TICKETLESS ENTRY SYSTEM TO MONUMENTS/MUESUM

Guided by: **Prof. Shivshankar Rajput**

Sarthak Jain , **Shikhar Rathore** , **Tanish Solanki** , **Tanishq Rawat**

Computer Science and Engineering, Acropolis Institute of Technology and Research, Indore, India

Abstract: - Easing up the process of entry to museums and monuments with the help of a ticketless entry system. It will also help in keeping proper track of total number of people present at the said location, managing proper resources for the people present and preventing fraudulent entries for the people without tickets, the process of checking tickets can be optimized as only people with e-ticket would be able to enter the premises and all this would fasten up the process of getting entry. Also implementing the option to make payment through UPI is an ease for customers to easily make payments without getting in the hassle of net banking transactions. Providing an easy interface for user to interact with. A QR code or a quick response code is a type of matrix barcode (or two-dimensional barcode) QR codes use four standardized encoding modes (numeric, alphanumeric, byte/binary, and kanji) to store data efficiently.

Keywords: - Ticketless, e-ticket, museum, monuments, track.

I. INTRODUCTION

This project is made so the process of getting entry to monuments/museums can be eased up, helping in keeping track of the number of people present at the location and preventing entry for people without e-ticket. This project is applicable for the places with a high number of people trying to get entry, like museums, monuments, concerts, plays etc. This project would be very helpful for the process of admission into the premises and also keeping track of the number of people entering the premises so as to keep a proper track of the resources needed for helping and assisting the people also helping in removing the frustrating queues people hate. An e-ticket (electronic ticket) is a paperless electronic document used for ticketing. It can help in better crowd management of museums/heritage sites. Summary: To devise a QR based ticketing system with necessary hardware for the seamless visitor experience in Museums/Heritage sites. In addition, the prediction of the expected crowd should be added as a feature. A QR code or a quick response code is a type of matrix barcode (or two-dimensional barcode) QR codes use four standardized encoding modes (numeric, alphanumeric, byte/binary, and kanji) to store data efficiently. This application uses Django framework as the backend. Images and information about various places are already stored locally with the project source code.

II. PROBLEM FORMULATION

This project is helpful in booking tickets hassle-free and at ease via mobile phone, this process is easy to do, as all it takes is a few clicks, helping people book tickets at their ease and without complexity, also getting admission into the premises easily by skipping the traditional queue method where people had to stand in long queues to buy tickets and then another long queue to get the tickets checked and get admitted into the premise.

The objective of this platform is keeping proper track of total number of people present at the said location, managing proper resources for the people present and preventing fraudulent entries for the people without tickets, the process of checking tickets can be optimized as only people with e-ticket would be able to enter the premises and all this would fasten up the process of getting entry.

III. LITERATURE REVIEW

A ticketless entry system is a computerized program that works as a managing entity to better manage the ticketing system and purchases and has become exceptionally popular in recent years mainly due to dramatic improvements in the areas like QR scanning and generation which allows prompt verification when they enter the monument or museum. This project is helpful in booking tickets hassle-free and at ease via mobile phone, this process is easy to do, as all it takes is a few clicks, helping people book tickets at their ease and without complexity, also getting admission into the premises easily by skipping the traditional queue method where people had to stand in long queues to buy tickets and then another long queue to get the tickets checked and get admitted into the premise.

IV. METHODOLOGY

Methodology includes the steps to be followed to achieve the objective of the project during the project development. QR code algorithm will be used to generate the QR code for every Monuments /Museum. The Reed Solomon method is an algorithm that all QR code readers have built-in as standard. It allows QR codes to be scanned even if a certain amount of the QR code is covered up or blocked. However, there is a limit as to how much of your QR code you can cover up. A free QR code generator online encodes information into a QR code. Often that means turning a link into a QR code. You upload information onto the website, and the website spits out a QR code. That QR code links out to a URL, a PDF, or the other information you uploaded about the Monuments/Museums and also their prices. Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with that image.

