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APPLICATION OF E-TRANSPORT THROUGH DESIGNING TIKETING INFORMATION SYSTEM USING DIAGRAM ACTIVITIES

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Abstract
E-Transport is a form of service / facility provided to the public in the field of transfer using electronic media. E-transport itself can be in the form of a guide to route use services on transportation, road monitoring services to transportation users in real time, services such as booking tickets for a transportation service provider, services such as gps guiding vehicles for travel and other security services. One of the services that is currently developing in the community is travel services, where travel services provide transportation services based on the destination location. In the city of Bandung itself travel services have been very much, but the problem that occurs is how to provide maximum service to the community, especially in booking tickets, not only fixated on the convenience of transportation services, but travel booking service services are also very important. Travel booking services should have been greatly paid attention to by travel service providers, so that people are accustomed to and believe in using travel services rather than having to use private vehicles so as to reduce the amount of transportation in the city of Bandung. So this research is based on improving the quality of service providers in the city of Bandung.
Keywords: Transportation, Technology, System, Information.

1.0 INTRODUCTION

One of the problems that occur in travel service providers is the administrative activities that still use manual systems. The manual system itself is still using the method of recording through paper media. This method will often result in problems that occur such as the loss of documents, incompatibility between ordering data and data that has been recorded, or errors in writing consumer identity or travel booking data.

Another problem is the unclear departure information, regarding the number of available passengers in the travel, sometimes the information delivered through the website or telephone is different when the passenger /community comes directly to the travel, which means that the departure schedule is not according to the schedule provided by the travel service . These problems will later cause consumers to lack trust in the travel service provider or the number of passengers in the travel service provider decreases. So with this problem one solution is to create or build one of the scope of e-transport that is providing an Android-based ticketing information system, where transportation services are currently developing based on technology by integrating applications with Android-based mobile technology. The application of ticketing information system is very necessary for Krakaline Travel service providers, where the company still uses a manual system. With the existence of this ticketing information system, it can be one solution that becomes the answer to problems that often occur.

1.2 Problem Formulation

Based on the description of the problems that occur in Krakaline Shuttle can be described as follows:

1. There are administrative documents that are missing or illegible by the krakaline administration officer.
2. Information provided to service users is less clear, especially for the availability of passenger numbers, departure schedules, prices, cancellations, notification of departures to passengers.
3. Processing reports that are not in accordance with the number of proof of transactions each month.
4. There is no direct or online booking to use this travel service.

1.3 Objectives and Benefits of Research

To describe the solution to the problem that occurs, the description of the objectives can be described as follows.

1. Providing information services online using a mobile-based application regarding departure, availability, price, cancellation and notification information.
2. Building a ticketing information system by building ticketing applications on Krakaline Shuttle.

2.0 THEORETICAL

2.1. Understanding The System

The system is a collection of people who work together with the provisions of systematic and structured rules to form a unit that carries out a function to achieve goals [1].

According to Muhammad Muslihudin and Oktafiano in his book, "The system is a set of components or networks of procedures that are interrelated and work together to form a network to achieve certain goals or objectives[2].

Based on several definitions regarding the system above, it can be concluded that the system is a set of components or a set of interrelated procedures to achieve certain goals

2.1. Understanding The Information

In his book Muhamad Muslihudin and Oktafiano, "Information is data that is processed into a form that is useful for making decisions [2].

Quoted from journal Andri Sahata Sitanggang, understanding information according to Bonnie Soeherman & Marion Pinontoan is that "Information is the result of processing (facts or events) into something that has meaning and value for decision making [3]".

Based on the above definition, the researcher concludes that information is the result of data processing or facts that have value and are used to make a decision

2.1. Ticketing

Tiketing is a process where by a document made by a company for consumers in ordering and payment as proof of order in which there are data relating to the transaction.

2.1. Information System

Information system is a set of components that form a system that has a link between one component and another component that aims to produce an information in a particular field.

2.3. Scheduling

Scheduling is a collection of policies and mechanisms in the operating system related to work orders carried out by computer systems. Scheduling is to decide[4]:

1. Process that must be run
2. When and for how long the process will succeed.
3. The main target of scheduling the process of optimizing work according to the specified criteria.

2.5. Mobile

Mobile is a portable electronic device that functions as a normal telephone, which can move in a large area. The word mobile means moving or moving, so the application.

Mobile according to Rangsang Purnama is a term for applications that run on mobile devices. By using a mobile application, you can easily carry out various kinds of activities ranging from entertainment, selling, studying, doing office work, browsing and so on[5].

2.5. Application.

An application is a subclass of computer software that utilizes the ability of a computer directly to perform a task that the user wants. It is usually compared to system software that integrates various computer capabilities, but does not directly apply this ability to do a task that benefits the user [6].

In this section describe the complete theory about the system used, for example if you examine the use of Php MySQL then describe the theories about PhP, starting from the definition of continued description of all that is related to PhP applications.

3.0 METHODOLOGY

Then it can be concluded the stages in this study consist of the formulation of the problem, data requirements, completion strategies, needs analysis, software design, system implementation. But for this study only focused on software design through activity diagrams with object approaches. In this study using the prototype method The flow of the research methodology used can be seen in Figure 1 below [7].

