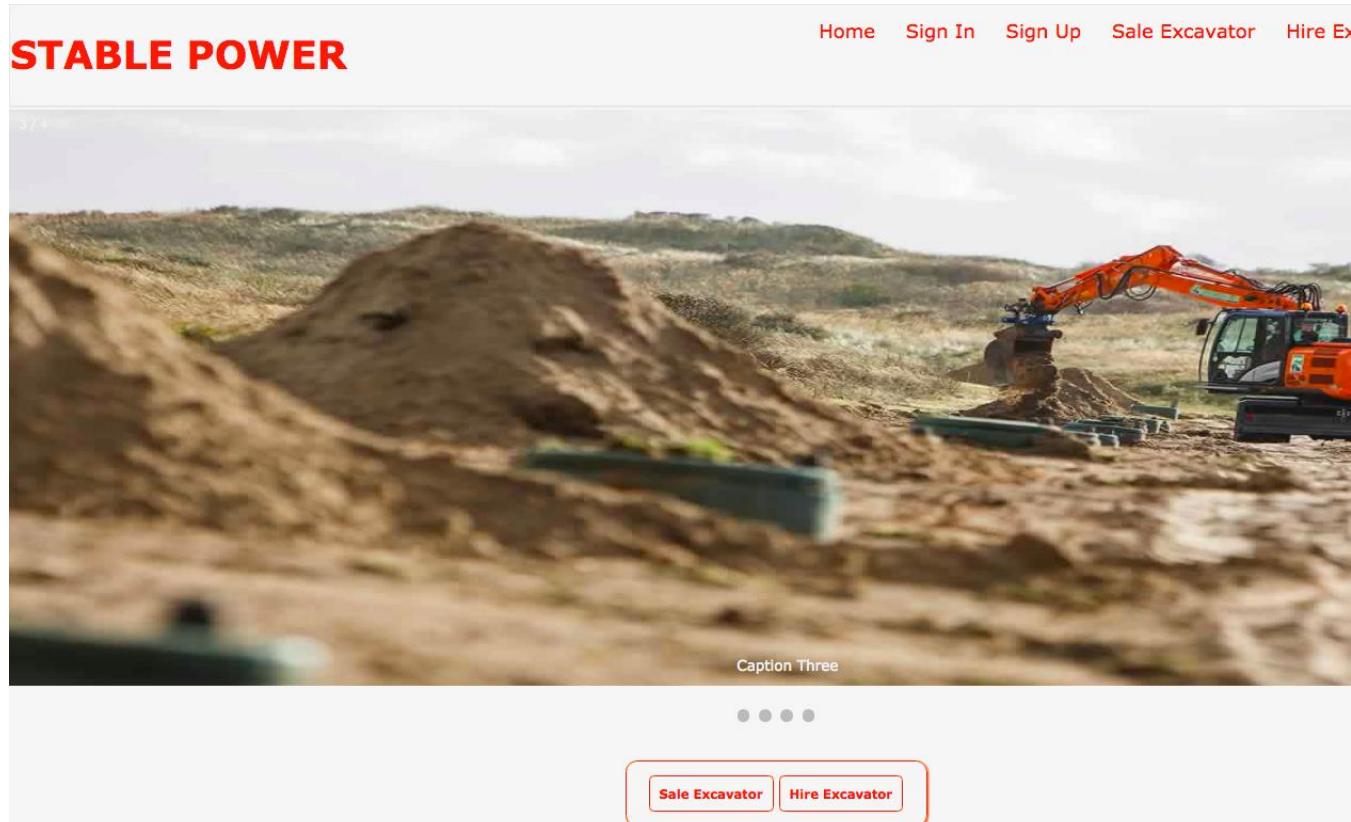


Fig 1.5

After Testing

The image is a screenshot of a website titled "STABLE POWER". The header includes links for Home, Sign In, Sign Up, Sale Excavator, Hire Excavator, Arkar, and Logout. Below the header are search filters: "Caterpillar,Sumitomo", "Search By Brand", "308CCR", "Search By Name", "250000 or 30000", and "Search By Price". A red banner at the top says "Sale Excavator". The main content displays a grid of six excavator listings:

| Image | Brand       | Model    | Price     | Action                 |
|-------|-------------|----------|-----------|------------------------|
|       | CATERPILLAR | 308CCR   | 25000 USD | <a href="#">Detail</a> |
|       | SUMITOMO    | SH125X-3 | 50000 USD | <a href="#">Detail</a> |
|       | KOBELCO     | SK200-1  | 60000 USD | <a href="#">Detail</a> |
|       |             |          |           |                        |
|       |             |          |           |                        |
|       |             |          |           |                        |

Fig 1.6

| Unit Test 4                    |   | Test Case : Choose Excavator from Sale Product form and click detail button | Designed by: Ar Ker Hein  |                         |
|--------------------------------|---|---|---|-------------------------|
| Data Source: Sale Product Form |   | Objective: To Test the choose excavator to click the detail                 | Tester: Ar Ker Hein   |                         |
| Test Case                      | Description   | Test Procedure  | Expected Result   | Actual Results          |
| 4.1                            | Testing the sale product form and click the detail button | Clicking the detail button to reached the sale product detail form.         | This Process is successfully to reached the sale product detail form. | See Fig.1.7 and Fig 1.8 |

Before Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator Arkar Logout

Caterpillar,Sumitomo Search By Brand 308CCR Search By Name 250000 or 30000 Search By Price

**Sale Excavator**

|  |  |  |   |  |   |
|--|--|--|---|--|---|
|  | <b>CATERPILLAR</b><br><b>308CCR</b><br>25000 USD<br><a href="#">Detail</a> |  | <b>SUMITOMO</b><br><b>SH125X-3</b><br>50000 USD<br><a href="#">Detail</a> |  | <b>KOBELCO</b><br><b>SK200-1</b><br>60000 USD<br><a href="#">Detail</a> |
|  |  |  |   |  |   |

Fig 1.7  
After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator Arkar Logout

|  |   |
|--|---|
|  | Product Name : <b>SH125X-3</b><br>Brand : <b>SUMITOMO</b><br>Model Year : <b>2001</b><br>Sale Price : <b>50000USD</b><br>Weight : <b>13 Ton</b><br>Color : <b>Yellow</b><br>Serial No : <b>125X3-1258</b><br>Hour : <b>9266</b><br>Status : <b>Active</b><br>Detail Description : <b>Good Condition</b> |
|  | <a href="#">Buy Now</a> <a href="#">Back</a>  |

Fig 1.8

|                           |                            |                          |
|---------------------------|----------------------------|--------------------------|
| Unit Test 5               | Test Case : Buy excavator  | Designed by: Ar Ker Hein |
| Data Source: Sale Product | Objective: To Test the buy | Tester: Ar Ker Hein      |

| Detail Form |                           | excavator   |  |                         |
|-------------|---------------------------|---|--|-------------------------|
| Test Case   | Description               | Test Procedure  | Expected Result  | Actual Results          |
| 5.1         | Testing the buy excavator | Clicking the Buy Now Button and reached the sale form | This Process is successfully to reached the sale form to checkout the product. | See Fig.1.9 and Fig 2.0 |

Before Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator Arkar Logout

Product Name : **SH125X-3**

Brand : **SUMITOMO**

Model Year : **2001**

Sale Price : **50000USD**

Weight : **13 Ton**

Color : **Yellow**

Serial No : **125X3-1258**

Hour : **9266**

Status : **Active**

Detail Description : **Good Condition**

**Buy Now** **Back**

Fig 1.9

After Testing

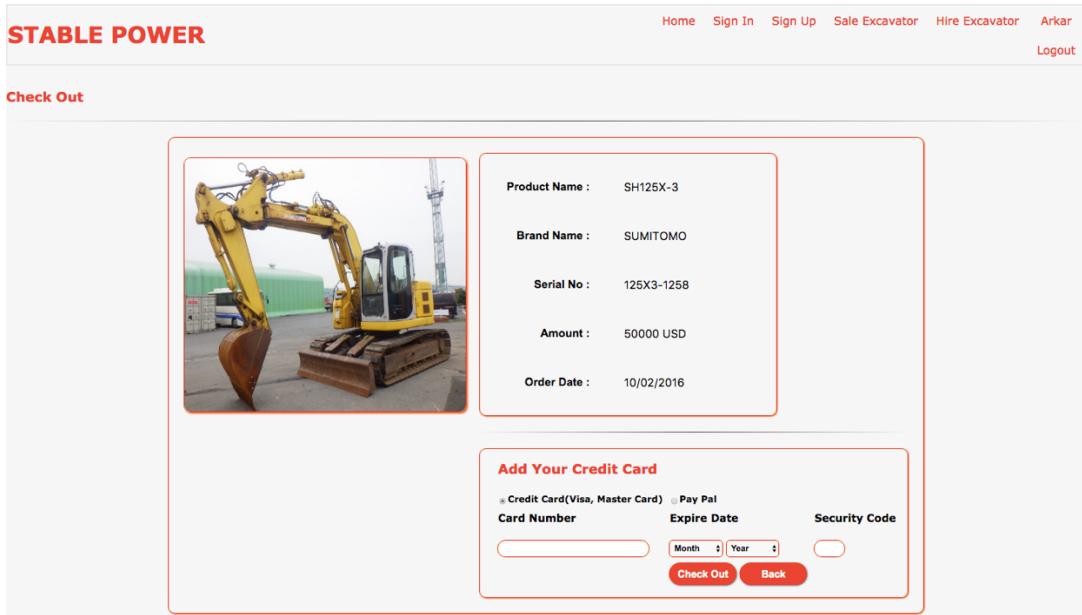


Fig 2.0

| Unit Test 6            |                                 | Test Case : Check-Out excavator  | Designed by: Ar Ker Hein                                     |                         |
|------------------------|---------------------------------|--|--|-------------------------|
| Data Source: Sale Form |                                 | Objective: Check-Out the excavator   | Tester: Ar Ker Hein  |                         |
| Test Case              | Description                     | Test Procedure   | Expected Result  | Actual Results          |
| 6.1                    | Testing the Check-Out excavator | Adding the Credit Card and Clicking the the check-out button to show message and reached the Home Page again | This Process is successfully to reached the Home Page Again. | See Fig.2.1 and Fig 2.2 |