The various phases of the agile model are as follows:

- Requirements
- Design
- Development and Coding
- Integration and Testing
- Implementation and Deployment
- Review

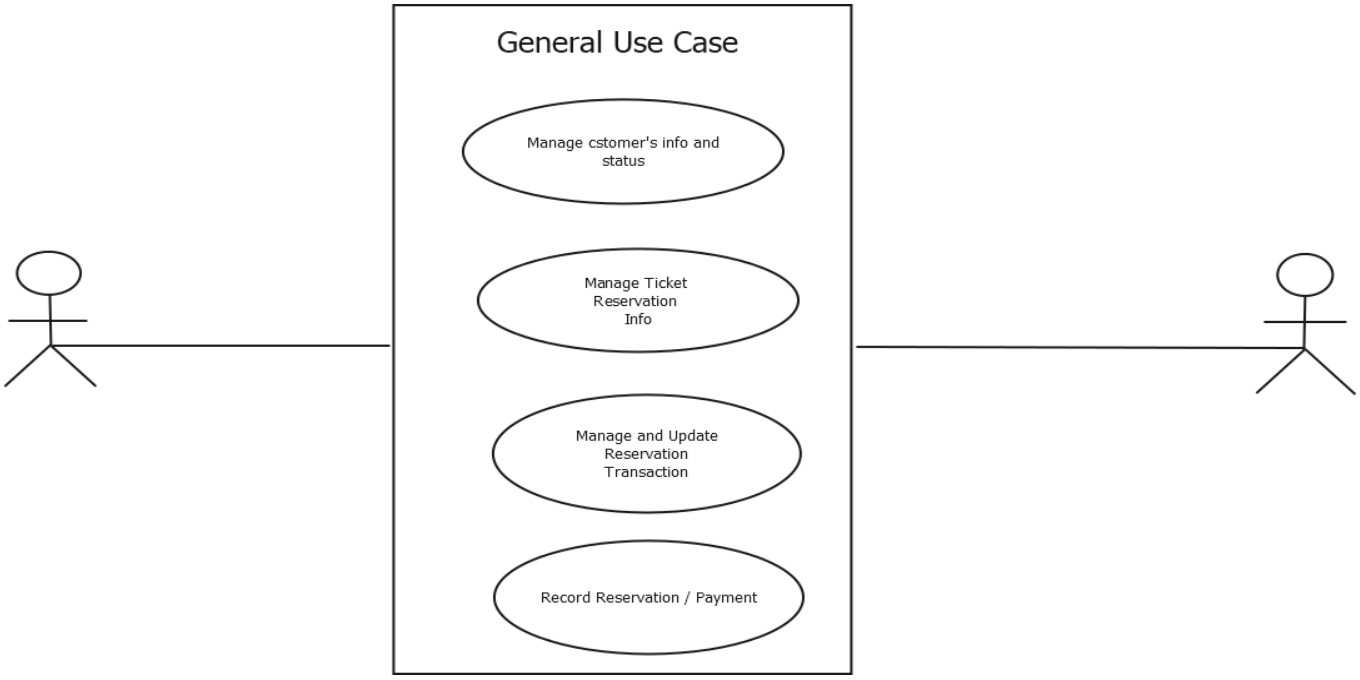
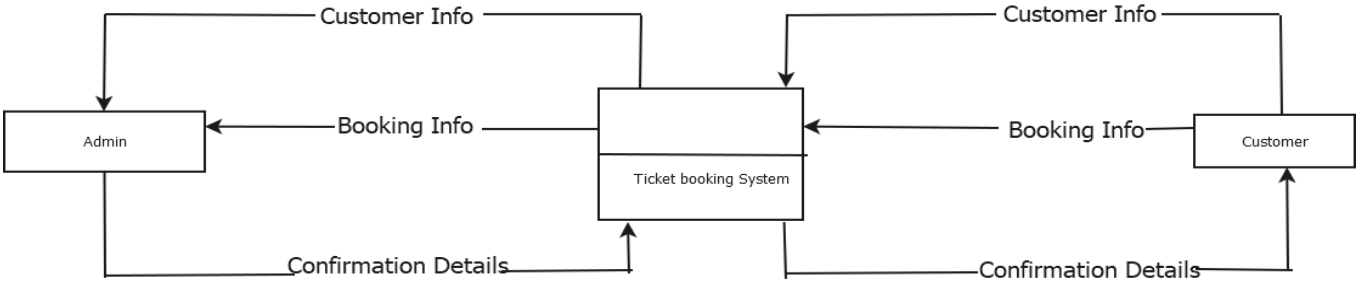
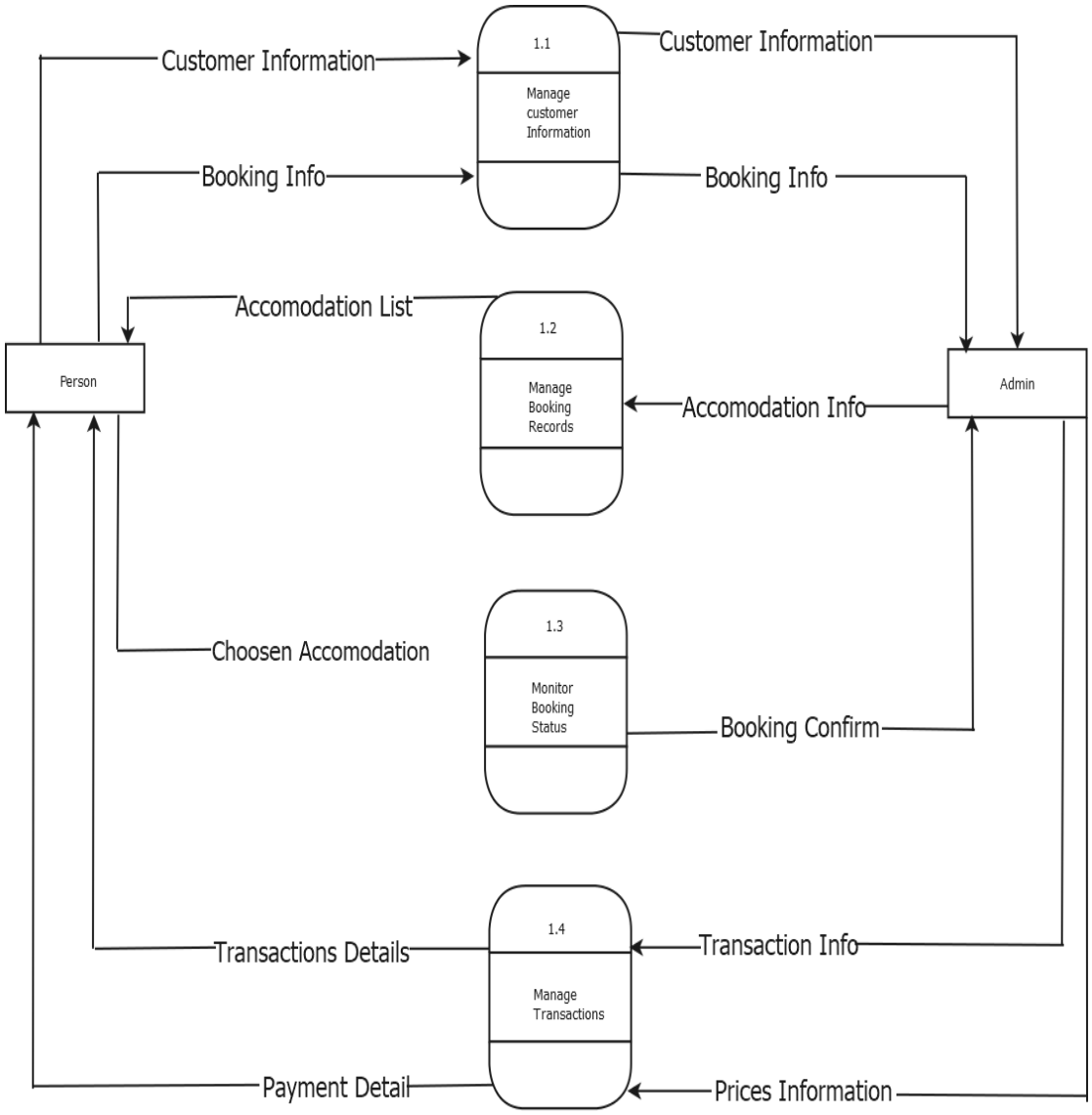


