**Human and Computer Interaction**

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1. PT Kereta Api Indonesia (Persero or Liability Company) or PT KAI is an Indonesian State-Owned Enterprise that provides rail transportation services. PT KAI's services consist of passenger and freight transportation. For the time being, PT KAI has a website https://www.kai.id/ that provides ticket ordering services, product info, and checking bookings via booking codes. As a UI/UX designer, you are asked to analyze this website. You need to test the interactions of the existing features.

After testing the interactions of the existing features on the PT KAI website, then your tasks are:

1. By using six usability goals to assess the user interface on the BINUS CX! Website. Describe any interaction designs that are suitable for the six usability goals! Give reasons that support your answer!

**Effective**: Searching ticket feature that appear in the web is effective on giving the user what they wanted. Once parameter filled, user could click search and show all available schedule accompanied with time and travel duration.

**Efficient**: Once an user click book button in the schedule list, system automatically book seat for that user in one step, provided that the user is already login to the page. If the user prefer not to login into the page, user only need fill out all important data to book the seat without login into the page.

**Utility**: When viewing schedule list, user could filter the schedule by Class, Station, Train Type, Time and Price.

**Learnable**: When filled out the parameter for searching the schedule, user could easily recognize all the parameter required to show the schedule list. Starting station and target station contain text field and automatically search all the available station for the user as drop down. Departure date is really simple process to use, when the user clicked the field, all date that might available are shown up to the user. Finally, user could provide how much passenger that will ride the transportation using numbering field.

**Memorable**: Because of how simple the process to searching all the schedule list and all the required parameter is highlighted inside a vibrant color box. User could easily remember all the process needed to use the website again later.

**Safe:** When using the core function of the website, which is booking, website will ask for confirmation in case the user have a mistake somewhere when providing the data. When the website notice something wrong with the data, website will not advance process to the next step but instead ask the user data to correctly filled the data while highlight which data isn’t in correct format.

1. Mention the features of the PT KAI website that you think are quite difficult to use in terms of human cognition. Explain why!

When booking selected train, user sometimes might select wrong schedule as a result if the user wanted to change the schedule, data provided by the user inside the booking form will be lost forever after user leave the page. Not to mention, the website doesn’t provide any way to change the schedule other than leave the page and type the parameter for searching the schedule again ( or go back to the previous page, if the browser provided that feature ) while losing all the data inside the booking form in the process

1. Explain which 8 Golden Rules are not fulfilled from the features you have mentioned in problem 1b!
2. Strive for consistency.

When searching for the train schedule, user could easily change the parameter since the data saved into the browser. In this feature, there is no way for user to change the schedule and might makes the user frustrated on using the feature.

1. Seek universal usability.

Although most user that careful wouldn’t have trouble to use this feature, but the user that has difficulty at noticing small detail or user that are in a hurry might have some difficulty and wasted time trying to use this feature.

1. Prevent errors.

This flaw on the design makes the user having a difficult time when clicking the wrong schedule. Not to mention, there is no way to recover from this scenario.

1. Permit easy reversal of actions.

Because of this flaw on the design, user must constantly focus on selecting the schedule while knowing that the error done by the user couldn’t be undone.

1. Explain the strategy you use to make the features that are quite difficult from a human cognition perspective that you have mentioned in question 1b to make it easier or better!

There is multiple way to solve this problem, although only couple of them that are good and easy to implement. One of them is providing the user a way to quickly change the schedule while in booking section. Usually this could be accomplished by show all possible schedule on previous search parameter. We also should have given a way for user to return to the previous schedule list that are searched on previous parameter while saved all important data that are provided by the user on booking form

1. You have carried out an interview with a relative who is having troubles finding a place to plan a wedding reception. The details of the story are as follows:

Based on the experience of a husband and a wife when planning their wedding, the most concerning issue for a wedding preparation is finding a place for the reception. Because at that time, they want the reception in an open space like a garden.

They started searching on Google, Instagram and asking their friends. After 3 days of searching, they finally found 3 places.

Because they wanted to see how spacious the place was, the price information and availability of dates, they decided to come to these 3 places. After visiting these 3 places, they received information that the first place was fully booked until the end of the year, the second place was not spacious enough and the third place was too expensive to rent. Finally, they decided to find another place again.

The total time they spent looking for a reception place was 3 weeks, and it was quite time consuming, because they had to search the internet, then they visited each place, one by one, just to ask for the availability of dates and price information.

From the details of the story above, answer the following questions:

1. Mention at least 3 points of difficulty from the problem above!
2. There is no information regarding size of space, price, and availability of dates online. So, they must visit the place and might wasting time once size of space, price or availability is not what they desire.
3. There is no specific place to search wedding reception, so user must search them manually using multiple way. As a result, it will be very hard to find what they wanted because they must check website/ask friend repeatedly.
4. There is no way to easily communicate between provider and buyer other than meet face to face. As a result, user might be frustrated since they must come to provider just to ask such a trivial question.
5. What needs would you propose to solve problems or make it easier for users when using the application from the 3 points of user difficulty mentioned in question 2a? Mention the features that will be in the application!

I would propose to make a website to find a wedding reception based on user preference. This website will have couple features:

1. The website shall have search feature where user could search wedding reception preference based on type, place, size, price, availability, and features.
2. Each wedding reception provided in a list shall have information regarding their type, place, size, price, availability, and features.
3. The website shall have a way for user connect and exchange information regarding their plan with the wedding reception provider
4. Based on your answer in question 2b above, determine the type of interface to be used, at least 2 types of interface types, and give reasons!
5. Web Interface

Using website is the easiest way to give information to user because website could be viewed using multiple devices, for example mobile, laptop, window, and even mac.

1. Mobile

Because of how website is suitable for many devices, there is multiple limitation that may prevent user from using full potential of the application. Luckily, because of how many people that using mobile nowadays, there will be so much user that would like to use our mobile application that included full potential of the application.

1. Draw the User Interface (UI) design for the features you propose in the answer to question No. 2b above!

Graphical user interface, application, website

Description automatically generatedGraphical user interface, application

Description automatically generatedGraphical user interface, application, website

Description automatically generatedGraphical user interface, application

Description automatically generatedGraphical user interface, text, chat or text message

Description automatically generated