Before Testing

## STABLE POWER

Home Sign In Sign Up Sale Excavator Hire

Check Out



Product Name : SH125X-3

Brand Name : SUMITOMO

Serial No : 125X3-1258

Amount : 50000 USD

Order Date : 10/02/2016

### Add Your Credit Card

Credit Card(Visa, Master Card)  Pay Pal

Card Number

Expire Date

Security Code

 Month  Year

Check Out

Back

Fig 2.1  
After Testing

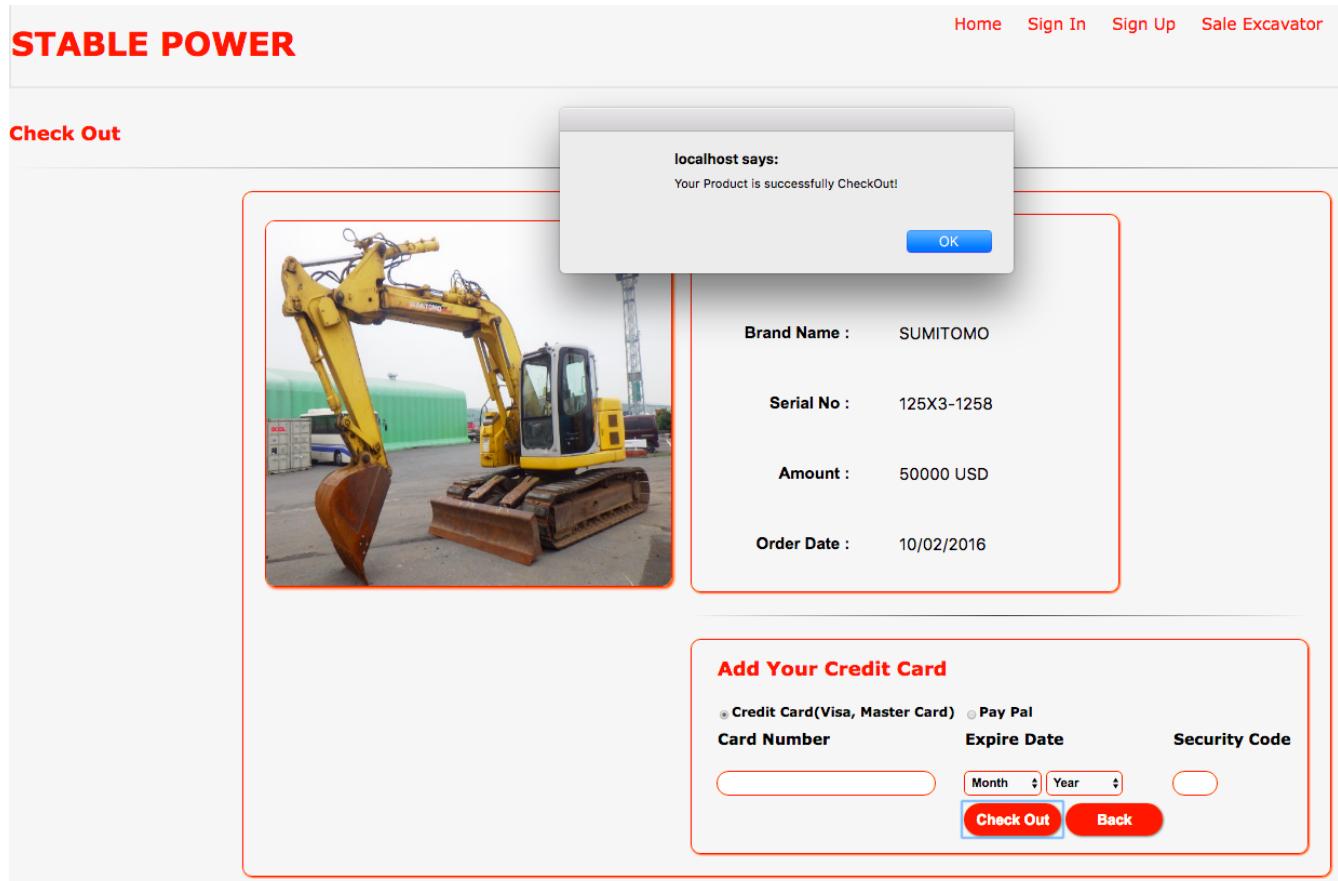


Fig 2.2

| Unit Test 7            |   | Test Case : Choose Hire from Home Page   | Designed by: Ar Ker Hein  |                         |
|------------------------|---|--|---|-------------------------|
| Data Source: Home Page |   | Objective: To Test the clicking the Hire Excavator button to reached the Hire Product form | Tester: Ar Ker Hein   |                         |
| Test Case              | Description   | Test Procedure   | Expected Result   | Actual Results          |
| 7.1                    | Testing the Home page form to choose hire excavator button. | Clicking the hire excavator button and reached the hire product form                       | This process is successfully and reached the Hire product form, | See Fig.2.3 and Fig 2.4 |

Before Testing

# STABLE POWER

[Home](#) [Sign In](#) [Sign Up](#) [Sale Excavator](#) [Hire Excavator](#)

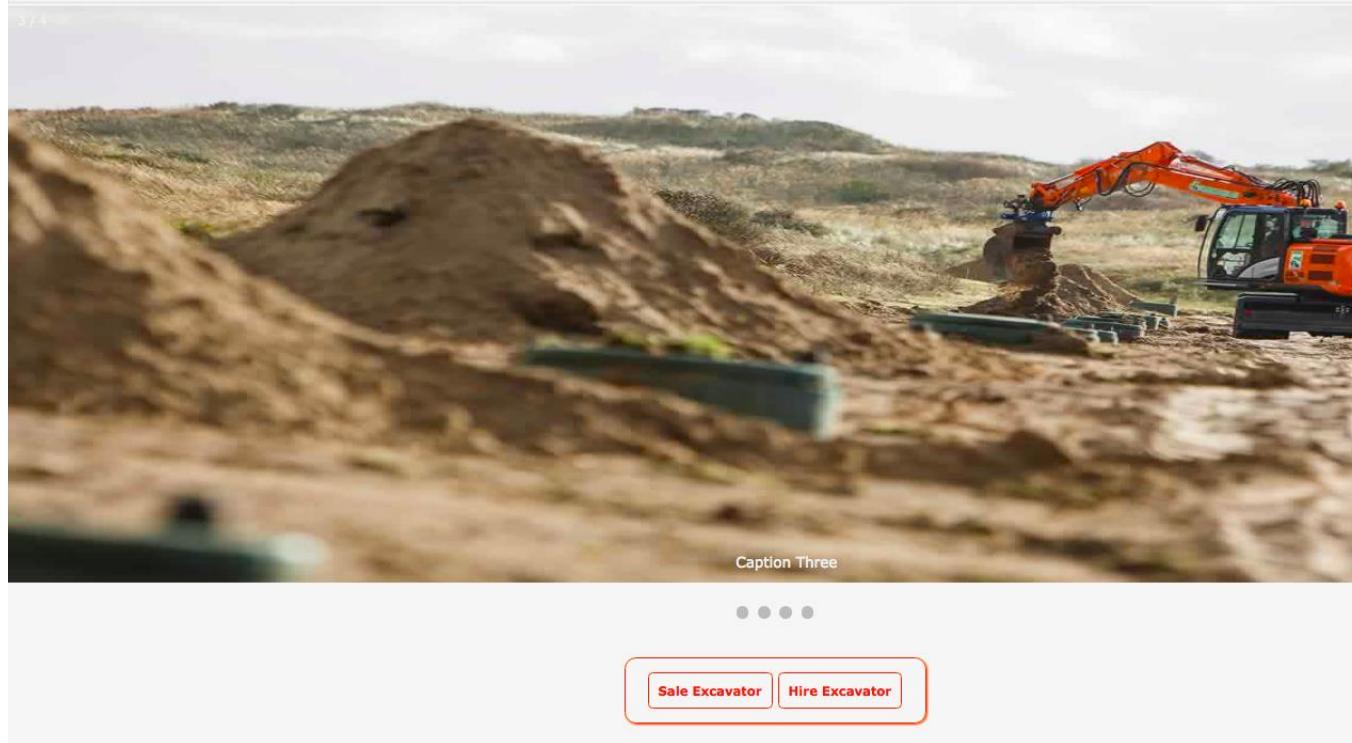


Fig 2.3

After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator

Search... Search Search... SearchByName Search... SearchByPrice

**Hire Excavator**

|  |  |  |   |  |  |
|--|--|--|---|--|--|
|  | <b>SUMITOMO</b><br><b>SH225X-3</b><br>100 Per Duty<br><a href="#">Detail</a> |  | <b>KOBELCO</b><br><b>SK235SR</b><br>50 Per Duty<br><a href="#">Detail</a> |  | <b>Komatsu</b><br><b>PC128US-2</b><br>120 Per Duty<br><a href="#">Detail</a> |
|--|--|--|---|--|--|

Fig 2.4

| Unit Test 8                    |   | Test Case : Choose Excavator from Hire Product form and click detail button | Designed by: Ar Ker Hein  |                          |
|--------------------------------|---|---|---|--------------------------|
| Data Source: Hire Product Form |   | Objective: To Test the choose excavator to click the detail                 | Tester: Ar Ker Hein   |                          |
| Test Case                      | Description   | Test Procedure  | Expected Result   | Actual Results           |
| 8.1                            | Testing the hire product form and click the detail button | Clicking the detail button to reached the hire product detail form.         | This Process is successfully to reached the hire product detail form. | See Fig. 2.5 and Fig 2.6 |

Before Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator

Search... Search Search... SearchByName Search... SearchByPrice

**Hire Excavator**



**SUMITOMO**  
**SH225X-3**  
100 Per Duty  
[Detail](#)



**KOBELCO**  
**SK235SR**  
50 Per Duty  
[Detail](#)



**Komatsu**  
**PC128US-2**  
120 Per Duty  
[Detail](#)

Fig 2.5  
After Testing

## STABLE POWER

[Home](#) [Sign In](#) [Sign Up](#) [Sale Excavator](#) [Hire](#)

### Product Detail



Product Name : **SH225X-3**

Brand : **SUMITOMO**

Hire Price : **100 USD Per Duty**

Weight : **25 ton**

Status : **Active**

Detail Description : **cab, a/c, 600mmTBG shoe shoe, bkt**

[Book Now](#)

[Back](#)

Fig 2.6

| Unit Test 9                           |                            | Test Case : Book excavator                             | Designed by: Ar Ker Hein  |                         |
|---------------------------------------|----------------------------|--|---|-------------------------|
| Data Source: Hire Product Detail Form |                            | Objective: To Test the book excavator                  | Tester: Ar Ker Hein   |                         |
| Test Case                             | Description                | Test Procedure   | Expected Result   | Actual Results          |
| 9.1                                   | Testing the book excavator | Clicking the Book Now Button and reached the hire form | This Process is successfully to reached the Hire form to Booking the product. | See Fig 2.7 and Fig 2.8 |

