

Designing And Implementation of Charging Point Kiosk

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Abstract- In this Charging Point Kiosk project, we are going to build the Prepaid charging slot system to charge the smartphones. So, for that to interact with system we are going to implement touch screen-based GUI system. To easily manage the system. In this publicly placed automated kiosk system we have implemented the 3-4 Charging points so normally those points will not provide the charging. When users need to charge his/her phone he needs to pay for some amount based on per hour Rs. So when user want to charge his smart phone he enters his mobile no by selecting the appropriate option from the touch screen and waits for OTP after receiving the OTP he will chose the package and pay for amount after payment. System will send one SMS regarding the payment successful and Charging Point Slot allotment a After that he can use the Charging point system.

For purpose of SMS sending we have used the 3rd party SMS gateway Quick Transactional SMS Service for Quick OTP Messages instead of Traditional GSM Module. Our main Server we have created using the Server-side Scripting languages. And for payment gateway purpose e have used the Instamojo Service

I. INTRODUCTION

Buyer's fixation on innovation has achieved new statures, and none more so than with their cell phones – especially among recent college grads. Our telephones have supplanted the need to bear watches, journals and wallets; they give us moment access to the best arrangements, our financial balances, and data. It's hence no big surprise that 66% of us dread our telephone battery running out. Lamentably, the interest we put on our telephones to do everything mean they frequently have a short battery life, regularly requiring energizing at numerous focuses during the day. In this Design and Implementation of Charging Point Kiosk venture, we are going to assemble the Prepaid charging space framework to charge the cell phones. In this way, for that to communicate with framework we are going to actualize contact screen-based GUI framework. To effectively deal with the framework. In this freely set mechanized booth framework we have actualize the 3-4 Charging focuses so typically those focuses won't give the charging. At the point when clients need to charge his/her telephone he needs to pay for some sum

dependent on every hour Rs. So when client need to charge his advanced mobile phone he enters his versatile no by choosing the proper choice from the touch screen and hangs tight for OTP in the wake of getting the OTP he will picked the bundle and pay for sum after installment. Framework will send one SMS with respect to the installment fruitful and Charging Point Slot portion an After that he can utilize the Charging point framework. For motivation behind SMS sending we host utilized the third gathering SMS door Quick Transactional SMS Service for Quick OTP Messages rather than Traditional GSM Module. Our fundamental Server we have made utilizing the Server-side Scripting dialects. What's more, installment passage reason e have utilized the Instamojo Service.

II. BLOCK DIAGRAM

Block Diagram Description:-

WiFi Module:-

ESP 12E WiFi module is created by Ai-mastermind Team. center processor ESP8266 in littler sizes of the module embodies Tensilica L106 coordinates industry-driving ultra-low power 32-bit MCU smaller scale, with the 16-bit short mode, it has Clock speed bolster 80 MHz, 160MHz, it needs to underpins the RTOS and incorporated Wi-Fi which on-board recieving wire. The module bolsters standard 802.11 b understanding and complete TCP/IP convention stack.

Power Supply:-

There are numerous kinds of intensity supply. Most are intended to change over high voltage AC mains power capacity to an appropriate low voltage supply for electronic circuits and different gadgets. A power supply can by separated into a progression of obstructs, every one of which plays out a specific capacity. For instance a 5V controlled supply.

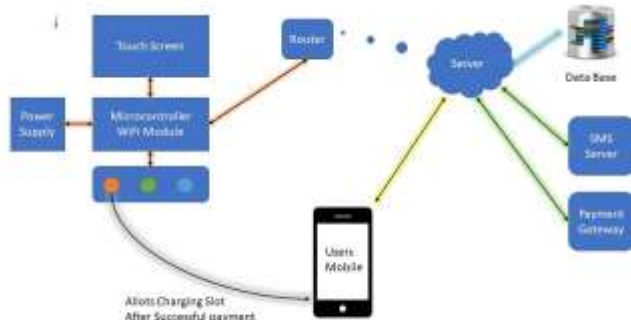
Touch Screen Display:-

Nextion fuses a hardware segment (a movement of TFT sheets) and an item part. The Nextion TFT board uses

only a solitary successive port to bestow. It allows customers to keep up a key separation from the issue of wiring. We saw that most designers put much vitality in application improvement anyway get inadmissible results. As a response for this condition, Nextion chief has mass sections, for instance, get, content, advance bar, slider, instrument board, etc to upgrade the interface plan. Besides, the disentangled limit ensures that customers put less vitality in programming, which will reduce 99% of their progression exceptional main jobs. With the help of this WYSIWYG publication supervisor, organizing a GUI is simple. It's definitely not hard to change Nextion family HMI to existing exercises customers just need to give it a UART.

ESP32:-

ESP32 can execute as a total independent framework or as a slave gadget to a host MCU, lessening correspondence stack overhead on the principle application processor. ESP32 can interface with different frameworks to give Wi-Fi and Bluetooth usefulness through its SPI/SDIO or I2C/UART interfaces.



III. RESULTS AND DISCUSSIONS

In this Charging Point Kiosk project, we have build the Prepaid charging slot system to charge the smartphones. So, for that to interact with system we are going to implement touch screen-based GUI system.

There is no need to allocate a large percentage of your budget to a cell phone charging kiosk.

VI. CONCLUSION

In this Design and Implementation of Charging Point Kiosk project, we are going to build the Prepaid charging slot system to charge the smartphones. So, for that to interact with system we are going to implement touch screen-based GUI system. Customers can get free amenity that would ensure an

all-day connection. Thousands of visitors visit everyday, with many of them staying on the gaming floors for long hours.

Ability to capture customer data is proving to be one of the key benefits for retailers and other venues in providing charging services as an extra amenity. It is the wave of future because you can interact with the customer. There are currently a number of models by which companies are using phone charging kiosk to promote their brand and boost their bottom line. Increasingly, venues such as bars, restaurants and theaters are partnering with kiosk makers to mdeployt custom solutions as afree amenity for their customers.

REFERENCES

- [1] Y. Wang, J. Li, J. Jiang, L. Niu, Management Information System of Charging Station for Electric Vehicle (EV), IEEE Conference, Volume: 1, Publication Year: 2005, pp: 857 – 860.
- [2] CLP online website, <http://www.clponline.com>
- [3] T. Winkler, P. Komarnicki, G. Mueller, G. Heideck, M. Heuer, Z.A. Styczynski, Electric Vehicle Charging Stations in Magdeburg, Vehicle Power and Propulsion Conference, 2009. IEEE, Publication Year: 2009, pp: 60 – 65