

Software Requirements Report for Software Engineering Group Project

2022/2023 Semester 2
<Software Requirements Report>
<2023/03/23>

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Product Backlog Item

PBI #	Ren001
Title	Specify location(s), time and price range

Creation Date	12 March 2023	Status	New	Iteration	
Priority	1	Effort		Business Value	

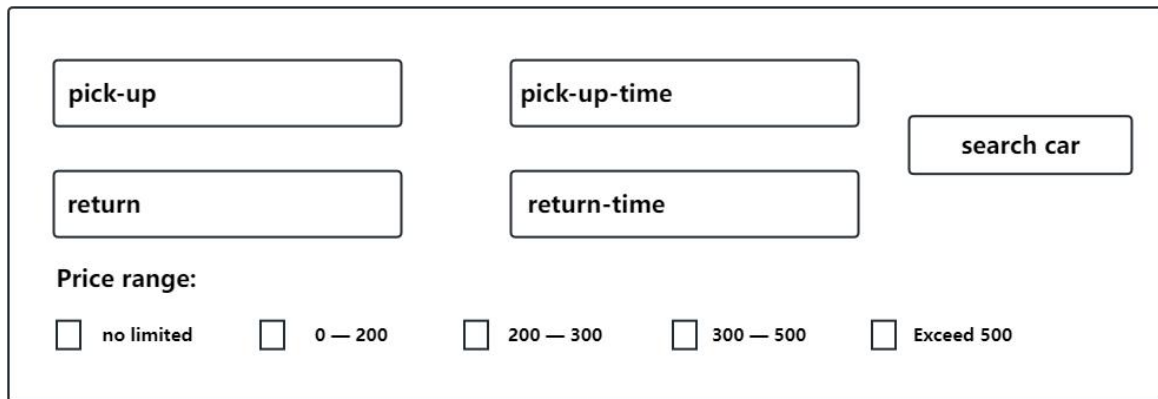
Story

As a logged-in customer, I want to select filter conditions so that I can choose the cars based on my preference.

Description

1. The title of the page is "**Car Rental Main page**".
2. The system will display the items meet all the conditions I selected.
3. The filter conditions are pick-up location, return location, pick-up time, return time, and price range.
4. Pick-up location, return location, pick-up time and return time are the 4 criteria that **must be selected**.
5. The pick-up and return locations the logged-in customer choose must be given in the database.
6. The time must be in the format of **year/month/day hour:minute**. Adopt the 24-hour system of representation. (e.g. 2023/03/06 14:32)
7. The date and time entered should be limited to the future. The return time must be later than the pick-up time.
8. The pick-up and return locations can be identical.
9. The location, time and price range can be modified.
10. There are several options for the price range, i.e. "no limited", "0-200", "200-300", "300-500", "Exceed 500". The price limited is the base price without any additional charges.
11. The unit of value is RMB and the price is the cost of renting the car for one day.

12. If the customer does not select any price range, then the default choice will be “no limited”.



The interface is a rectangular form with a light gray border. It contains several input fields and a search button. At the top left is a rectangular box labeled "pick-up". To its right is a rectangular box labeled "pick-up-time". Below "pick-up" is a rectangular box labeled "return". To its right is a rectangular box labeled "return-time". To the right of these four boxes is a rectangular button labeled "search car". Below the "pick-up" and "return" boxes is the text "Price range:". Underneath this text are five radio button options: "no limited", "0 — 200", "200 — 300", "300 — 500", and "Exceed 500".

Fig.1 The drafted logged-in customer interface of Car Rental Main page

Acceptance Criteria

1. Given that I am a logged-in customer, when I click the “**pick up**” and the “**return**” buttons in the Car Rental Main page, then the optional car rental outlets will be displayed for chosen.
2. Given that I am a logged-in customer, when I click the “**pick-up-time**” and the “**return-time**” buttons in the Car Rental Main page, then the optional time will be displayed for chosen.
3. Given that I am a logged-in customer, when I click the “**search car**” button after choosing the locations and the time, then all the available cars will be displayed.
4. Given that I am a logged-in customer, when I did not select the return time later than the pick-time and click the “**search car**” button after choosing the locations and the time, then the system will display “You have select the wrong time, please try it again”.
5. Given that I am a logged-in customer, when there is no available car after I click the “**search car**” button , then the system will display “Sorry, there is no available car for your conditions. Please select any other condition”.
6. Given that I am a logged-in customer, when I limit the price range, then only the cars belong to that range will be showed on the web page.