Before Testing

# STABLE POWER

[Home](#) [Sign In](#) [Sign Up](#) [Sale Excavator](#) [Hire](#)

## Product Detail



Product Name : **SH225X-3**

Brand : **SUMITOMO**

Hire Price : **100 USD Per Duty**

Weight : **25 ton**

Status : **Active**

Detail Description : **cab, a/c, 600mmTBG shoe shoe, bkt**

[Book Now](#)

[Back](#)

Fig 2.7

After Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Ex

## Booking



Product Name : SH225X-3

Brand Name : SUMITOMO

Hire Price : 100

Hire Date :

Duty :

Total Amount

**Confirm** **Back**

Fig 2.8

| Unit Test 10           |                                       | Test Case : Booking excavator   | Designed by: Ar Ker Hein                                     |                         |
|------------------------|---------------------------------------|---|--|-------------------------|
| Data Source: Hire Form |                                       | Objective: Booking the excavator  | Tester: Ar Ker Hein  |                         |
| Test Case              | Description                           | Test Procedure  | Expected Result  | Actual Results          |
| 10.1                   | Testing the confirm Booking excavator | Inserting the How many duty we use excavator to duty text box and choose hire date and automatic calculate the total amount and click confirm button. | This Process is successfully to reached the Home Page again. | See Fig.2.9 and Fig 3.0 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Ex

## Booking



Product Name : SH225X-3

Brand Name : SUMITOMO

Hire Price : 100

Hire Date : 10/27/2016

Duty : 5

Total Amount

500

**Confirm**

**Back**

Fig 2.9  
After Test

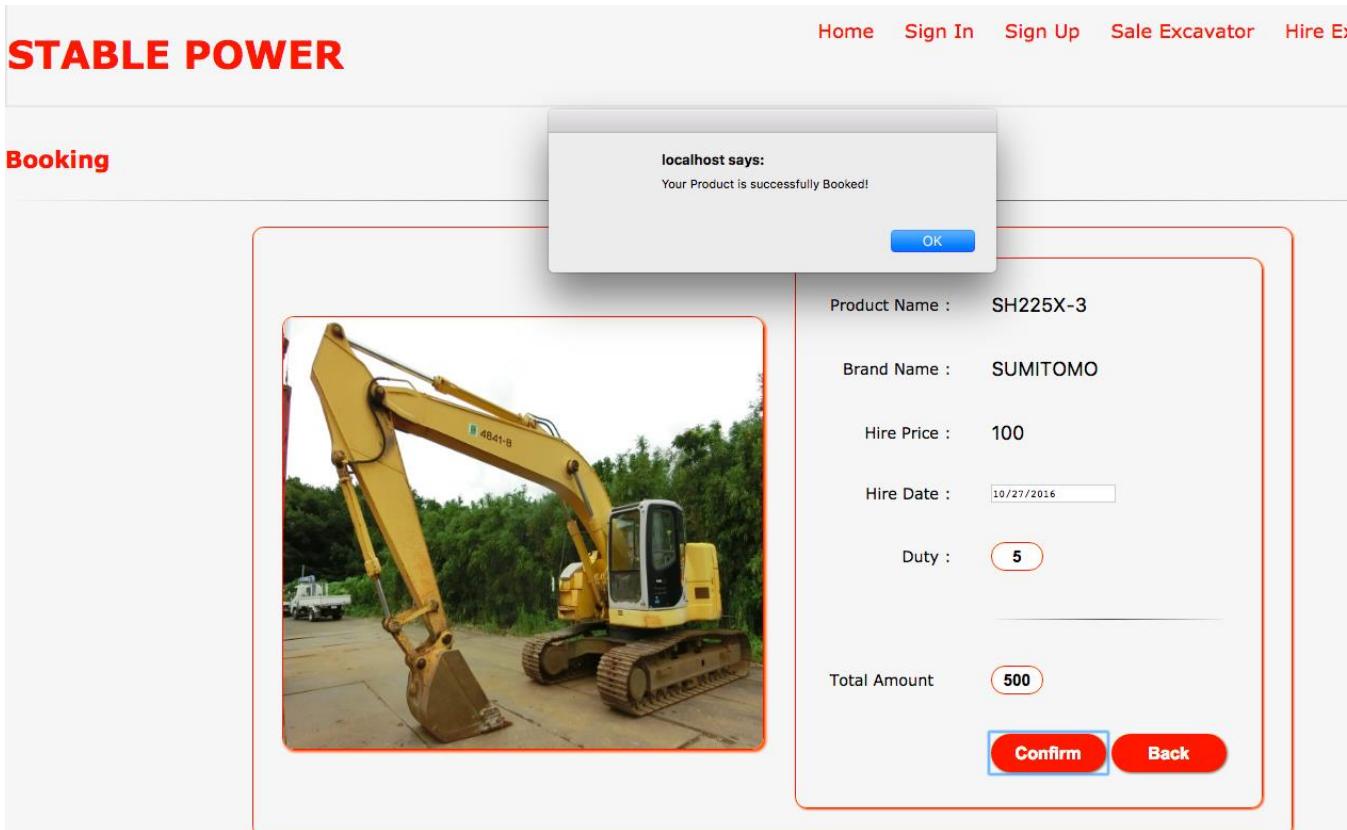


Fig 3.0

| Unit Test 11                         |                                   | Test Case : Customer Registration  | Designed by: Ar Ker Hein                               |                         |
|--------------------------------------|-----------------------------------|--|--|-------------------------|
| Data Source: Customer Sign up form   |                                   | Objective: To Test Customer Registration   | Tester: Ar Ker Hein                                    |                         |
| Test Case                            | Description                       | Test Procedure   | Expected Result  | Actual Results          |
| 11.1<br>11.2<br>11.3<br>11.4<br>11.5 | Testing the Customer Registration | Inserting the Customer First Name, Last Name, Email, Re-email, Password, Phone No and Address. And then, Click the Sign Up Button. | The Signup is successfully and reached the login form. | See Fig.3.0 and Fig 3.1 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator

|  |                                      |
|--|--------------------------------------|
| First Name                             | Last Name                            |
| John                                   | Cena                                 |
| Email                                  | Re-Email                             |
| johncena@gmail.com                     | johncena@gmail.com                   |
| Password                               | Phone No                             |
| *****                                  | 001510999243                         |
| Address                                |                                      |
| New York                               |                                      |
| <input type="button" value="Sign Up"/> | <input type="button" value="Clear"/> |

Fig 3.0

After Testing

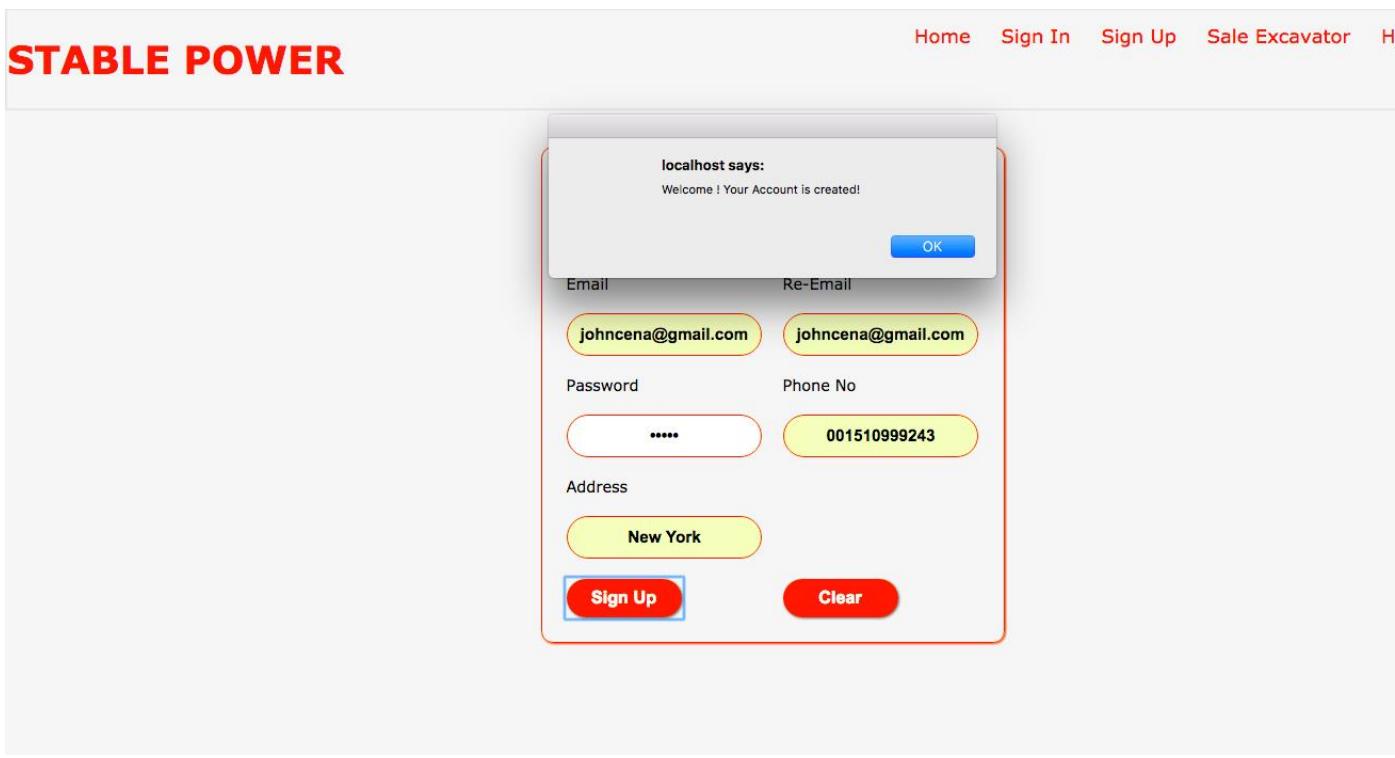


Fig 3.1

| Unit Test 12                       |   | Test Case : Customer email and re-email check                      | Designed by: Ar Ker Hein                                      |                         |
|------------------------------------|---|--|---|-------------------------|
| Data Source: Customer Sign up form |   | Objective: To Test customer email and re-email check               | Tester: Ar Ker Hein   |                         |
| Test Case                          | Description                                   | Test Procedure   | Expected Result   | Actual Results          |
| 12.1                               | Testing the customer email and re-email check | Inserting the different email and re-email and show error message. | This process is successfully complete and show error message. | See Fig.3.2 and Fig 3.3 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator H

|                     |                     |
|---------------------|---------------------|
| First Name          | Last Name           |
| John                | Cena                |
| Email               | Re-Email            |
| john cena@gmail.com | john cena@gmail.com |
| Password            | Phone No            |
| *****               | 001510999243        |
| Address             |                     |
| New York            |                     |
| <b>Sign Up</b>      | <b>Clear</b>        |

Fig 3.2  
After Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator H

localhost says:  
email is not correct please try again  
 Prevent this page from creating additional dialogs.