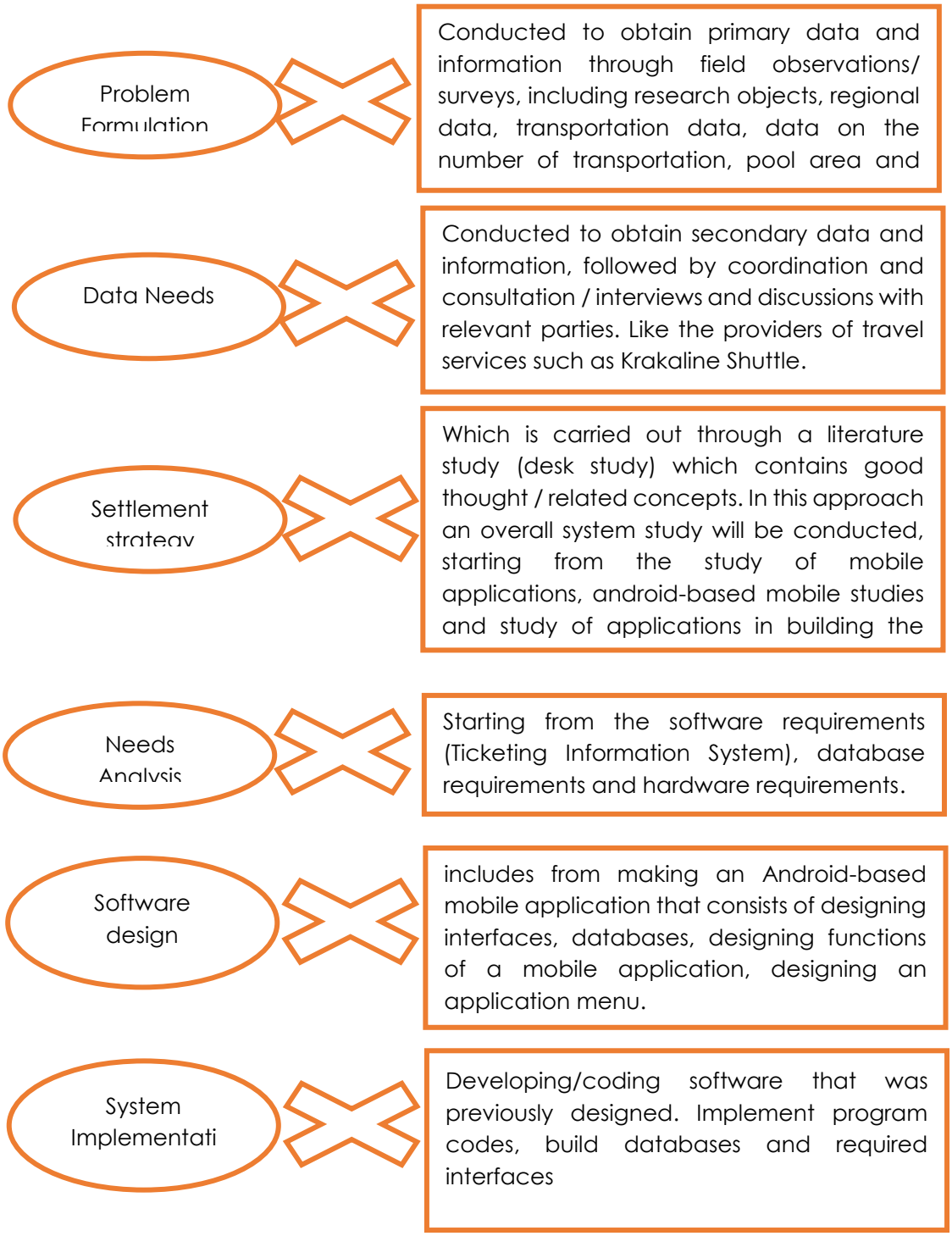

Figure 1. Research Method

4.0 RESULT AND DISCUSSION

To answer the problems that occur at Krakaline Shuttle, the following is the design of the system being built.

