

Good Afternoon, Our project is called eZpark. It's a parking management system which goal is to find solutions to a critical aspect of urban life. Traffic due to unorganized parking, fines due to illegal parking, time waste during looking for a parking space are problems we face in practice life when we live in urban environment. Our aim is to address these issues by provide real time information of parking availability, optimize space utilization in urban areas, provide convenience to parking owners and drivers while ensuring safety. There are four main users can register in our system. Driver, Parking owner, Merchandiser, Security other than that their also admin and super admin. Driver is the one who use application to find the available parking. Parking owner can register their lands and available through our system. You may wonder what's the merchandiser's task. Merchandisers such as clothing shop, gym, Supermarket can register their parking in our system so cutomers can easily find the parking information such as availability and merged parking with no hustle. Security manages the payments and parking physically. Admin manage the system and super Admin manage admins.

Let's move on to the system. Here you can see the index page of eZpark. You can sign in if you already have an account or you can sign up for particular user of your choice. To understand the system clearly first I'm going to register as parking owner. Here's the sign up button for parking owner. You can enter the correct details here and all details are verifying. After submitting you can log in as the parking owner. Here we use an already created account. Now you can see the dashboard of the parking owner. Here, recent transactions and analyzation of vehicle distribution and income across year for all the parking he owns. So, parking owner can get an understanding of the statistics easily. Parking owner can have many lands register in the system. Here you can see the parking he has already registered in the system and availability, capacity. Each parking has its own dashboard and the functions such as income, parking capacity, pricing display in the dashboard and he has ability to edit as well. And there are packages as well, weekly, monthly likewise parking owner can set the packages. Availability of the parking, he can change the availability by this toggle button and here are the recent transactions and income, vehicle distribution to this land only. Here you can see the images we have uploaded when the parking is registering. To understand the process more precisely let's add a new land to the parking owner. We have to enter below details and enter the exact location, we provide google map and gps as well so you can find your location easily. All emails and phone num are verifying and we expect deed as the prove of the ownership of the land. And then we enter the capacity as your choice then submit. You can enter here whether you have a security or not then you can provide parking prices per hour. After submitting you can't directly access the land, an admin should verify the land before submitting to the system.

Meanwhile let's sign in as an admin. You can see the admin dashboard here and parking requests under this card. Admin has authority to accept or decline land if necessary, information are false. And also admin can access the all the statistics of all lands registered in the system.

Let's again move on to the parking owner and after refreshing the dashboard you can see the newly added land. Thing is we don't have a security to manage the parking. We also provide that feature we can find a security through our system.

Let's again move on to the index, here you can sign up as security and register in our system. Parking owner can see all the available unassigned securities. And can request them and assign to the land.

This is the security dashboard and he hasn't assign to a land yet. And he can see the requests from parking owners here. This request which sent earlier by parking owner. When he accept the request he automatically assigns to the land and removed from the unassigned segment and then parking owner get a notification. After that parking owner has to give access to the security. He can change it anytime he wants. You can see the security dashboard includes all the statistics and recent transactions of land and admin can request parking owner to change the capacity but he can't edit pricing or packages.

So far we showed the parking owner, admin and security functions, to complete the full system next we move to the driver. Here you can register as a driver by provide these information. You can sign in as a driver. Driver dashboard basically has a google map and the current location. Here driver can add vehicles and remove. And in the google map you can see the all registered parking. Red is currently unavailable parking, green is currently available and yellow is available but parking is currently full. You can see available parking nearby and to enter, click through the map. You can go the land profile and see the details all the pricing and stuff then get the location. After reaching the destination by scanning the QR code in the parking you can enter to the parking, to exit the parking also you have to scan the QR code and do the payment either you can do through the system or physically.

You can see the statistics has updated real time in the parking owner dashboard. And that's the main process of the system.

Here we have some of the functions of each user.

These are some special functions implemented in our system. Driver can schedule parking if he wants. He can pre book through our application. Driver can review the parking also subscribe to packages such as weekly monthly. We have implemented a chat. Report Generation.

System Architecture, we used MVC architecture as the architecture of our system. And used mentioned technologies.