**OK**

|                     |                    |
|---------------------|--------------------|
| john cena@gmail.com | CenaJohn@gmail.com |
| Password            | Phone No           |
| *****               | 12345              |
| Address             |                    |
| New York            |                    |
| <b>Sign Up</b>      | <b>Clear</b>       |

Fig 3.3

| Unit Test 13                  |   | Test Case : Registration with registered email                        | Designed by: Ar Ker Hein                                   |                         |
|-------------------------------|---|---|--|-------------------------|
| Data Source: Customer Sign up |   | Objective: To Test the registration with registered email             | Tester: Ar Ker Hein  |                         |
| Test Case                     | Description                                     | Test Procedure  | Expected Result  | Actual Results          |
| 13.1                          | Testing the registration with registered email. | Customer registration with registered email and click Sign up button. | The registration is unsuccessfully and show error message. | See Fig.3.4 and Fig 3.5 |

Before Testing

## STABLE POWER

Home Sign In Sign Up Sale Excavator H

First Name

Last Name

Email

Re-Email

Password

Phone No

Address

Fig 3.4  
After Testing

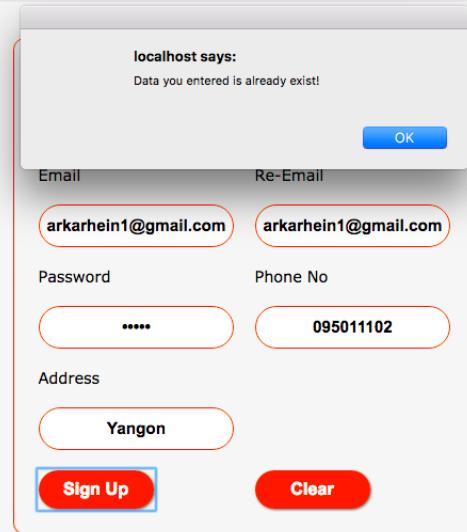


Fig 3.5

| Unit Test 14                   |   | Test Case : Search By Brand in sale product form  | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|---|---|---|-------------------------|
| Data Source: Sale Product form |   | Objective: To test the searching by brand in sale product                               | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description   | Test Procedure  | Expected Result   | Actual Results          |
| 14.1                           | Testing the searching by brand in sale product form | Insert the brand name ("SUMITOMO") in brand search box and click search by brand button | This process is successfully and show searched product. | See Fig.3.6 and Fig 3.7 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavator

SUMITOMO

Search By Brand

308CCR

Search By Name

250000 or 30000

Search By Price

## Sale Excavator



CATERPILLAR

308CCR

25000 USD

[Detail](#)



SUMITOMO

SH125X-3

50000 USD

[Detail](#)



KOBELCO

SK200-1

60000 USD

[Detail](#)



Fig 3.6  
After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excava

Catepillar,Sumitomo Search By Brand 308CCR Search By Name 250000 or 30000 Search By Price

**Sale Excavator**

Fig 3.7

| Unit Test 15                   |  | Test Case : Search By Product name in sale product form  | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|--|--|---|-------------------------|
| Data Source: Sale Product form |  | Objective: To test the searching by product name in sale product                               | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description  | Test Procedure   | Expected Result   | Actual Results          |
| 15.1                           | Testing the searching by product name in sale product form | Insert the product name ("SK200-1") in product name search box and click search by Name button | This process is successfully and show searched product. | See Fig.3.8 and Fig 3.9 |

Before Testing

## STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excava

Catepillar,Sumitomo

Search By Brand

SK200-1

Search By Name

250000 or 30000

Search By Price

### Sale Excavator



**CATERPILLAR**

**308CCR**

25000 USD

[Detail](#)



**SUMITOMO**

**SH125X-3**

50000 USD

[Detail](#)



**KOBELCO**

**SK200-1**

60000 USD

[Detail](#)



Fig 3.8

After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar,Sumitomo Search By Brand 308CCR Search By Name 250000 or 300000 Search By Price

**Sale Excavator**

KOBELCO  
SK200-1  
60000 USD  
[Detail](#)

Fig 3.9

| Unit Test 16                   |   | Test Case : Search By price in sale product form  | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|---|---|---|-------------------------|
| Data Source: Sale Product form |   | Objective: To test the searching by price in sale product                                 | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description   | Test Procedure  | Expected Result   | Actual Results          |
| 16.1                           | Testing the searching by price in sale product form | Insert the product's price ("60000") in price search box and click search by price button | This process is successfully and show searched product. | See Fig.4.0 and Fig 4.1 |

Before Testing

## STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar,Sumitomo

Search By Brand

308CCR

Search By Name

60000

Search By Price

### Sale Excavator



CATERPILLAR

308CCR

25000 USD

[Detail](#)



SUMITOMO

SH125X-3

50000 USD

[Detail](#)



KOBELCO

SK200-1

60000 USD

[Detail](#)



Fig 4.0  
After Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar,Sumitomo

Search By Brand

308CCR

Search By Name

250000 or 30000

Search By Price

## Sale Excavator



KOBELCO

SK200-1

60000 USD

Detail



KOMATSU

PC228US-3NO

60000 USD

Detail

Fig 4.1

| Unit Test 17                   |   | Test Case : Search By Brand in hire product form   | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|---|--|---|-------------------------|
| Data Source: Hire Product form |   | Objective: To test the searching by brand in hire product                                  | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description   | Test Procedure   | Expected Result   | Actual Results          |
| 17.1                           | Testing the searching by brand in hire product form | Insert the brand name ("CATERPILLAR") in brand search box and click search by brand button | This process is successfully and show searched product. | See Fig.4.2 and Fig 4.3 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excava

CATERPILLAR

Search By Brand

308CCR/SK125X-3

Search By Name

50/120/200

Search By Price

## Hire Excavator



HITACHI

EX40U

50 Per Duty

[Detail](#)



YANMAR

B3-3

40 Per Duty

[Detail](#)



CATERPILLAR

313BCR

180 Per Duty

[Detail](#)



Fig 4.2

After Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavat

Caterpillar/Sumitomo

Search By Brand

308CCR/SK125X-3

Search By Name

50/120/200

Search By Price

## Hire Excavator



Fig 4.3

| Unit Test 18                   |  | Test Case : Search By Product Name in hire product form                                     | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|--|---|---|-------------------------|
| Data Source: Hire Product form |  | Objective: To test the searching by product name in hire product                            | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description  | Test Procedure  | Expected Result   | Actual Results          |
| 18.1                           | Testing the searching by product name in hire product form | Insert the product name ("B3-3") in product name search box and click search by name button | This process is successfully and show searched product. | See Fig.4.4 and Fig 4.5 |

Before Testing

## STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar/Sumitomo

Search By Brand

B3-3

Search By Name

50/120/200

Search By Price

### Hire Excavator



HITACHI

EX40U

50 Per Duty

[Detail](#)



YANMAR

B3-3

40 Per Duty

[Detail](#)



CATERPILLAR

313BCR

180 Per Duty

[Detail](#)



Fig 4.4  
After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar/Sumitomo Search By Brand 308CCR/SK125X-3 Search By Name 50/120/200 Search By Price

Hire Excavator

Fig 4.5

| Unit Test 19                   |   | Test Case : Search By Price in hire product form                                    | Designed by: Ar Ker Hein                                |                         |
|--------------------------------|---|---|---|-------------------------|
| Data Source: Hire Product form |   | Objective: To test the searching by price in hire product                           | Tester: Ar Ker Hein                                     |                         |
| Test Case                      | Description   | Test Procedure  | Expected Result   | Actual Results          |
| 19.1                           | Testing the searching by price in hire product form | Insert the price ("50") in product name search box and click search by price button | This process is successfully and show searched product. | See Fig.4.6 and Fig 4.7 |

Before Testing

# STABLE POWER

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar/Sumitomo

Search By Brand

308CCR/SK125X-3

Search By Name

50

Search By Price

## Hire Excavator



HITACHI

EX40U

50 Per Duty

[Detail](#)



YANMAR

B3-3

40 Per Duty

[Detail](#)



CATERPILLAR

313BCR

180 Per Duty

[Detail](#)



Fig 4.6

After Testing

**STABLE POWER**

Home Sign In Sign Up Sale Excavator Hire Excavator

Caterpillar/Sumitomo Search By Brand 308CCR/SK125X-3 Search By Name 50/120/200 Search By Price

Hire Excavator

The screenshot shows a search interface for excavators. At the top, there are buttons for 'Caterpillar/Sumitomo', 'Search By Brand' (highlighted in red), '308CCR/SK125X-3', 'Search By Name', '50/120/200', and 'Search By Price'. Below this, a section titled 'Hire Excavator' displays two options:

- HITACHI EX40U**: A blue excavator with a bucket attachment. It is listed at 50 USD per day. A 'Detail' button is visible.
- KOBELCO SK235SR**: A teal excavator with a bucket attachment. It is listed at 50 USD per day. A 'Detail' button is visible.