1. Diagram Activity Manage login diagrams

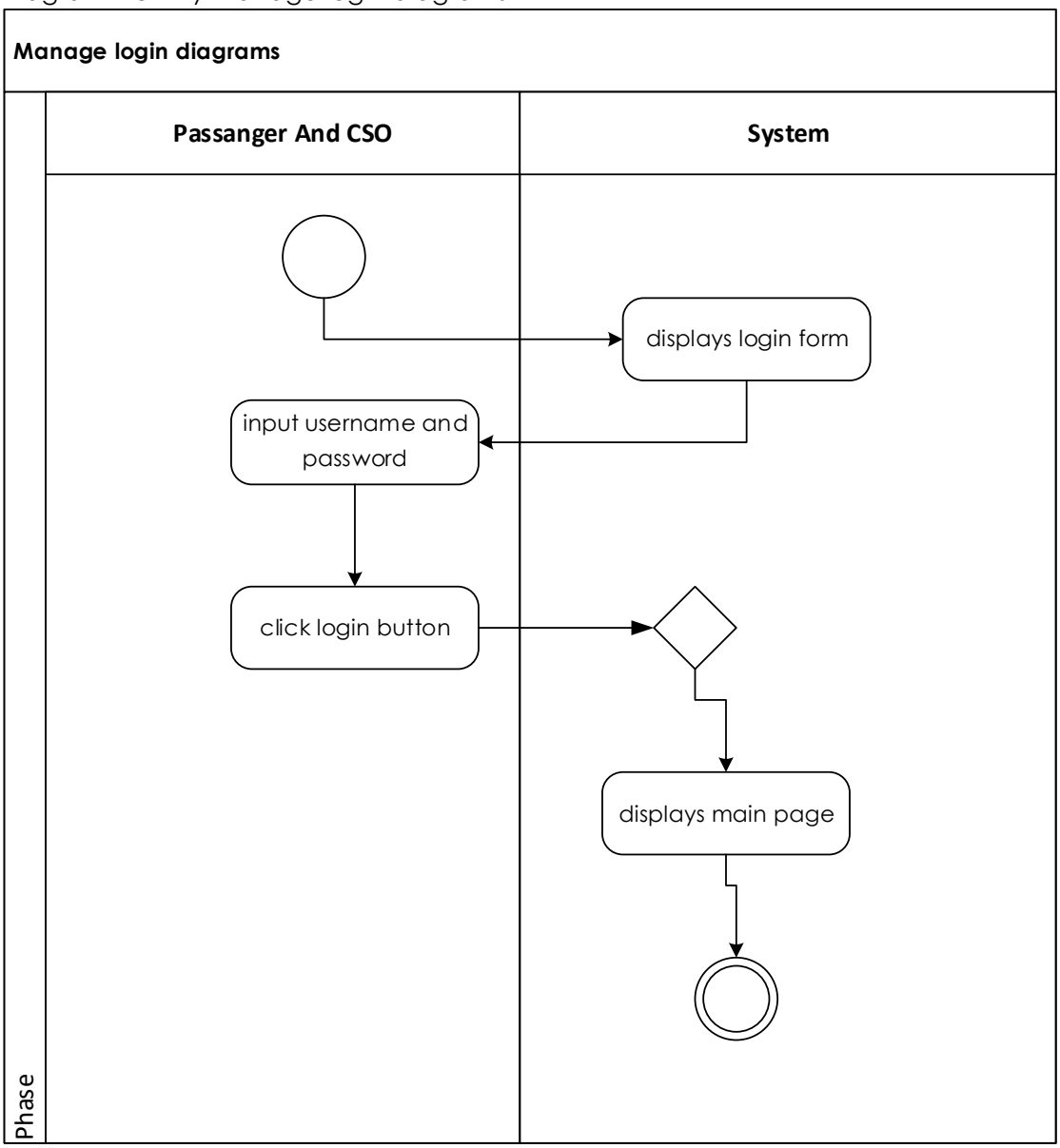

Figure 2. Login Diagrams

Consists of :

a. Display the login form
b. Input username and password.
c. Click the login button.
d. If valid it will display the main page if it is invalid, it will again display the login page.

2. Diagram Activity Manage Passenger Booking tickets

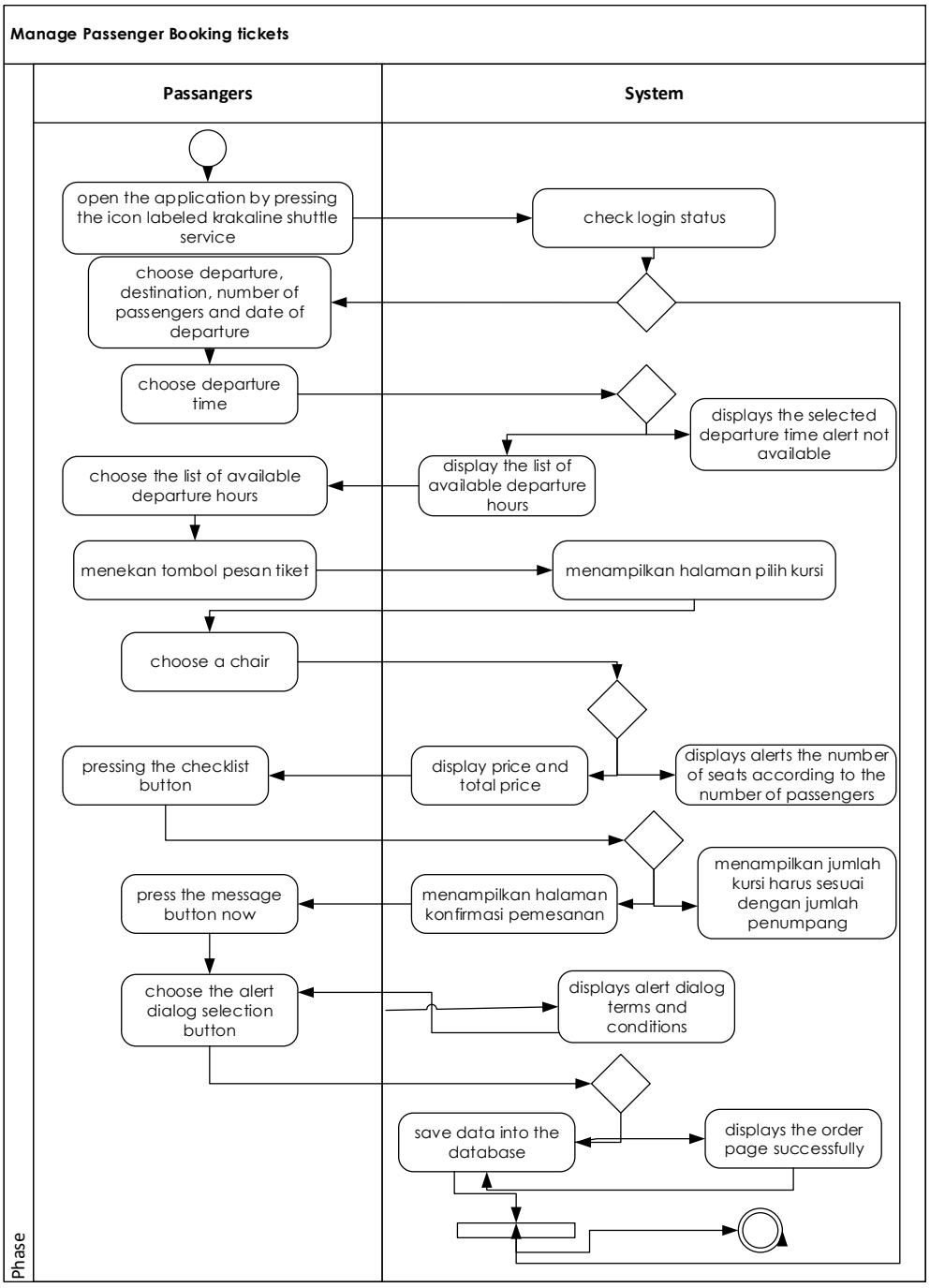

Figure 3 Manage Passenger Booking ticket

This activity consists of:

a. Open the application by pressing the icon labeled krakaline shuttle.
b. Check login validation.
c. If valid Choose departure, destination, number of passengers, and date of departure and if not, will return to the login page.
d. At the time of selecting the departure time if available displaying the page select the seat, if not then there will be a notification the seat is not available.
e. When you have chosen a seat, you will then choose the departure time, if available, display a list of departure hours if you do not display a notification that the departure hour is not available.
f. Displays the seat page as desired by the passenger
g. After that press the message button.

