

Applied Research Document



11-12-2023
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Problem statement

For our group project we need to come up with a design for a parking space provider dashboard. This requires us to make the design compatible with lots of data such as displaying multiple parking garages, multiple bookings, different fields for creating and editing data, because of this we have to come up with a user friendly way to display this data to the providers without them having trouble navigating.

Main question

The main question we have come up for this research is:

How can we display data from a database in a user-friendly way?

With this question we will be able to understand the different ways to create user-friendly designs and use the knowledge to improve our design for our application. Not only will we be able to get the best design layout but we can see what other preferences there are.

Sub questions

The subquestions we came up with based on the main question are:

1. What makes a data display well designed?
2. What tools are available for data display in JavaScript front end development?
3. What kind of information is important to be viewable to a client immediately?

Research pattern

There are many different research patterns that we can use such as the following.

- Field, with this method you should mostly observe the ways of your peers. Also you should interview and interact with the people in the field
- Work Shop, this method is great for learning about things while working with them in the field.
- Library, this method encourages us to search things up in books or online. Also do Community research and literature study.
- Lab, this method is about testing application using tests such as security tests, unit tests, system tests, usability tests, component tests, A/B tests, data analytics, hardware validation and non functional tests.
- Show Room, this method is all about reviews, such as product review, peer review but also thing such as a pitch and ethical checks.

For this research we will use.

- Field
- Library

Results

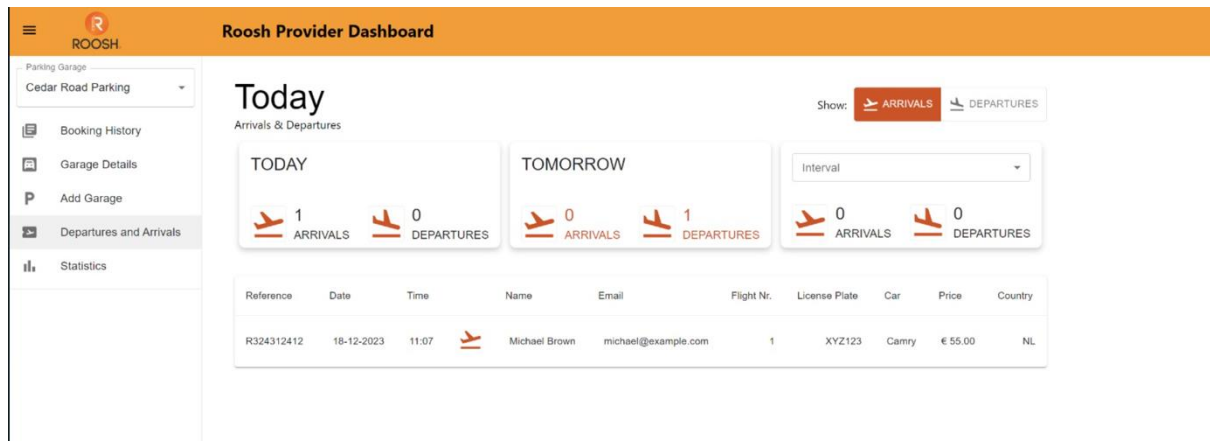
Creating a good UI is harder then it may seem at first. Josh Goodwin who was in charge of the user experience design at amazon said this about creating a good UX.

"Where I work, UX is the science behind the UI. A UX designer has a "Theory" then through research like user studies, A/B tests, design research, affinity diagrams, wireframes, prototypes, etc.. we tweak that theory. So for us a "Good" UX designer knows how to perform the research in an unbiased way and dig deep into the core of the goal. Once the Theory is proven (or close enough) then we do the UI work. Anything can be a theory. From colors, type and layout. To workflows, data set, strategy, domain mapping, etc."

The quote states that the UX is the science behind the UI, firstly you have to establish how you want to design your project. You have to be almost a 100% sure that the design that you are going for is going to work for both the customers and the users. We applied the same workflow into our group project by firstly designing a UI down to its finer details. We have thought about everything from colors, to sizing and expandability, because of this our project workflow was seamless and without any issues this is why its so important to have a good foundation to expand on.

Conclusion and recommendation

During our research we got a more clear understanding about the importance's and prioritization of a good design often people think that making a good functioning program is the most important step, but what is a good functioning program without a good functioning UI. This is why we found out that a great UI is a must but we have come to the conclusion that its also a form of art.



In the following picture we chose for a simple layout where every function is visually appealing. Not only did we fully design the layout first but this helped us later when we started implementing.

Creating a good UI isn't easy, it requires a lot of practice, time and research. Its not just making the designs, but its also about getting feedback from users and making sure your not the only one who understands your design. We recommend all our readers to keep practicing and priorities a great UI design this will not only make the workflow for the project easier but will also make the final delivery even better!

A wise css master once said "anyone who won't prioritize design will not prosper in the art of functionality" – Naadir Twahir

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