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iParking User Guide

IoT Web Based Smart Parking

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Introduction:

Imagine, you arrive at your destination twenty minutes early for a very important meeting. You have plenty of time as long as you can find a place to park.

The parking lot for the building is full. You drive around desperately looking for a space on the street but do not find one. You try the underground parking lot of the building across the street. Driving in, you suddenly have to stop. There is plenty of traffic ahead of you trying to do the same thing. You attempt to call the meeting to say you will be late and there is no cell phone signal in the underground parking garage.

It takes a half-hour to find a space. When you finally arrive at the office for the meeting, you are sweating profusely and out of breath. The receptionist tells you that everybody already left. Your meeting was cancelled and you have to deal with serious losses.

Well you are not alone. An average driver in the US wastes $345 per year, which results in over $70 billion annually nationwide.

Recent research is predicting that up to 68% of the people in the world will live in major metropolitan cities by 2050. This could have a direct impact on how car owners park in cities.

With the rise of connected devices, IoT-based smart parking systems are becoming more and more popular. These parking systems empower drivers with advanced information about available parking lots, the payment method can be easily automated and if these parking systems are private (for customers only) that means a parking lot will always be available for you.

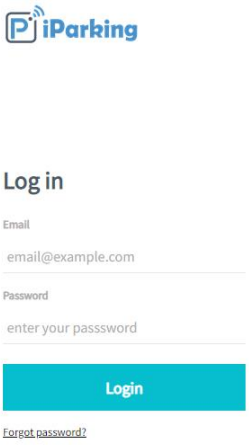
In order to make our version of an IoT Smart Parking we needed to build as well a platform where the user can check the availability of parking lots before going there, control his balance, keep an eye of his debts and his logs. This platform is “iParking” and in this document we will show you how to use it.

Admin Dashboard:

In this panel, the admin of this application (in our case the parking building owner) will have access to all kind of information needed to keep track of his business's performance and its financial status

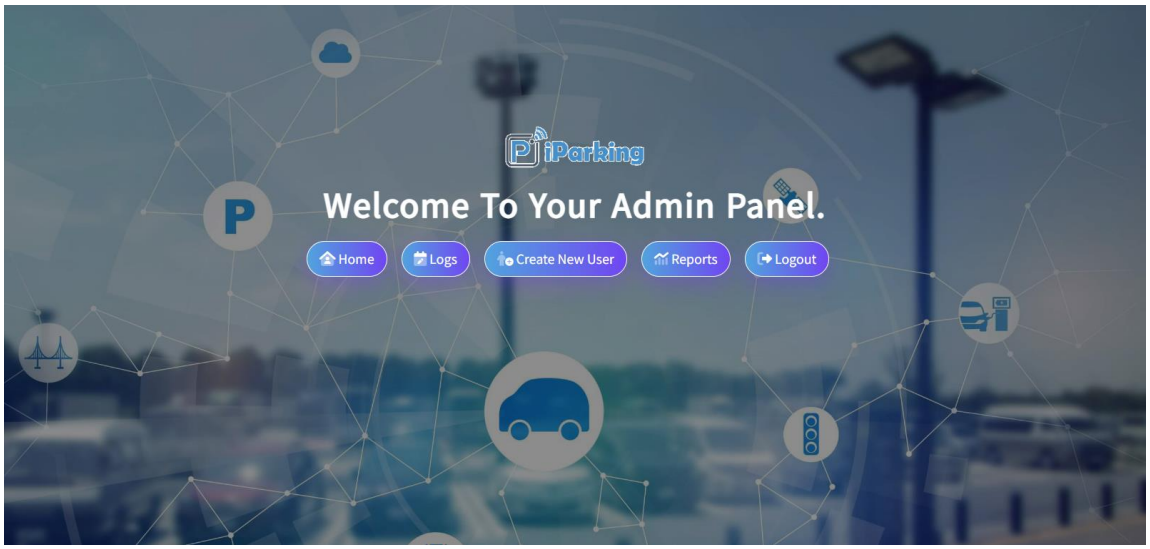
1. Login:

Through this page, the admin will have access to his dashboard. He would have to enter his personal email and password.



2. Admin Home Page:

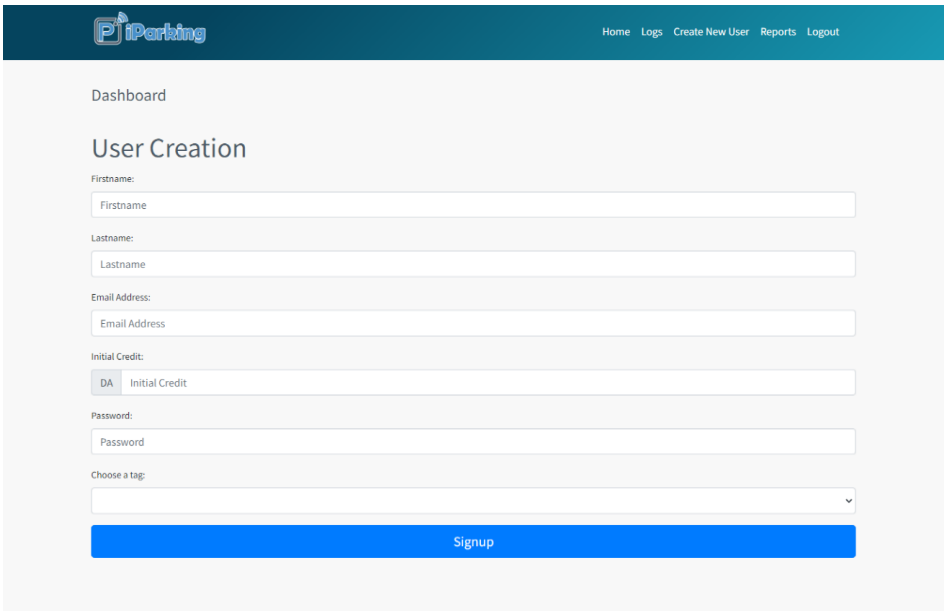
With the help of this page, the admin will be able to navigate easily through the different pages in his dashboard, he would be able to: see his clients' logs, see his reports and create a new user profile.