3. Diagram Activity Manage Ticket Orders by CSO

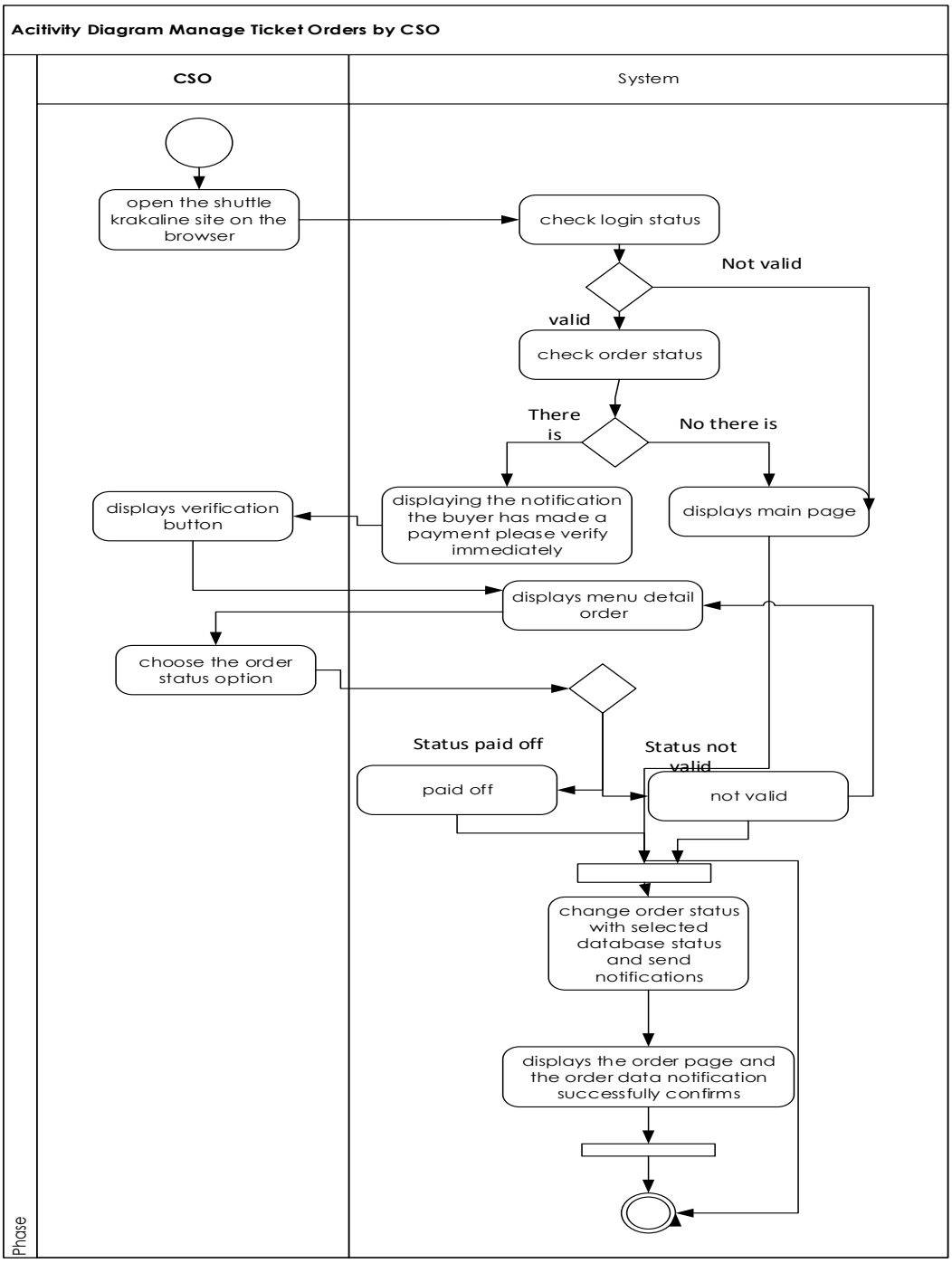

Figure 4 Manage Ticket Orders by CSO

Consists of :

a. Open the suttle krakaline site in the browser.
b. Check the logon status, if appropriate check the order status if you don't return to the login page.
c. If there is a booking, the system will display the buyer has made a payment, please verify immediately, if there is no display of the main page.
d. Press the verification button by CSO
e. After that change the order status
f. The system will automatically display a notification that the order has been successfully carried outMengelola Pemesanan Tiket oleh CSO.