Fig 4.7

| Unit Test 20             |                         | Test Case : Admin Login   | Designed by: Ar Ker Hein  |                         |
|--------------------------|-------------------------|---|---|-------------------------|
| Data Source: Admin Login |                         | Objective: To Test the admin Login  | Tester: Ar Ker Hein   |                         |
| Test Case                | Description             | Test Procedure  | Expected Result   | Actual Results          |
| 20.1                     | Testing the admin login | Inserting the admin name and password in admin login form and click the login button. | This Login is successfully login and reached the admin home form. | See Fig.4.8 and Fig 4.9 |

ting

Bef  
ore  
Tes

**STABLE POWER**

Home Add Product Add Brand Hire List Admin Login

**Admin Login**

|   |            |
|---|------------|
| Admin Name  | Arkar Hein |
| Password  | .....      |
| <input style="border-radius: 10px; background-color: red; color: white; font-weight: bold; padding: 5px 10px; border: none; width: 100px; height: 30px; margin-right: 10px;" type="button" value="Login"/> <input style="border-radius: 10px; background-color: red; color: white; font-weight: bold; padding: 5px 10px; border: none; width: 100px; height: 30px;" type="button" value="Clear"/> |            |

Fig 4.8  
After Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login Admin Login

**Order List**

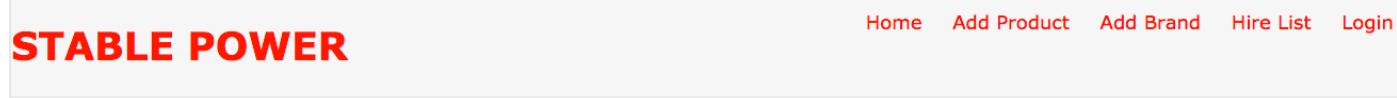
| Order Date | Enter Date 1 | to         | Order Date   | Enter Date 2      | Search       | SearchAll   | Make Report |           |              |              |                        |
|------------|--------------|------------|--------------|-------------------|--------------|-------------|-------------|-----------|--------------|--------------|------------------------|
| Order ID   | Order Date   | Product ID | Product Name | Serial No         | Total Amount | Customer ID | First Name  | Last Name | Address      | Phone No     | Action                 |
| O-000007   | 2016-09-23   | P-000007   | PC228US-3N0  | KMTPC057J02031118 | 60000 USD    | C-000005    | Jonny1      | English   | Yangon       | 095011102    | <a href="#">Delete</a> |
| O-000009   | 2016-09-27   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1      | English   | Yangon       | 095011102    | <a href="#">Delete</a> |
| O-000010   | 2016-09-28   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1      | English   | Yangon       | 095011102    | <a href="#">Delete</a> |
| O-000011   | 2016-10-02   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar Hein  | abc       | 12345        | 12345        | <a href="#">Delete</a> |
| O-000012   | 2016-10-02   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar Hein  | abc       | 12345        | 12345        | <a href="#">Delete</a> |
| O-000013   | 2016-10-02   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar Hein  | abc       | 12345        | 12345        | <a href="#">Delete</a> |
| O-000014   | 2016-10-02   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar Hein  | abc       | 12345        | 12345        | <a href="#">Delete</a> |
| O-000015   | 2016-10-04   | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000009    | John Cena   | New York  | 001510999243 | 001510999243 | <a href="#">Delete</a> |

Fig 4.9

|                         |                                   |   |                              |                         |
|-------------------------|-----------------------------------|---|------------------------------|-------------------------|
| Unit Test 21            |                                   | Test Case : Search Order List   | Designed by: Ar Ker Hein     |                         |
| Data Source: Admin Home |                                   | Objective: To Test the search order list                                  | Tester: Ar Ker Hein          |                         |
| Test Case               | Description                       | Test Procedure  | Expected Result              | Actual Results          |
| 21.1                    | Testing the search the order list | Inserting the order date between “2016-09-23” to “2016-10-02” and clicked | This process is successfully | See Fig.5.0 and Fig 5.1 |

|  |  |               |                  |  |
|--|--|---------------|------------------|--|
|  |  | search button | and show result/ |  |
|--|--|---------------|------------------|--|

Before Testing



### Order List

| Order Date        | 2016-09-23 | to         | Order Date   | 2016-10-02"       | Search       | SearchAll   | Make Report  |
|-------------------|------------|------------|--------------|-------------------|--------------|-------------|--------------|
| <b>Order List</b> |            |            |              |                   |              |             |              |
| Order ID          | Order Date | Product ID | Product Name | Serial No         | Total Amount | Customer ID | First Name   |
| O-000007          | 2016-09-23 | P-000007   | PC228US-3N0  | KMTPC057J02031118 | 60000 USD    | C-000005    | Jonny1       |
| O-000009          | 2016-09-27 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1       |
| O-000010          | 2016-09-28 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1       |
| O-000011          | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar        |
| O-000012          | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar        |
| O-000013          | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar        |
| O-000014          | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar        |
| O-000015          | 2016-10-04 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000009    | John         |
|                   |            |            |              |                   |              |             | Cena         |
|                   |            |            |              |                   |              |             | New York     |
|                   |            |            |              |                   |              |             | 001510999243 |

Fig 5.0  
After Testing

# STABLE POWER

[Home](#) [Add Product](#) [Add Brand](#) [Hire List](#) [Login](#)

## Order List

Order Date  to Order Date  [Search](#) [SearchAll](#) [Make Report](#)

| Order ID | Order Date | Product ID | Product Name | Serial No         | Total Amount | Customer ID | First Name | Last Name | Address | Phone No  | Action                 |
|----------|------------|------------|--------------|-------------------|--------------|-------------|------------|-----------|---------|-----------|------------------------|
| O-000007 | 2016-09-23 | P-000007   | PC228US-3NO  | KMTPC057J02031118 | 60000 USD    | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| O-000009 | 2016-09-27 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| O-000010 | 2016-09-28 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| O-000011 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| O-000012 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| O-000013 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| O-000014 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |

Fig 5.1

|                          |                                  |   |  |                         |
|--------------------------|----------------------------------|---|--|-------------------------|
| Unit Test 22             |                                  | Test Case : Search Hire List  | Designed by: Ar Ker Hein                     |                         |
| Data Source: Hire Search |                                  | Objective: To Test the search hire list   | Tester: Ar Ker Hein                          |                         |
| Test Case                | Description                      | Test Procedure  | Expected Result                              | Actual Results          |
| 22.1                     | Testing the search the hire list | Inserting the order date between “2016-09-28” to “2016-10-01” and clicked search button | This process is successfully and show result | See Fig.5.2 and Fig 5.3 |

Before Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login

### Hire List

| Hire ID  | Hire Date  | Product ID | Product Name | Serial No    | Duty | Total Amount | Customer ID | First Name | Last Name | Address | Phone No  | Action                 |
|----------|------------|------------|--------------|--------------|------|--------------|-------------|------------|-----------|---------|-----------|------------------------|
| H-000001 | 2016-09-28 | P-000005   | SH225X-3     | 225X3-5031   | 3    | 300          | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| H-000003 | 2016-09-30 | P-000004   | SK235SR      | YF01-00925   | 5    | 250          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| H-000004 | 2016-10-01 | P-000004   | SK235SR      | YF01-00925   | 5    | 250          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| H-000005 | 2016-10-01 | P-000004   | SK235SR      | YF01-00925   | 1    | 50           | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| H-000006 | 2016-10-02 | P-000004   | SK235SR      | YF01-00925   | 4    | 200          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| H-000007 | 2016-10-03 | P-000002   | PC128US-2    | PC128US-6529 | 3    | 360          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |
| H-000008 | 2016-10-04 | P-000005   | SH225X-3     | 225X3-5031   | 5    | 500          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |

Fig 5.2

After Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login

### Hire List

| Hire ID  | Hire Date  | Product ID | Product Name | Serial No  | Duty | Total Amount | Customer ID | First Name | Last Name | Address | Phone No  | Action                 |
|----------|------------|------------|--------------|------------|------|--------------|-------------|------------|-----------|---------|-----------|------------------------|
| H-000001 | 2016-09-28 | P-000005   | SH225X-3     | 225X3-5031 | 3    | 300          | C-000005    | Jonny1     | English   | Yangon  | 095011102 | <a href="#">Delete</a> |
| H-000003 | 2016-09-30 | P-000004   | SK235SR      | YF01-00925 | 5    | 250          | C-000004    | Arkar      | Hein      | abc     | 12345     | <a href="#">Delete</a> |

Fig 5.3

|                    |             |                                     |  |  |  |                          |                |  |  |
|--------------------|-------------|-------------------------------------|--|--|--|--------------------------|----------------|--|--|
| Unit Test 23       |             | Test Case : Adding the Brand        |  |  |  | Designed by: Ar Ker Hein |                |  |  |
| Data Source: Brand |             | Objective: To Test adding the brand |  |  |  | Tester: Ar Ker Hein      |                |  |  |
| Test Case          | Description | Test Procedure                      |  |  |  | Expected Result          | Actual Results |  |  |

|      |                            |  |  |                         |
|------|----------------------------|--|--|-------------------------|
| 23.1 | Testing the add brand form | Inserting the brand name "KATO" into textbox and click save button | This process successfully and show result in brand listing | See Fig.5.4 and Fig 5.5 |
| 23.2 |                            |  |  |                         |

Before Testing

## STABLE POWER

Home Add Product Add Brand Hire List Login

Brand Name

Status

 Active
  InActive

Save
Clear

Brand Listing

| Brand ID | Brand Name  | Status | Action  |
|----------|-------------|--------|---|
| B-000002 | CATERPILLAR | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000003 | KOBELCO     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000004 | KOMATSU     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000005 | SUMITOMO    | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000006 | YANMAR      | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000007 | HITACHI     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000008 | VOLVO       | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 5.4  
After Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login

Brand Name

Status
 Active  InActive

Save
Clear

**Brand Listing**

| Brand ID        | Brand Name  | Status        | Action   |
|-----------------|-------------|---------------|--|
| B-000002        | CATERPILLAR | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000003        | KOBELCO     | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000004        | KOMATSU     | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000005        | SUMITOMO    | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000006        | YANMAR      | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000007        | HITACHI     | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| B-000008        | VOLVO       | Active        | <a href="#">Edit</a>   <a href="#">Delete</a>        |
| <b>B-000009</b> | <b>KATO</b> | <b>Active</b> | <b><a href="#">Edit</a>   <a href="#">Delete</a></b> |

Fig 5.5

| Unit Test 24       |  | Test Case : Edit Brand name and status   | Designed by: Ar Ker Hein                                   |   |
|--------------------|--|--|--|---|
| Data Source: Brand |  | Objective: To Test edit brand name and status  | Tester: Ar Ker Hein  |   |
| Test Case          | Description                            | Test Procedure   | Expected Result  | Actual Results                                |
| 24.1               | Testing the edit brand name and status | Clicking the edit button in "KOBELCO" brand name and to showed in brand name textbox. Then, We changed the "KOBELCO" to "KOBELCO 1" , "Active" to "Inavtive" and clicked Update Button | This process successfully and show result in brand listing | See Fig.5.6 and Fig 5.7<br><br>Before Testing |

# STABLE POWER

Home Add Product Add Brand Hire List Login

Brand Name **KOBELCO 1**

Status  Active  InActive

**Update** **Clear**

**Brand Listing**

| Brand ID | Brand Name  | Status | Action  |
|----------|-------------|--------|---|
| B-000002 | CATERPILLAR | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000003 | KOBELCO     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000004 | KOMATSU     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000005 | SUMITOMO    | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000006 | YANMAR      | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000007 | HITACHI     | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000008 | VOLVO       | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000009 | KATO        | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 5.6

After Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login

Active  InActive

Save
Clear

**Brand Listing**

| Brand ID        | Brand Name  | Status   | Action  |
|-----------------|-------------|----------|---|
| B-000002        | CATERPILLAR | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| <b>B-000003</b> | KOBELCO 1   | InActive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000004        | KOMATSU     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000005        | SUMITOMO    | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000006        | YANMAR      | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000007        | HITACHI     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000008        | VOLVO       | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000009        | KATO        | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 5.7

| Unit Test 25       |                                      | Test Case : Delete Brand                        | Designed by: Ar Ker Hein            |                         |
|--------------------|--------------------------------------|---|-------------------------------------|-------------------------|
| Data Source: Brand |                                      | Objective: To Test delete brand                 | Tester: Ar Ker Hein                 |                         |
| Test Case          | Description                          | Test Procedure                                  | Expected Result                     | Actual Results          |
| 25.1               | Testing the delete brand information | Clicking the delete navigation in "KATO" Brand. | This brand is successfully deleted. | See Fig.5.8 and Fig 5.9 |

Before Testing

STABLE POWER 116

**STABLE POWER**

Home Add Product Add Brand Hire List Login

Brand Name

Status
 Active  InActive

Save
Clear

**Brand Listing**

| Brand ID | Brand Name  | Status   | Action  |
|----------|-------------|----------|---|
| B-000002 | CATERPILLAR | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000003 | KOBELCO 1   | InActive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000004 | KOMATSU     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000005 | SUMITOMO    | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000006 | YANMAR      | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000007 | HITACHI     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000008 | VOLVO       | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000009 | KATO        | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 5.8  
After Testing

**STABLE POWER**

Home Add Product Add Brand Hire List Login

Brand Name

Status
 Active  InActive

Save
Clear

**Brand Listing**

| Brand ID | Brand Name  | Status   | Action  |
|----------|-------------|----------|---|
| B-000002 | CATERPILLAR | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000003 | KOBELCO 1   | InActive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000004 | KOMATSU     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000005 | SUMITOMO    | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000006 | YANMAR      | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000007 | HITACHI     | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| B-000008 | VOLVO       | Active   | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 5.9

| Unit Test 26       |                             | Test Case : Add new Product   | Designed by: Ar Ker Hein  |                                     |
|--------------------|-----------------------------|---|---|-------------------------------------|
| Data Source: Brand |                             | Objective: To Test adding new product   | Tester: Ar Ker Hein   |                                     |
| Test Case          | Description                 | Test Procedure  | Expected Result   | Actual Results                      |
| 26.1               | Testing the add new product | Inserting the new product information such as "Product ID, Product Name, Brand Name, Model Year, Sale Price, Hire Price, Weight, Color, Serial No, Status, Detail Description and 7 images of product image". Then, We clicked the add product button | This process is successfully and showed resulted in product listing area. | See Fig.6.0 and Fig 6.1 and Fig 6.2 |

Before Testing

**STABLE POWER**

Fig 6.0

| Product Listing        |              |                        |            |             |                   |        |                               | <a href="#">Add Product</a> | <a href="#">Clear</a> |  |
|------------------------|--------------|------------------------|------------|-------------|-------------------|--------|-------------------------------|-----------------------------|-----------------------|--|
| <a href="#">Search</a> |              | <a href="#">Search</a> |            |             |                   |        |                               |                             |                       |  |
| Product ID             | Product Name | Sale Price             | Hire Price | Brand Name  | Product Situation | Status | Action                        |                             |                       |  |
| P-000002               | PC128US-2    | 0                      | 120        | Komatsu     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000004               | SK235SR      | 0                      | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000005               | SH225X-3     | 0                      | 100        | SUMITOMO    | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000006               | SK200SR-1    | 55000                  | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000007               | PC228US-3N0  | 60000                  | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000008               | PC228US-3    | 80000                  | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000009               | SK200-1      | 60000                  | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000010               | SH125X-3     | 50000                  | 0          | SUMITOMO    | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000011               | 308CCR       | 25000                  | 0          | CATERPILLAR | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000012               | 320BU-8GZ    | 0                      | 150        | CATERPILLAR | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000013               | PC60-2       | 0                      | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |

Fig 6.1  
After Testing

| Product Listing        |              |                        |            |             |                   |        |                               | <a href="#">Add Product</a> | <a href="#">Clear</a> |  |
|------------------------|--------------|------------------------|------------|-------------|-------------------|--------|-------------------------------|-----------------------------|-----------------------|--|
| <a href="#">Search</a> |              | <a href="#">Search</a> |            |             |                   |        |                               |                             |                       |  |
| Product ID             | Product Name | Sale Price             | Hire Price | Brand Name  | Product Situation | Status | Action                        |                             |                       |  |
| P-000002               | PC128US-2    | 0                      | 120        | Komatsu     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000004               | SK235SR      | 0                      | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000005               | SH225X-3     | 0                      | 100        | SUMITOMO    | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000006               | SK200SR-1    | 55000                  | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000007               | PC228US-3N0  | 60000                  | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000008               | PC228US-3    | 80000                  | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000009               | SK200-1      | 60000                  | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000010               | SH125X-3     | 50000                  | 0          | SUMITOMO    | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000011               | 308CCR       | 25000                  | 0          | CATERPILLAR | Sale              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000012               | 320BU-8GZ    | 0                      | 150        | CATERPILLAR | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000013               | PC60-2       | 0                      | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |
| P-000014               | SK130UR-1E   | 0                      | 90         | KOBELCO     | Hire              | Active | <a href="#">Edit   Delete</a> |                             |                       |  |

Fig 6.2

## User Guide

### Customer Registration User Guide

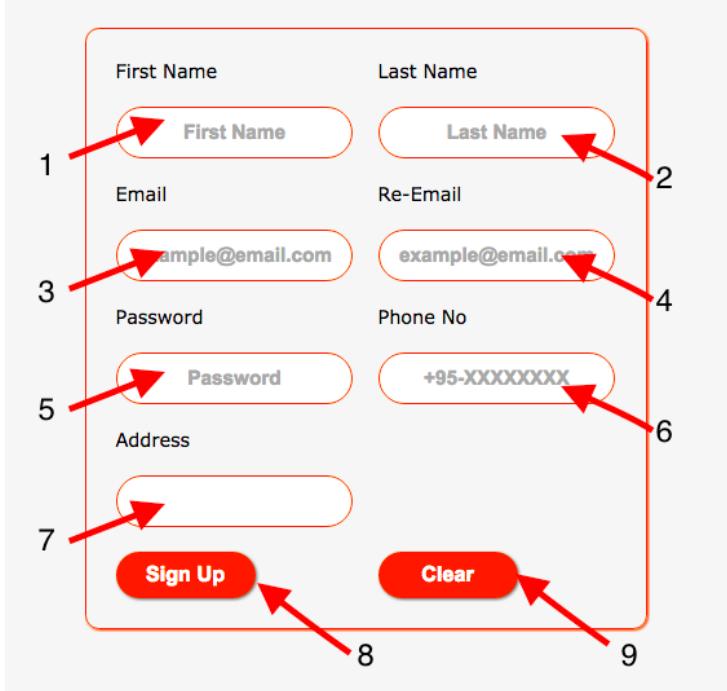


Fig 1

1. Inserting Customer's First Name
2. Inserting Customer's Last Name
3. Inserting Customer's email
4. Retype a Customer's email
5. Inserting Password as customer like.
6. Inserting the Customer's Phone Number
7. Inserting the Customer's address
8. Click the Sign up button to registration
9. If customer can clear the inserted data, click the clear button.

### Customer Login User Guide

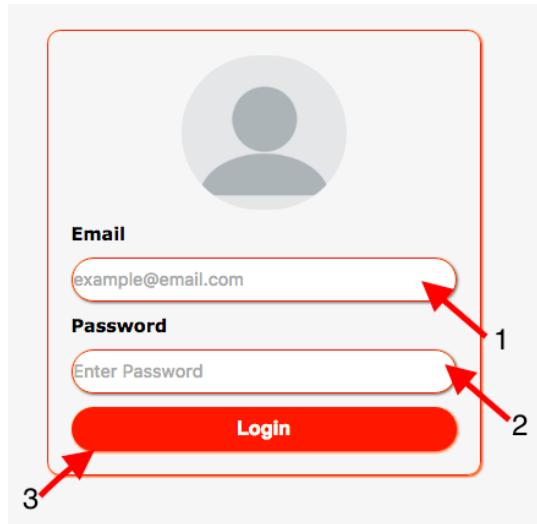


Fig 2

1. Insert the customer's email
2. Insert the customer's password
3. Click the login button to Login.

### Home Page User Guide

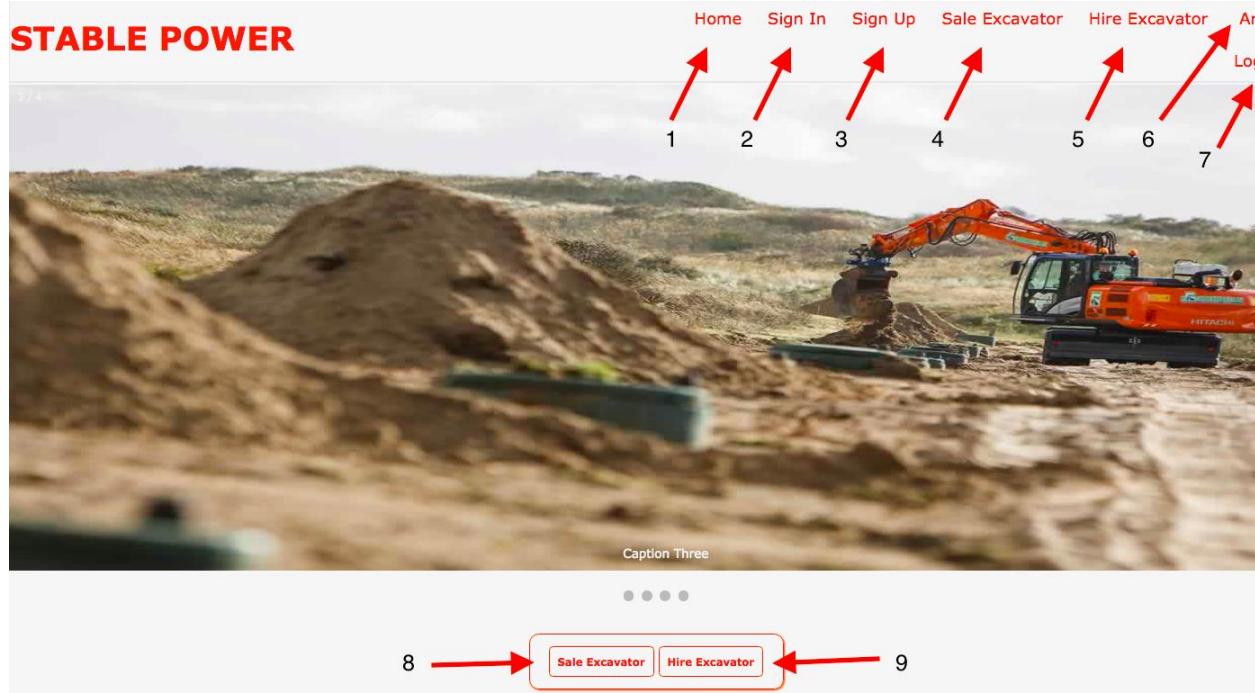


Fig 3

1. Click the Home navigation link to reached the Home Page.
2. Click the Sign In navigation link to reached the Customer Login Page.