Figure 1. USE CASE



Data Flow Diagram 0

Figure 2.1 DFD Level 0



Data Flow Diagram Level 1

Figure 2.2 DFD Level 1

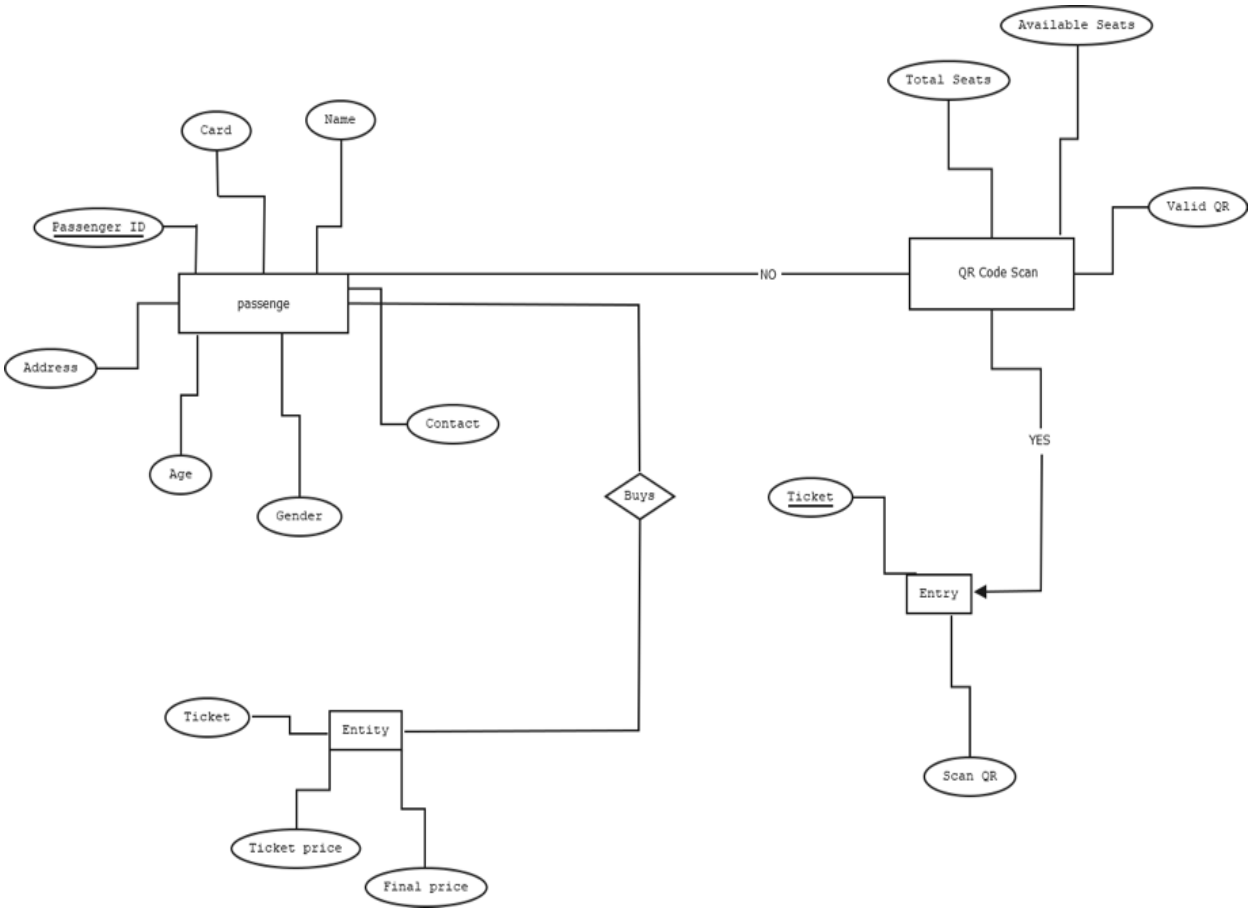


Figure 3. ER Diagram

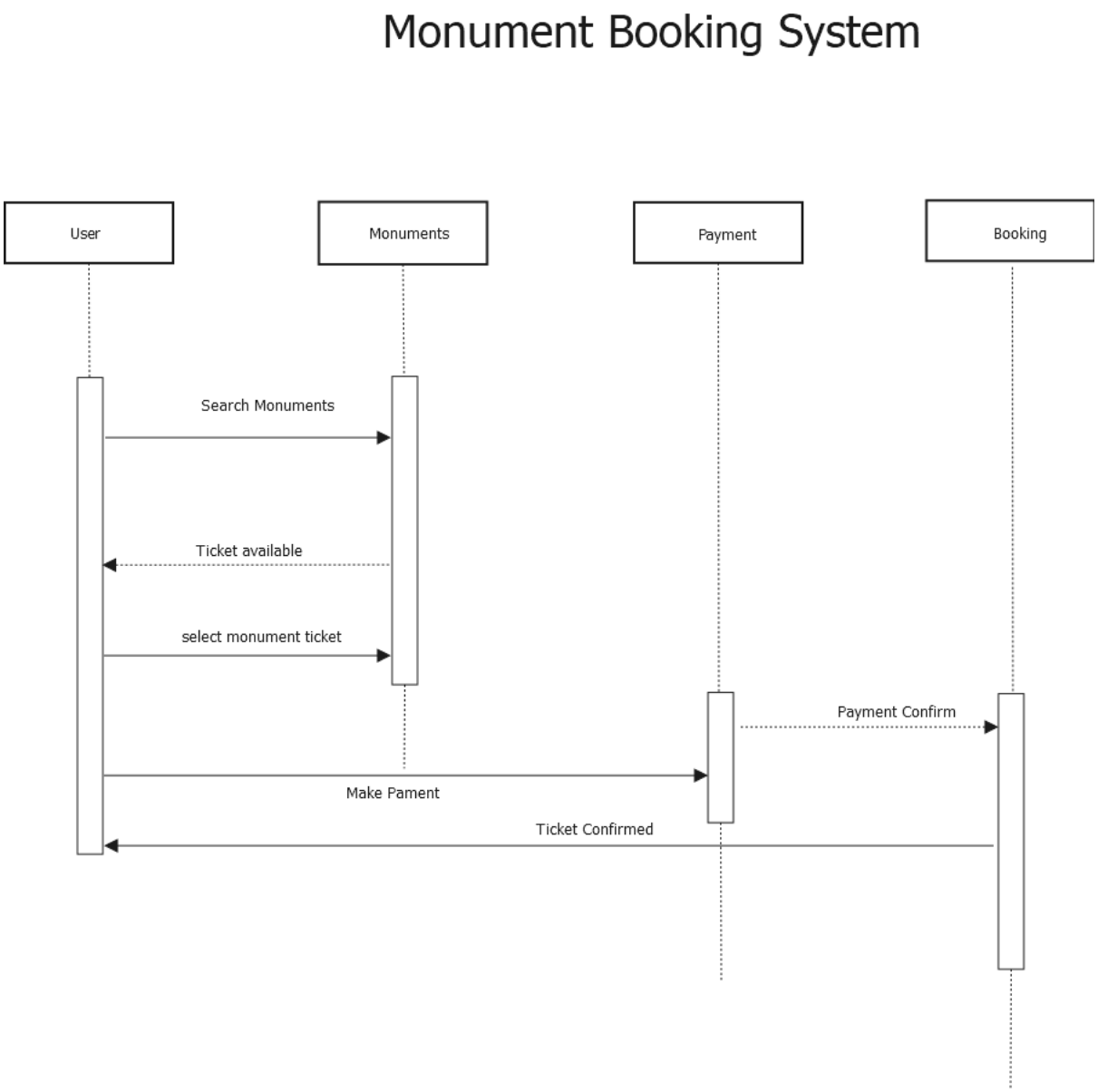


Figure 4. Sequence Diagram

4.1 Technology Used:

- Python
- QR Code Generator
- Reed Solomon algorithm
- Tkinter

V. RESULT DISCUSSION

Figure 5.1 Screenshot 1

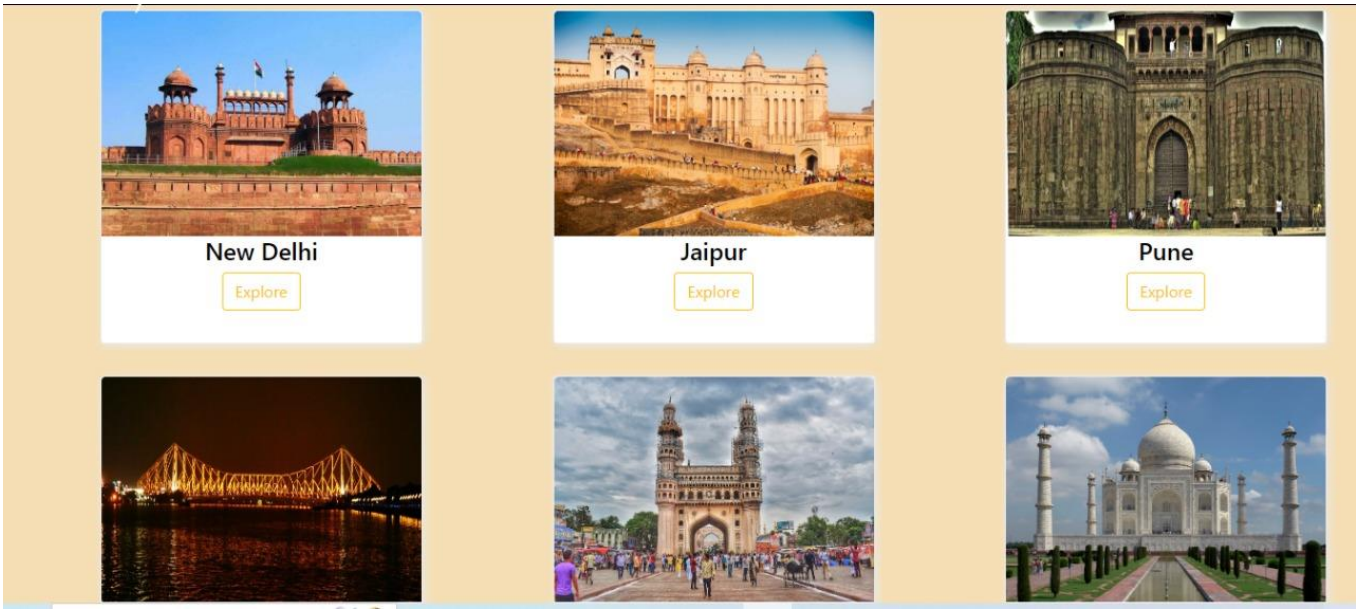


Figure 5.2 Screenshot 2

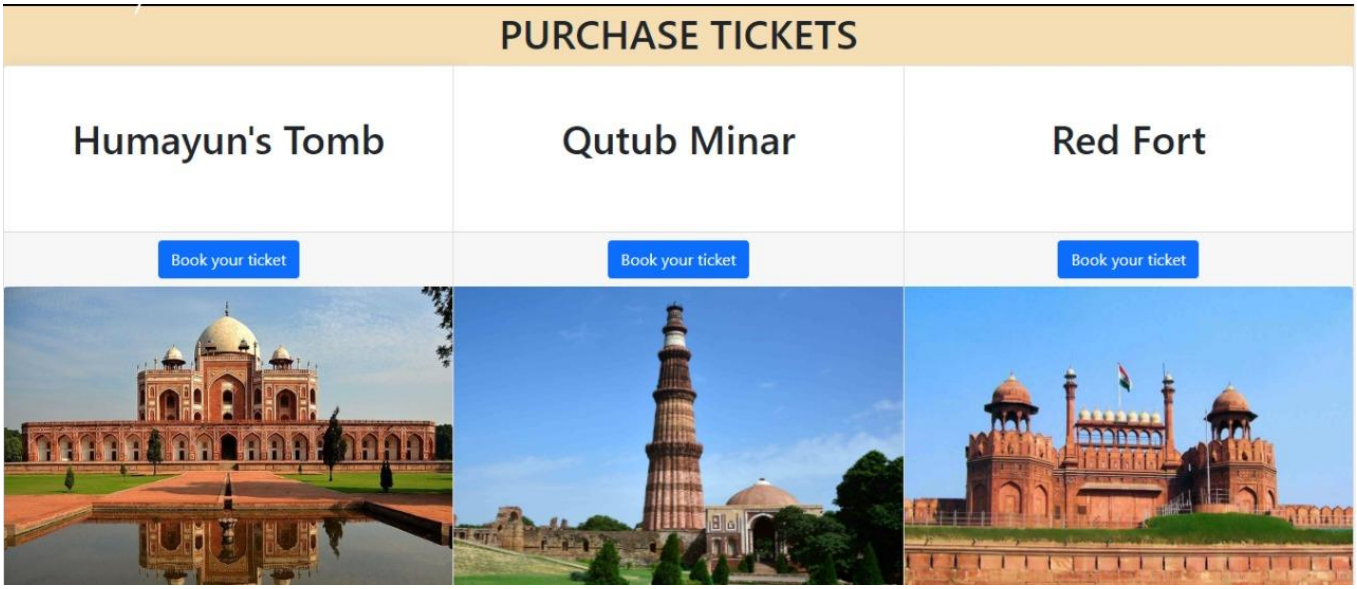
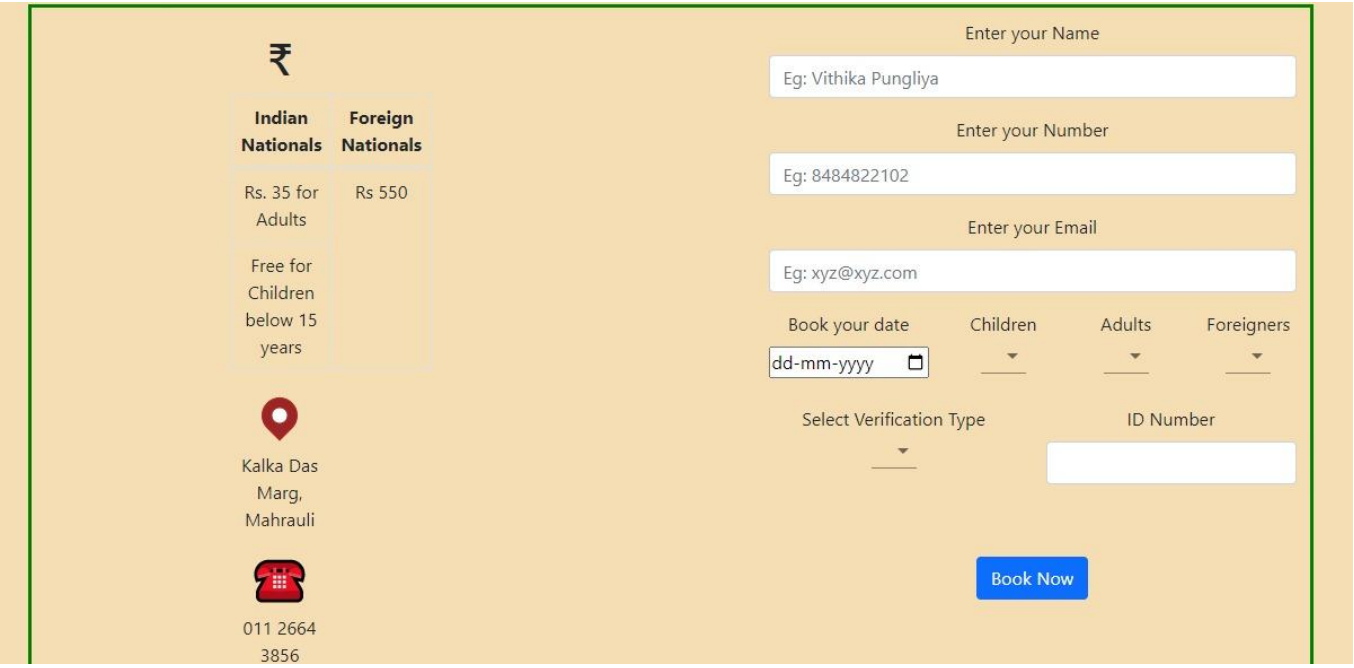