4. Diagram Activity Manage Payment Confirmation

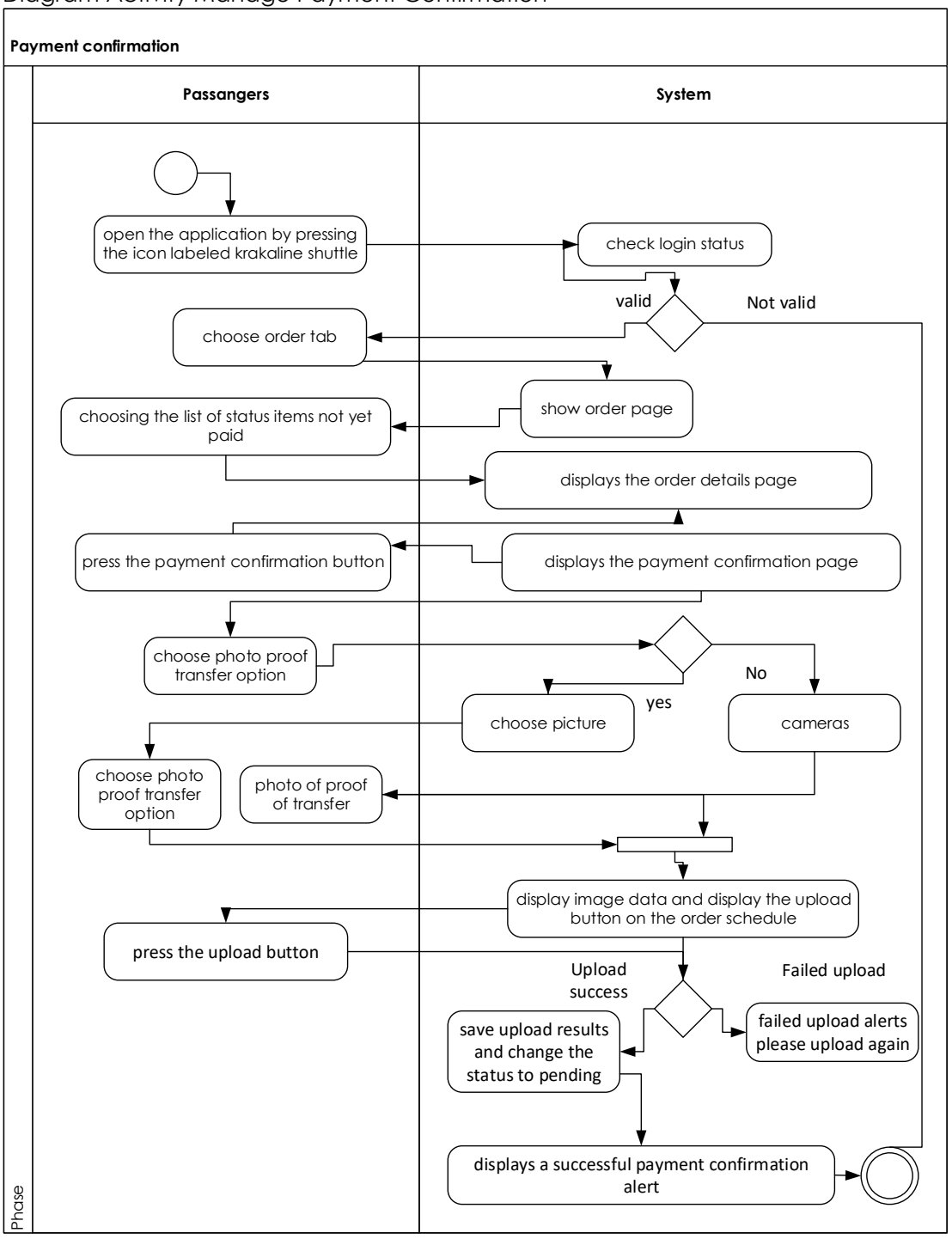

Figure 5 payment confirmation

Consists of :

a. Passengers open a krakaline shuttle application that has been installed.
b. Make a login menu.
c. And if you successfully select the order menu.
d. The system will display passenger booking details
e. Then the passenger presses the payment confirmation button.
f. After making a payment, the passenger selects the proof of transfer menu and enters the proof of payment into the menu.
g. After succeeding, the system will display a payment confirmation that was successfully done

5. Diagram Activity Manage ticket cancellations.

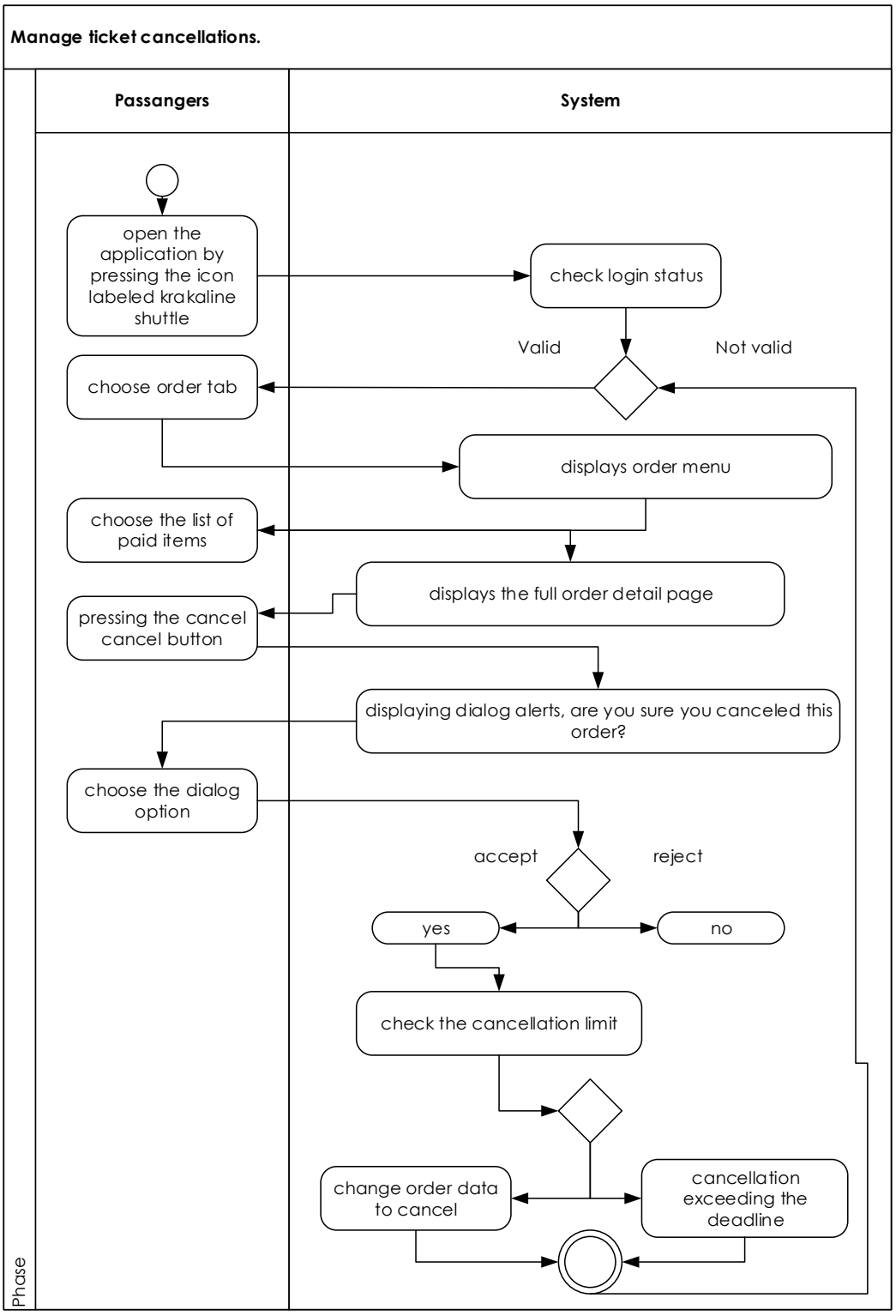

Figure 6 Manage ticket cancellations.