3. Click the Sign Up navigation link to reached the Customer Registration Page.
4. Click the Sale Excavator navigation link to reached the Sale Product Page.
5. Click the Hire Excavator navigation link to reached the Hire Product Page.
6. Click the Customer's First Name (Arkar) navigation link to update their information.
7. Click the Logout navigation link to logout the customer account.
8. If the Customer need to buy the excavator, click the sale excavator button.
9. If the Customer need to Hire the excavator, click the hire excavator button.

### Sale Product Form User Guide

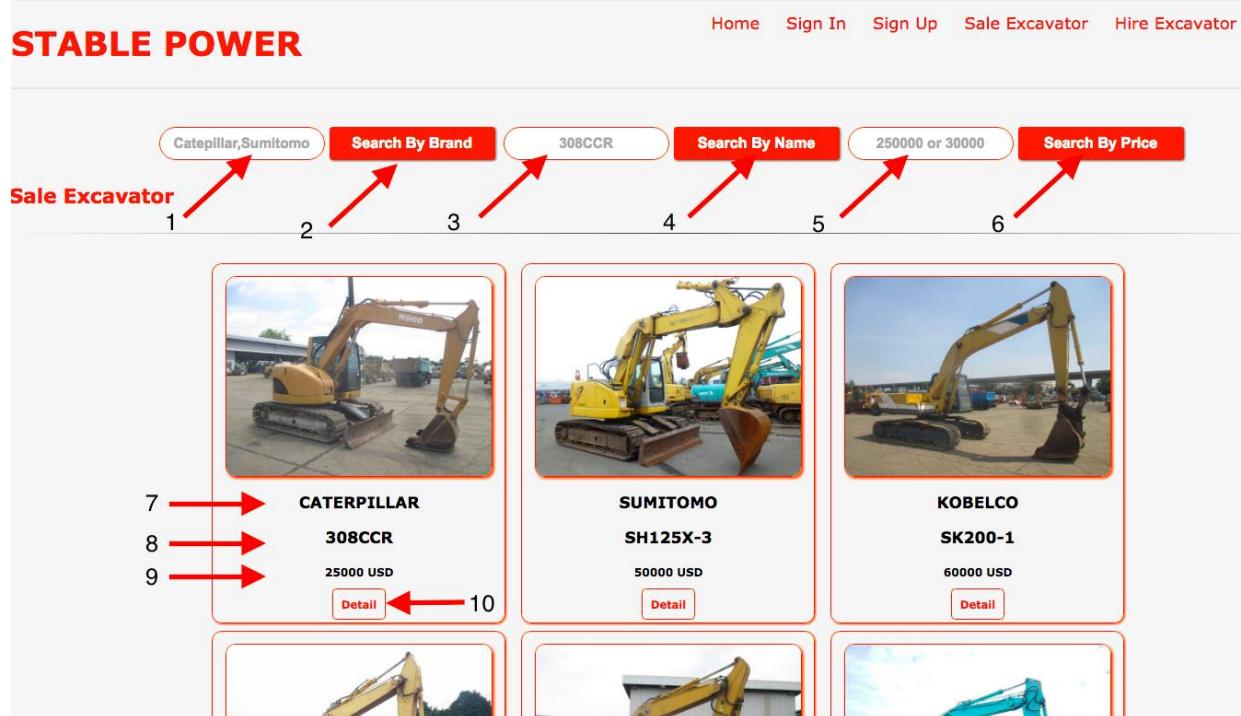


Fig 4

1. If the Customer Search by brand, insert the brand name in search box.
2. Click the Search By Brand button to search the excavator.
3. If the Customer Search by name, Insert the product name in search box.
4. Click the Search By Name button to search the excavator.

5. If the customer search by price, insert the price in search box.
6. Click the Search By Price button to search the excavator.
7. Product's brand name.
8. Product's Name
9. Price
10. Click the "Detail" Navigation Like to reached the Sale Product Detail to show detail information.

### **Sale Product Detail Page User Guide**


Product Name : **308CCR**

Brand : **CATERPILLAR**

Model Year : **2006**

Sale Price : **25000USD**

Weight : **8 Ton**

Color : **Yellow**

Serial No : **CAT0308CKCPE03383**

Hour : **3411**

Status : **Active**

Detail Description : **Good Engine**

1  Buy Now Back

Fig.5

1. If customer buy this product , click the Buy Now Button to reached the sale page.
2. If the customer cannot buy this product, Click the Back button to reached the sale product page.

## Sale Page User Guide

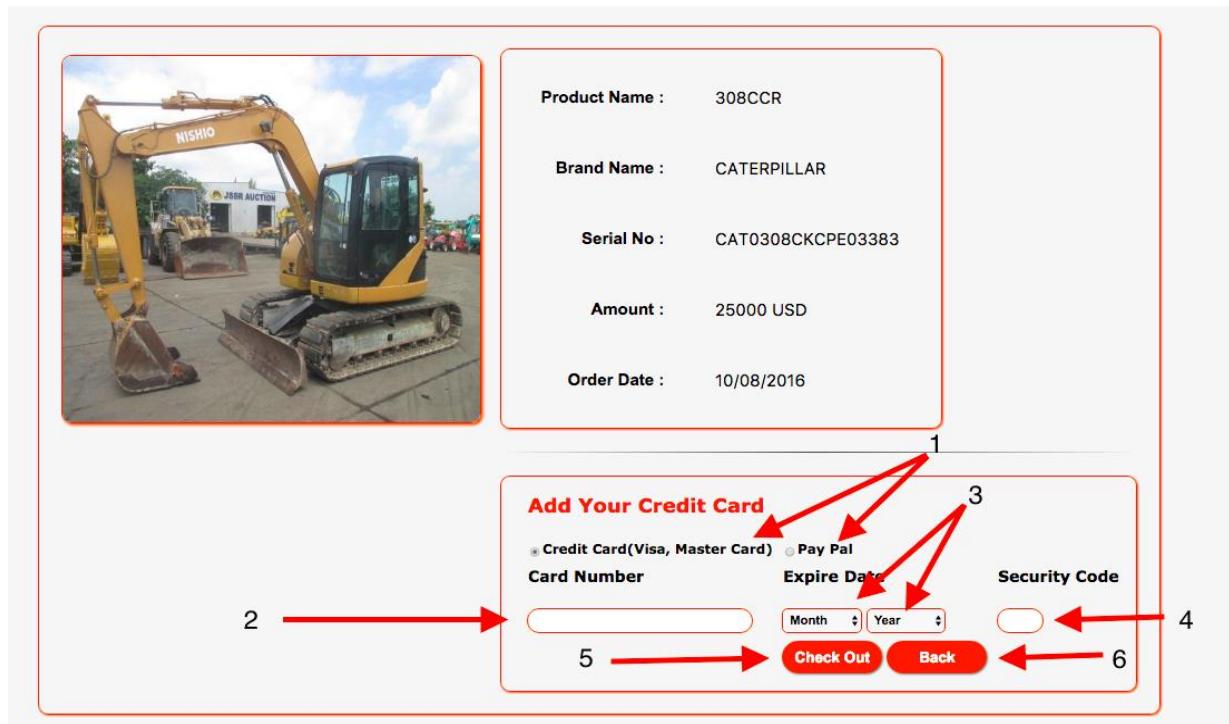


Fig 5

1. Choose Credit Card Type
2. Insert Credit Card Number
3. Insert Credit Card Expire date
4. Insert Credit Card security code
5. If the Customer buy the excavator, Click the Check-out Button to buy this excavator.
6. If the Customer cannot buy this excavator, Click the back button to reached the sale product detail page.

## Hire Product Detail User Guide



Product Name : **320BU-8GZ**

Brand : **CATERPILLAR**

Hire Price : **150 USD Per Duty**

Weight : **20 Ton**

Status : **Active**

Detail Description : **Good Condition**

1 → **Book Now** **Back** ← 2

Fig 6

1. If the Customer book the excavator to hire the product, click “Book Now” button to book the excavator.
2. If the Customer cannot hire the excavator, click the back button to reached hire product page.