7. Given that I am a logged-in customer, when I change the filter conditions, then the web page will reload to display the new result.

8. Given that I am a logged-in customer, when there are no items in the price range I choose, then the system will display "Sorry, there is no available car for your condition. Please select any other condition".

9. Given that I am a logged-in customer, when I click the browser's refresh button when the page content cannot be fully displayed (probably due to network issues), then the page will be refreshed.

Grooming

Discussion

Related PBIs

Product Backlog Item

PBI #	Ren002
Title	Search by keywords

Creation Date	12 March 2023	Status	New	Iteration	
Priority		Effort		Business Value	

Story

As a logged-in customer, I want to be able to search by keywords so that I can do an efficient search to find vehicles that match my preferences.

Description

1. Keywords refer to the information that appears in the basic information. (i.e. 1. the vehicle's brand (e.g. MAZDA) 2. the vehicle's type (e.g. BUICK ENCORE) 3. automatic catch or manual transmission.)
2. Matches are case-insensitive.
3. Match ignore Spaces.
4. The logged-in customer can delete or change the keywords.
5. If the logged-in customer delete all the keywords, and click "Search" button, then the system will display the available cars match the filter conditions.
6. The search results should match the keywords entered by the logged-in customer and the filtering conditions.
7. The Search bar consists of two parts: the left side prompts the logged-in customer to enter keywords (Gray prompt "type in keyword"), and the right side is a "**Search**" button.

type in keyword	Search
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Fig.2 The drafted logged-in customer interface of Car Rental Main page

8. When the logged-in customer has typed in some keywords, then the gray prompt "type in keyword" will disappear. Unless there is no keyword in the search bar.

Acceptance Criteria

1. Given that I am a logged-in customer, when I have typed in the keywords and clicked the button "**Search**", then the system will display available cars matched the keywords.
2. Given that I am a logged-in customer, when I change the keywords I typed and clicked the button "**Search**", the web page will reload to display the available cars match the new keywords.

3. Given that I am a logged-in customer, when I delete all the keywords I typed and click **“Search”**, the web page will reload to display the available cars match the filter conditions.
4. Given that I am a logged-in customer, when there is no available cars match my keywords, the system will display “Sorry, there is no available car for your keywords. Please type in any other keywords”.

Grooming

Discussion

Related PBIs

Product Backlog Item

PBI #	Ren003
Title	Choose the sorting method

Creation Date	12 March 2023	Status	New	Iteration	
Priority		Effort		Business Value	

Story

As a logged-in customer, I want to be able to view cars based on different sorting method, so that I can efficiently choose the car I want.

Description

1. The sorting methods the logged-in customer can choose are “**Default sorting**”, “**Low price first**” and “**High price first**”.
2. Low price first (or high price first) means that the daily rent is ranked from lowest to highest (or from highest to lowest), while other screening criteria are also met.
3. The logged-in customer can change the sorting method and the page will reload to display.
4. If the logged-in customer does not choose any sorting method, then the sorting method will be default sorting.
5. Default sorting means that the system will display the highest rated products of recent times so that logged-in customers can see the best products first.
6. The page will have a scroll bar that customers can drag to display the part beyond the page.

Acceptance Criteria

1. Given that I am a logged-in customer, when I choose the sorting method I want, then the system will display all the available cars in the order I stipulated.
2. Given that I am a logged-in customer, when I change the sorting method, then the page will reload and the new sorting method will be applied to the list of available cars on the current page.

3. Given that I am a logged-in customer, when I drag the scroll bar of the window, then the content that is not displayed on the lower side of the page will be displayed.

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Discussion

Related PBIs

Product Backlog Item

PBI #	Ren004
Title	Displays vehicles for each entry

Creation Date	12 March 2023	Status	New	Iteration	
Priority		Effort		Business Value	

Story

As a logged-in customer, I want to see a list of optional vehicles with the basic information after selecting the conditions, so that I can select the one I am interested in to see all its information.