Consists of:

a. Passengers choose the order menu.
b. Select the list of items that are paid off and press the cancel departure button.
c. Then the system will display a dialog are you sure to cancel the order?
d. If yes, the system automatically shows your order has been canceled otherwise it returns to the main page

6. Diagram Activity Manage Driver Data

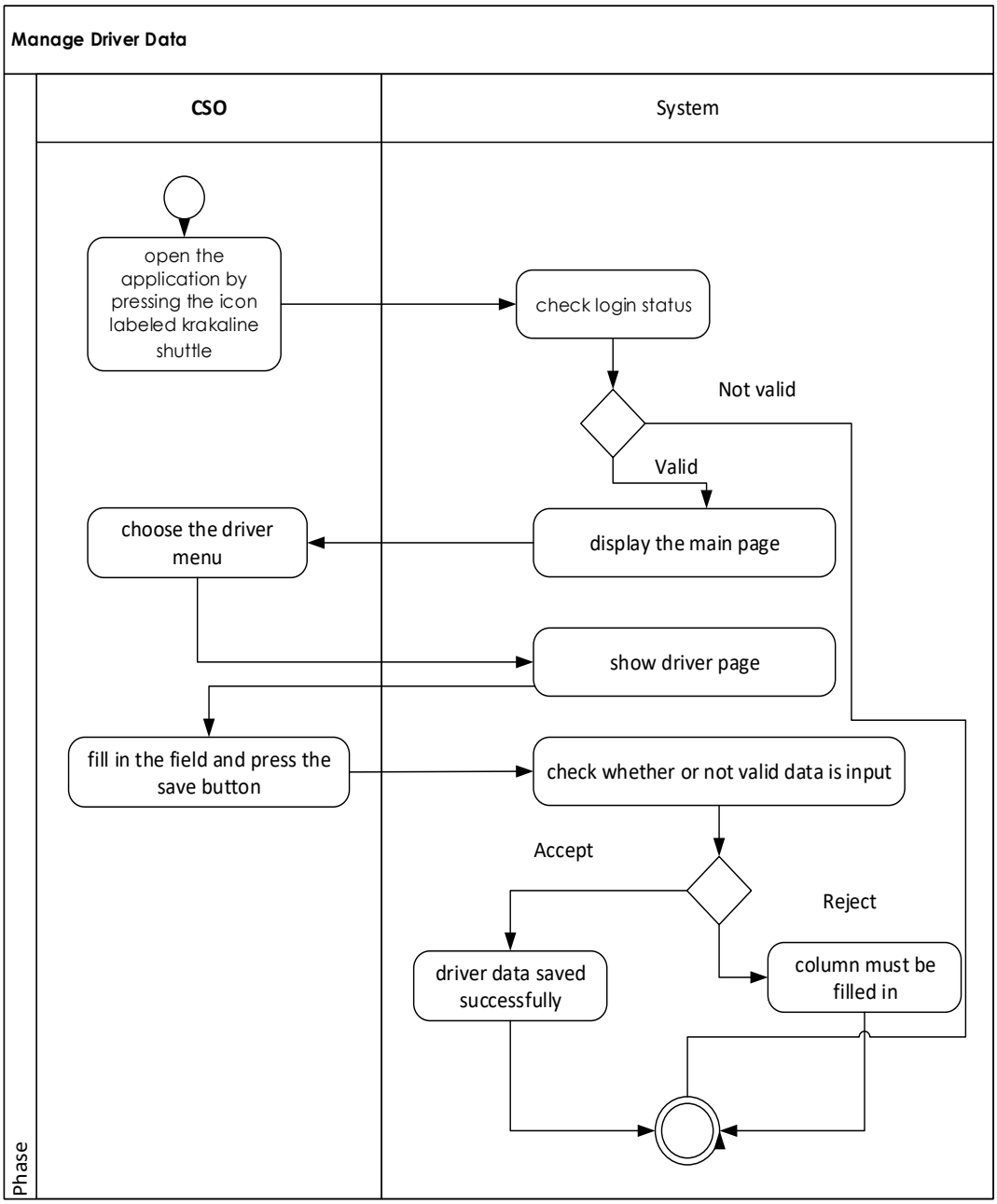

Figure 7 Manage Driver Data

Consists of:

a. Cso opened the krakaline site in the browser.
b. Check login status.
c. When successfully displaying the driver page, then fill in the fields that have been provided and if it is filled in, then press the save button.