### Hire Page User Guide

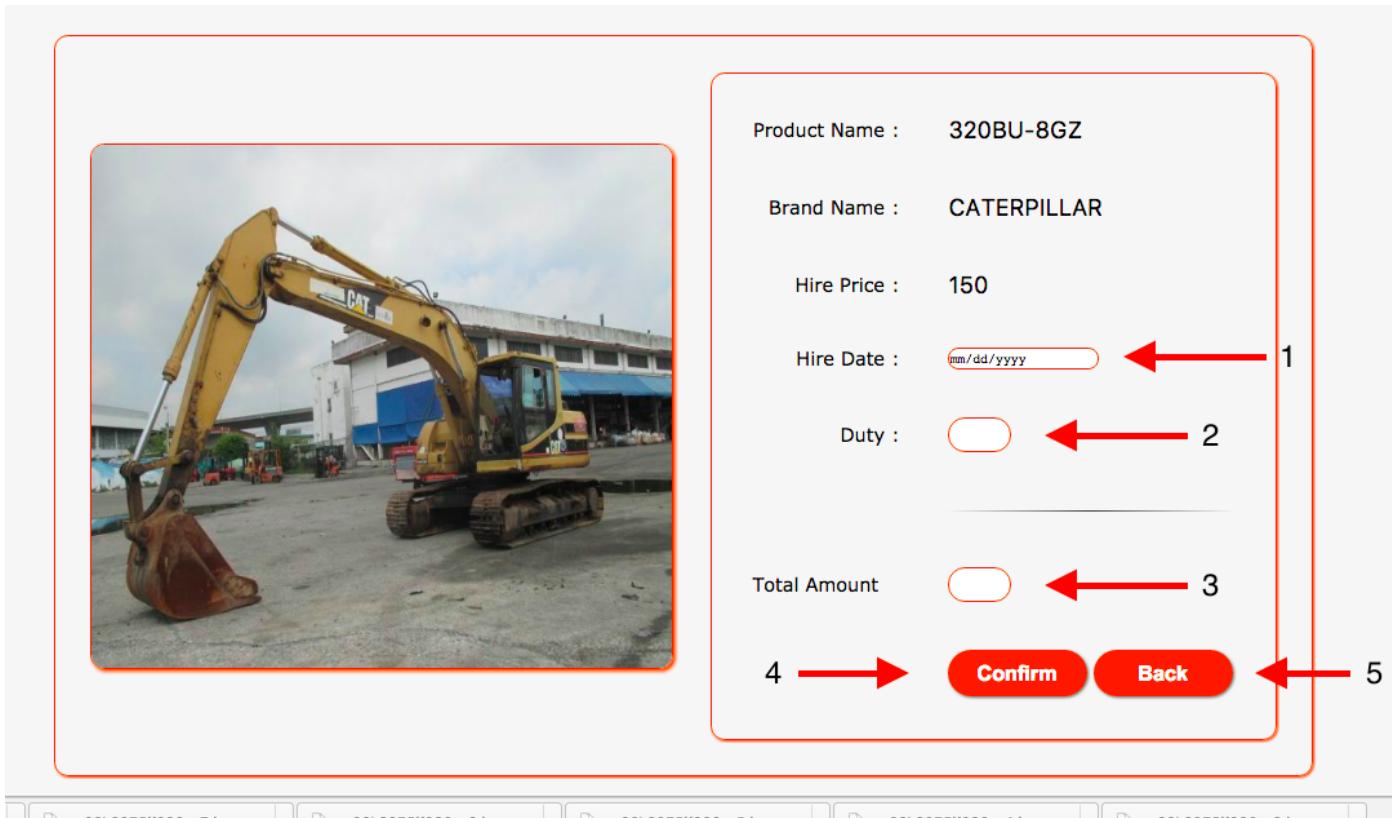


Fig.7

1. Inserting the customer's need to hire date to hire the excavator
2. Inserting the customer's want a duty
3. Total Amount is automatic showed when duty is inserted.
4. Click the confirm button to book the excavator.
5. If the customer cannot buy this excavator, click the back button to hire product detail page.

#### Admin Login Page User Guide

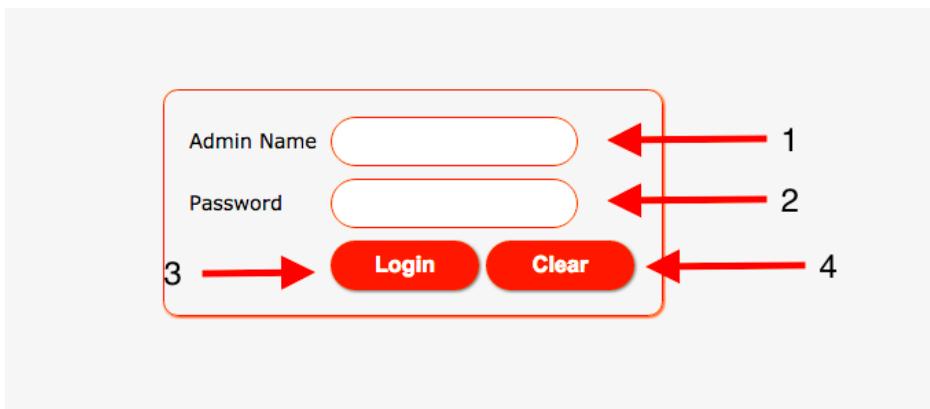


Fig 8

1. Insert the admin name.
2. Insert the password
3. Click the Login button to login.
4. Click the clear button to clear the admin name and password.

### Admin Home Page User Guide

The screenshot shows the Admin Home Page with the title "STABLE POWER". At the top right are navigation links: Home (1), Add Product (2), Add Brand (3), Hire List (4), Login (5), Logout (6). Below these are search fields: Order Date (7), Enter Date 1 (8), to (9), Order Date (10), Enter Date 2 (11), Search (9), SearchAll (10), and Make Report (11). A table below lists order details with a "Delete" link for each row (12).

| Order ID | Order Date | Product ID | Product Name | Serial No         | Total Amount | Customer ID | First Name | Last Name | Address  | Phone No     | Action                 |
|----------|------------|------------|--------------|-------------------|--------------|-------------|------------|-----------|----------|--------------|------------------------|
| O-000007 | 2016-09-23 | P-000007   | PC228US-3N0  | KMTPC057302031118 | 60000 USD    | C-000005    | Jonny1     | English   | Yangon   | 095011102    | <a href="#">Delete</a> |
| O-000009 | 2016-09-27 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1     | English   | Yangon   | 095011102    | <a href="#">Delete</a> |
| O-000010 | 2016-09-28 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000005    | Jonny1     | English   | Yangon   | 095011102    | <a href="#">Delete</a> |
| O-000011 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc      | 12345        | <a href="#">Delete</a> |
| O-000012 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc      | 12345        | <a href="#">Delete</a> |
| O-000013 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc      | 12345        | <a href="#">Delete</a> |
| O-000014 | 2016-10-02 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000004    | Arkar      | Hein      | abc      | 12345        | <a href="#">Delete</a> |
| O-000015 | 2016-10-04 | P-000010   | SH125X-3     | 125X3-1258        | 50000 USD    | C-000009    | John       | Cena      | New York | 001510999243 | <a href="#">Delete</a> |

Fig 9

1. Click the Home navigation link to reached the Admin Home Page.
2. Click the Add Product navigation link to reached the Add Product Page.
3. Click the Add Brand navigation link to reached the Add Brand Page.
4. Click the Hire List navigation link to reached the Hire Search Page.
5. Click the Login navigation link to reached the Admin Login Page.
6. Click the Logout navigation link to logout to admin account.
7. Insert Order date when admin search order list by date to date.
8. Insert another Order date when admin search order list by date to date.
9. Click the Search button to search the order list.
10. Click the Search All Button to show all order list.
11. When the admin produce report file, click the Make Report button.
12. When the admin delete the order list, click the delete navigation link.

## Add Product Page User Guide

The form consists of the following fields:

- Product ID: P-000015
- Product Name: (empty)
- Brand: -Select Brand-
- Model Year: (empty)
- Sale Price: (empty)
- Hire Price: (empty)
- Weight: (empty)
- Color: (empty)
- Serial No: (empty)
- Hour: (empty)
- Status: Active (radio button selected)
- Detailed Description: (empty)
- ProductImage1: Choose File (No file chosen)
- ProductImage2: Choose File (No file chosen)
- ProductImage3: Choose File (No file chosen)
- ProductImage4: Choose File (No file chosen)
- ProductImage5: Choose File (No file chosen)
- ProductImage6: Choose File (No file chosen)
- ProductImage7: Choose File (No file chosen)
- Product Situation: -Select Situation-
- Add Product
- Clear

Red numbers 1 through 6 are overlaid on the form, pointing to specific fields and buttons:

- Product ID
- Brand dropdown
- ProductImage1 file input
- Product Situation dropdown
- Add Product button
- Clear button

Fig.9

The screenshot shows a table of product data with various columns including Product ID, Product Name, Sale Price, Hire Price, Brand Name, Product Situation, Status, and Action. The Action column contains links for 'Edit' and 'Delete'. Red arrows and numbers provide instructions:

- 7: Points to the 'Product Listing' button.
- 8: Points to the first 'Search' button.
- 9: Points to the second 'Search' button.
- 10: Points to the 'Edit | Delete' link in the Action column of the first row.

| Product ID | Product Name | Sale Price | Hire Price | Brand Name  | Product Situation | Status | Action  |
|------------|--------------|------------|------------|-------------|-------------------|--------|---|
| P-000002   | PC128US-2    | 0          | 120        | Komatsu     | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000004   | SK235SR      | 0          | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000005   | SH225X-3     | 0          | 100        | SUMITOMO    | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000006   | SK200SR-1    | 55000      | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000007   | PC228US-3N0  | 60000      | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000008   | PC228US-3    | 80000      | 0          | KOMATSU     | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000009   | SK200-1      | 60000      | 0          | KOBELCO     | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000010   | SH125X-3     | 50000      | 0          | SUMITOMO    | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000011   | 308CCR       | 25000      | 0          | CATERPILLAR | Sale              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000012   | 320BU-8GZ    | 0          | 150        | CATERPILLAR | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000013   | PC60-2       | 0          | 50         | KOBELCO     | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |
| P-000014   | SK130UR-1E   | 0          | 90         | KOBELCO     | Hire              | Active | <a href="#">Edit</a>   <a href="#">Delete</a> |

Fig 10

1. It's a Auto ID. It's automatic show in Product ID textbox. Do not remove it.
2. Click the down arrow to choose the brand.
3. Click the "Choose File" Button to upload the product image.
4. Click the down arrow to choose sale or hire the product.
5. Click the Add Product button to adding the product.
6. If the admin clear the above the textbox into the data, click the clear button.
7. Inserting the brand name to search the product list.
8. Click the search button to search the product list.
9. Click the edit navigation link to edit the product information.
10. If the admin delete the product, click the delete navigation link.

## System Code

| Form                | Function  | Purpose                                      |
|---------------------|-----------|--|
| customer_signup.php | AutoID()  | To Generate the customer id automatically.   |
| Customer_signup.php | Save()    | Save the customer's information to database. |
| Sale.php            | Check Out | Save the orderid, productid, orderdate,      |

|                 |          |  |
|-----------------|----------|--|
|                 |          | totalamount, customerid in order_ table.   |
| Hire.php        | Booking  | Save the hireid, productid, hiredate, duty, totalamount, customerid in hire table. |
| Add Product.php | AutoID() | To Generate the product id automatically.  |
| Add Product.php | Save()   | Save the product's information and image to database                               |
| Add Product.php | Update() | Edit the product's information from database.                                      |
| Add Product.php | Delete() | Delete the Product from database   |
| Add Brand.php   | AutoID() | To Generate the brand id automatically.  |
| Add brand.php   | Save()   | Save the brand's information and image to database                                 |
| Add brand.php   | Update() | Edit the brand's information from database.  |
| Add brand.php   | Delete() | Delete the Brand from database   |