Figure 5.3 Screenshot 3

Figure 5.4 Screenshot 4



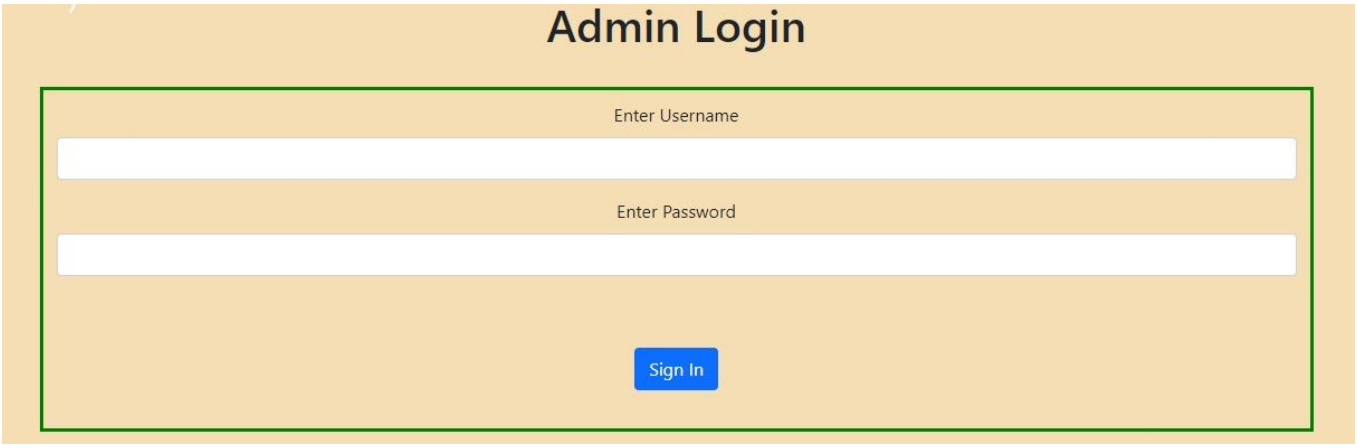


Figure 5.5 Screenshot 5

VI. CONCLUSION

This project comes under the category of image processing and QR generation. It is useful to get easy entry to monuments/museums by skipping the ticket buying and standing in the long queue process altogether. It is used for easy tracking and managing of people and resources at the said monuments/museums. In future modifications this project can be further modified to directly see upcoming events and auctions at the said museums as well as monuments. The data can be used to collect the high time for the monuments/museums as well as gathering general feedback from people about the places and how the experience can be improved.

VII. ACKNOWLEDGMENT

The success and final outcome of this project required a lot of guidance and assistance from many people and we are extremely privileged to have got this all along with the completion of my project. All that we have done is only due to such supervision and assistance and we would not forget to thank them.

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VII. REFERENCES

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