7. Diagram Activity Manage Fleet Data

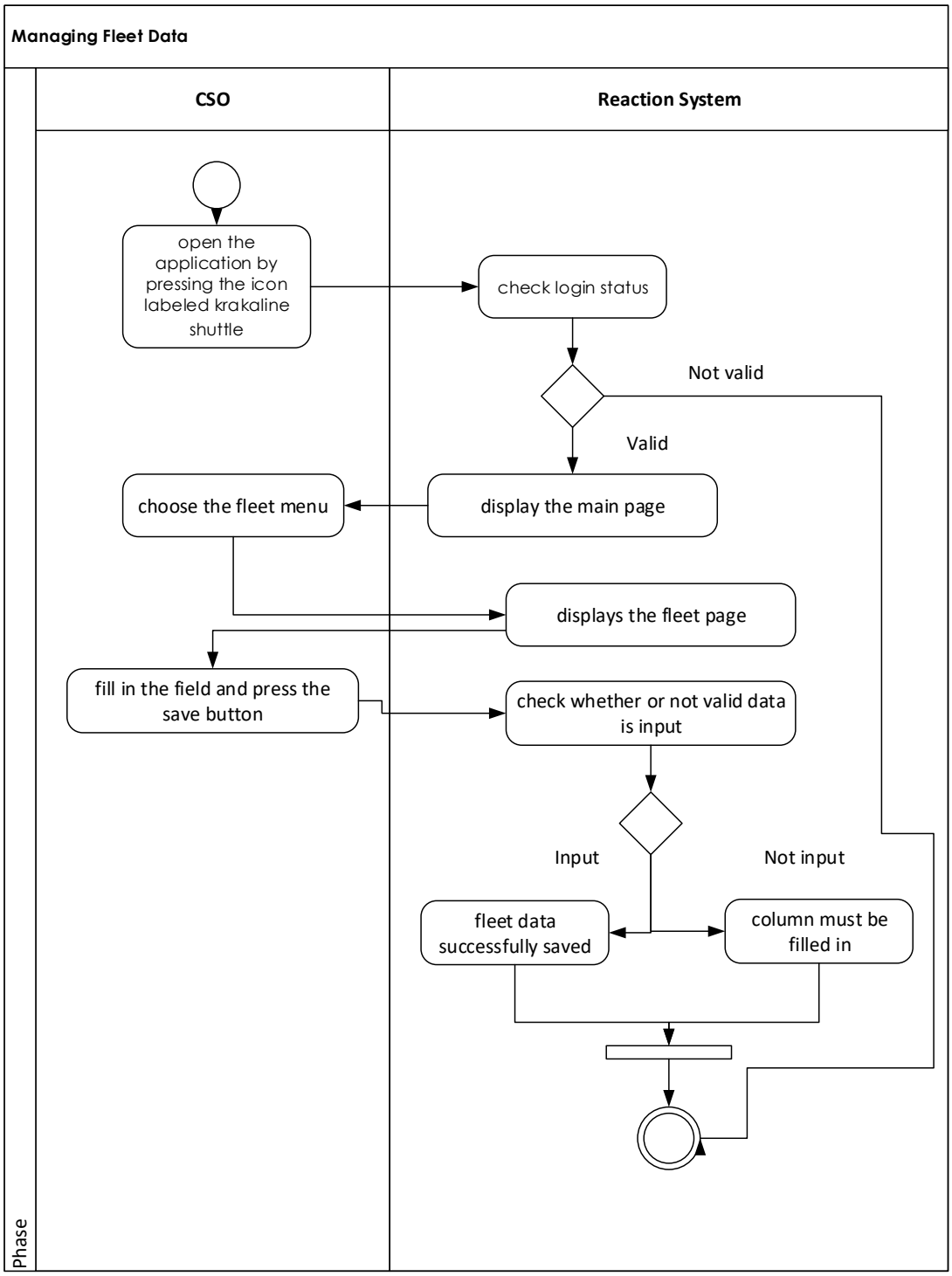

Figure 8 Managing Fleet Data

Consists of :

a. Cso opened the krakaline site in the browser.
b. Check login status.
c. If successful the system will display the main page, where the main page consists of the fleet page.
d. Fill in the fields available on the page and press the save button, the system will automatically save the data that has been entered.