3. Admin Create New User Page:

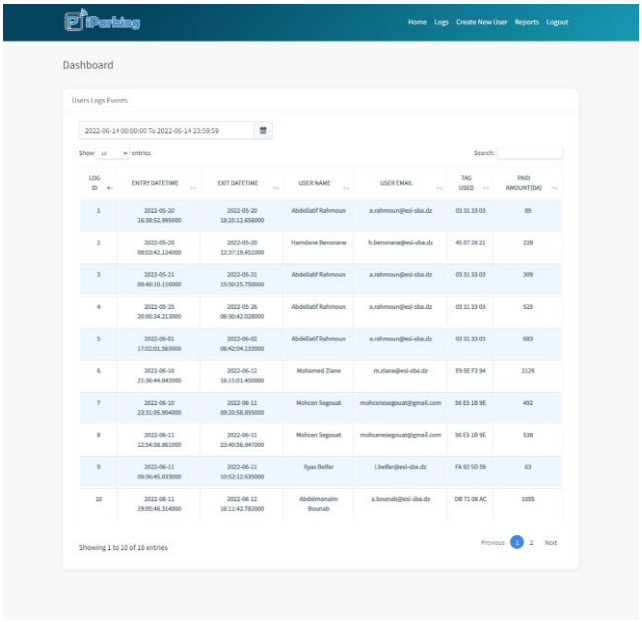
With the help of this page, the admin will be able to add a new client to the database, he would give him a username, an email, a password, an initial balance and an associated tag.

The email and the password will enable the new client to enter to his account, on the other hand, the tag and the initial balance would help him to start using the parking system.



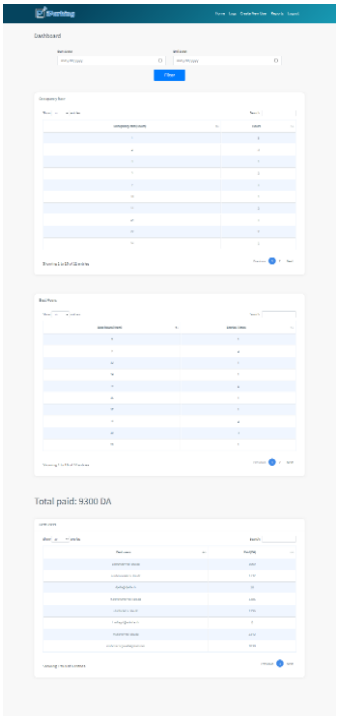
4. Admin Clients Logs Page:

In this page, the admin will be able to look at all his clients' logs, he can make search, sorting and see logs that happened between two dates that he can specify.



5. Admin Reports Page:

In this page, the admin will be able to keep track of his parking system's many information, such as the best hours and the best users.

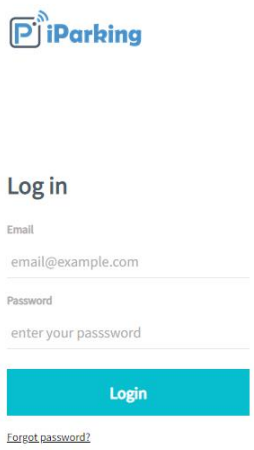


Client Dashboard:

In this panel, the admin of this application (in our case the parking building owner) will have access to all kind of information needed to keep track of his business's performance and its financial status

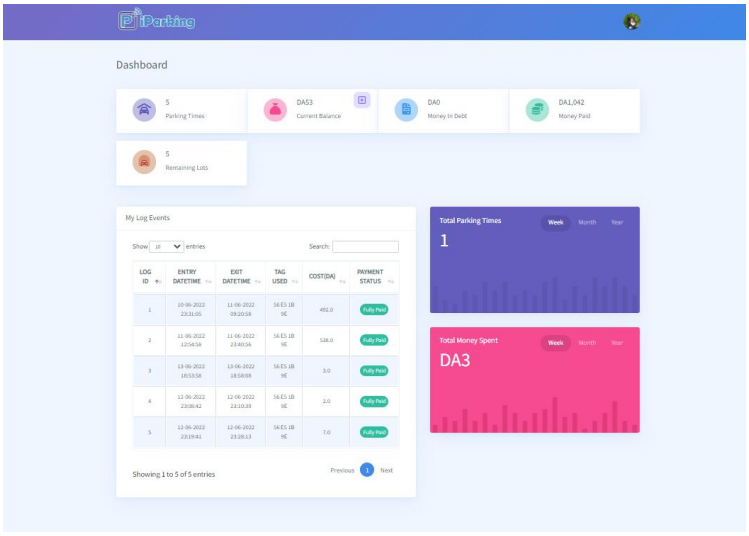
1. Login:

Through this page, the client will have access to his dashboard. He would have to enter his personal email and password.



2. Client Dashboard:

With the help of this page, the client can see all the information he needs, such as the parking lots available in the parking building, how much he has (balance), how much money he owes to the parking company (debt), how many time he used the parking system and how much money he spent in total. In here he can also see all of his logs and the information related to each one them. In here he can also add to his balance.



3. Client Profile Page:

With the help of this page, the client will be able to change his personal information such as name, email, password and profile photo.