Description

1. Each item of a car shows the **basic information**: 1. the picture of the vehicle appearance 2. the vehicle's type (e.g. BUICK ENCORE) 3. the cost of renting the car for one day (e.g. ¥ 200/day) 4. the number of seats (e.g. 5 seats) 5. automatic catch or manual transmission

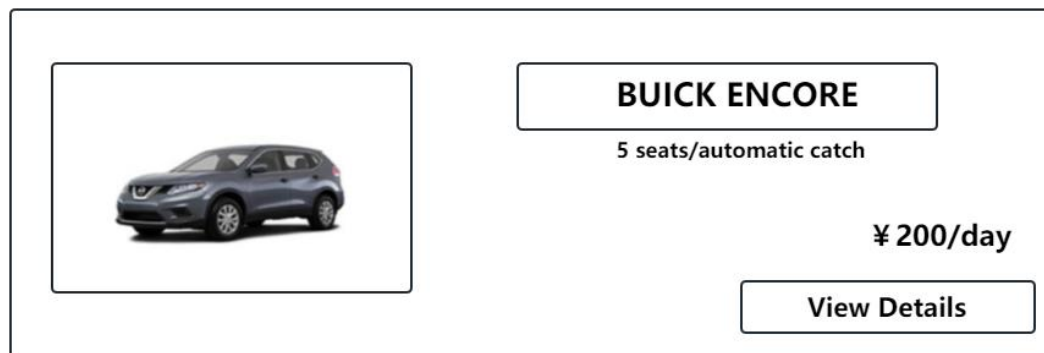


Fig.3 The drafted logged-in customer interface of Car Rental Main page

2. The detailed information is located in the **Vehicle Details page**, and there is a button called "**View Details**" in each entry to direct to that page

3. Each item of a car does not have duplicate type (e.g. There won't be two types named BUICK ENCORE.). If there is more than one vehicle of the same type, the number

is kept in the database and not displayed on the **Car Rental Main page**.

4. The order and the range of cars listed will be based on the conditions logged-in customer chose.

Acceptance Criteria

1. Given that I am a logged-in customer, when I finished selecting conditions, then all the available cars with the basic information will be displayed.

2. Given that I am a logged-in customer, when I click the button "**View Details**" below the basic information, then the system will direct me to the **Vehicle Details page**.

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Discussion

Related PBIs

Product Backlog Item

PBI #	Ren005
Title	Display the drop-down menu.

Creation Date	12 March 2023	Status	New	Iteration	
Priority		Effort		Business Value	

Story

As a logged-in customer, I want to click on the icon to display the drop-down menu, so that I can view different price bundles.

Description

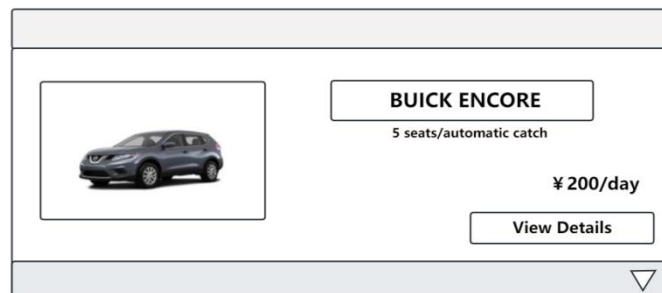


Fig.4 The drafted logged-in customer interface of Car Rental Main page

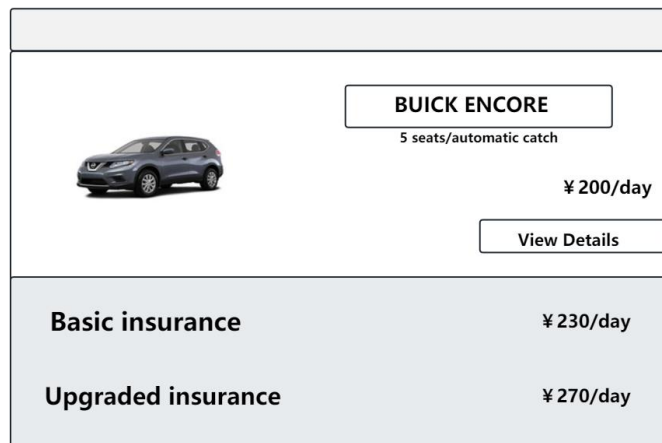


Fig.5 The drafted logged-in customer interface of Car Rental Main page

1. When the triangle icon is clicked by the customer, a drop-down menu appears.
2. Price bundle means a series of prices that customers can choose. For example, those that do not include insurance, those that include basic insurance, and those that include upgraded version of insurance.
3. Price is updated in real time.
4. The customer can view more details by clicking the button "**View Details**".

Acceptance Criteria

1. Given that I am a logged-in customer, when I click on the triangle icon below the basic information, then a drop-down menu appears.
2. Given that I am a logged-in customer, when I click the button "**View Details**" to see more details about the price, then the system will direct me to the **Vehicle Details page**.

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Discussion

Related PBIs