8. Diagram Activity Manage Departure Schedules.

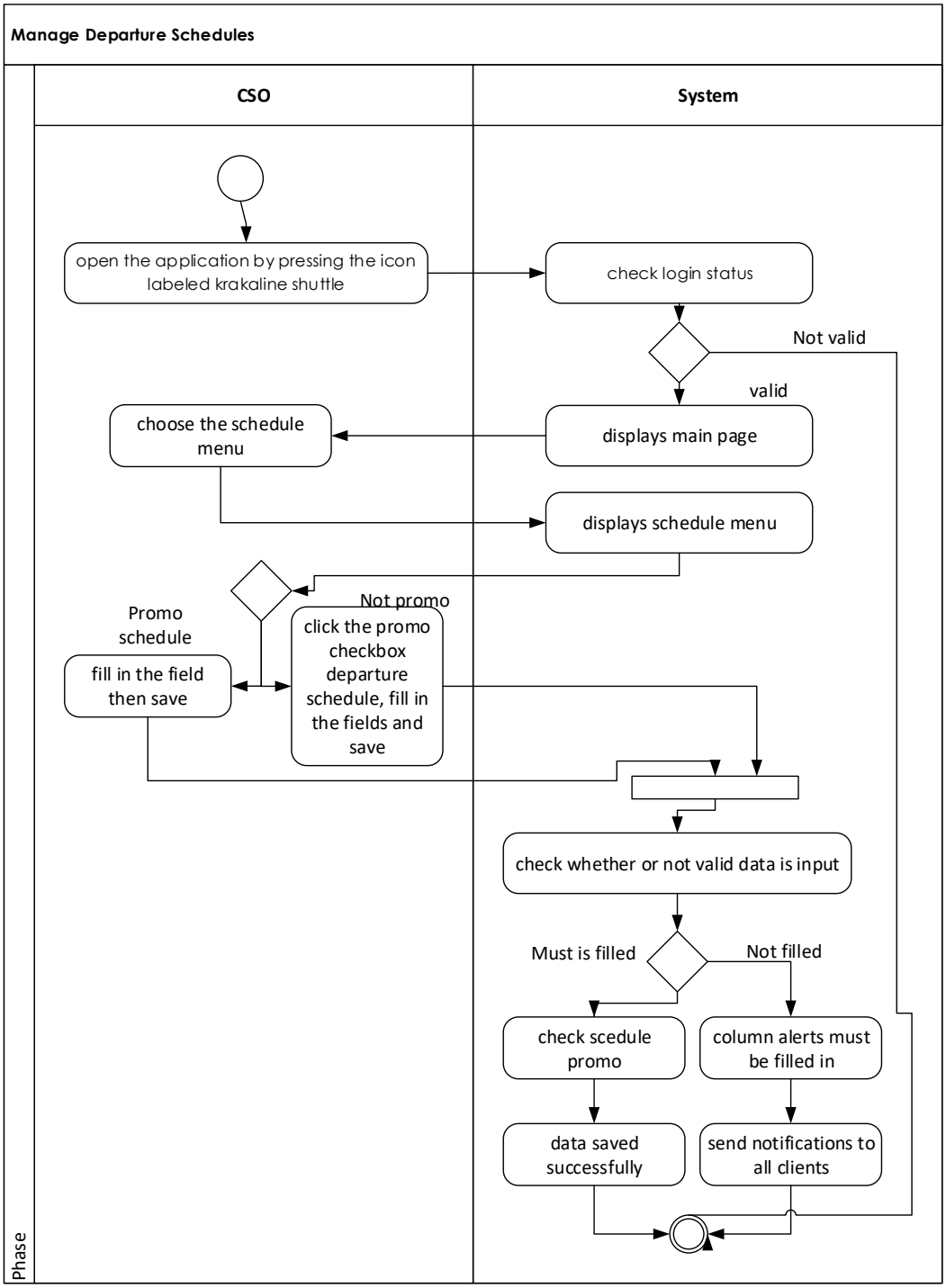

Figure 9 Manage Departure Schedules

Consists of :

a. Cso opened the krakaline site in the browser.
b. Check login status
c. Select schedule menu.
d. The system displays a schedule page.
e. Then cso includes the fields provided.
f. If you want to make a promo schedule pressing the departure promo schedule, fill in the fields and press the save button
g. The system will check the departure schedule, if there is a promo it will display the promo price to all passenger pages

9. Diagram Activity Manage the Registration Menu

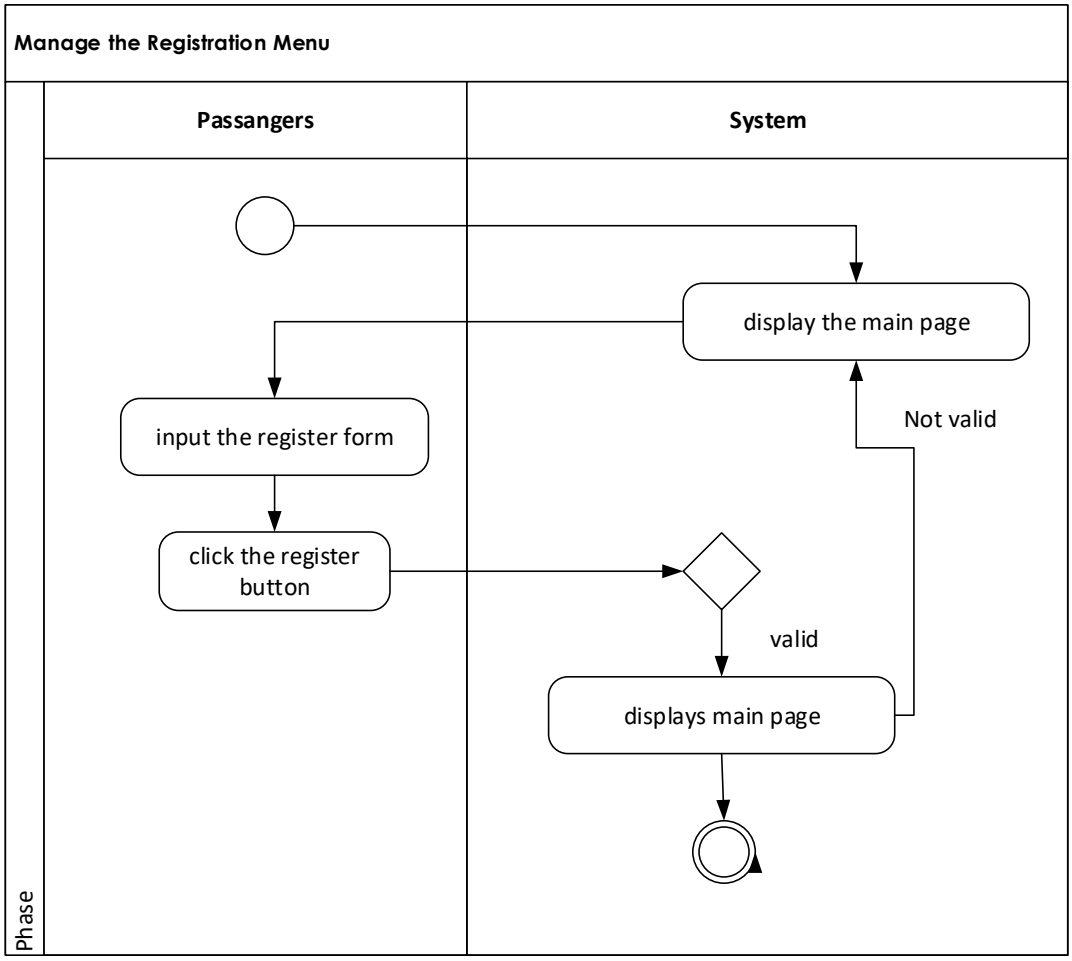

Figure 10 Manage the Registration Menu

Consists of :

a. Display the main form in the application.
b. Fill out the registration form, after all filled in the passenger presses the register button.
c. If valid, the passenger will be given a main page consisting of menus provided by the application.

5.0 CONCLUSION

5.1. Conclusion

The proposed design on the Krakaline Shuttle includes designing a login menu, managing passenger pickup tickets, managing ticket reservations by CSO, payment confirmation menu, ticket cancellation menu, driver data management menu, managing fleet data menu, managing departure schedule menu, and registration menu. Then it will provide convenience to the public as passengers to get travel service booking information including departure information, ease of booking tickets online, making ticket payments easier, ticket cancellations good. Ease of data management will also be obtained by the provider of travel services in the customer service section.

5.2. Suggestion

The design made can be applied to the implementation of the system or mobile-based application so that the community can feel the function or benefit directly, and the application created can be integrated with the play store.

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