SMART BUS PASS WITH QR CODE

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ABSTRACT: We're aware that generally bus passes were verified manually in the current scenario. Sometimes it might be difficult to verify the pass manually. To overcome this, we've come with a smart solution where we design a Website in which the user registers himself with the path of his source to destination which includes payment for that particular route.

The website is specific with the verification of the user from where we collect the information or data of the registered users and store it in our database. Here we use a unique QR Code to identify the validity of the pass. When the user goes with the QR Code scanning we show the difference between the registered user and unregistered user through the output either as Valid or Invalid.

The output is Valid only when the user is registered and he has certain period of validation through that route after completing the payment. In rest of all cases the output is shown as invalid.

Thus, we've come with a smart solution which enhances the limitation of manual and other types of Bus Pass.

Index Terms: QR Code, Web based Application

INTRODUCTION:

What if a transportation in this current and complicated generation got digitalized? What if mal functionless transport system is entered? What if a transport system is structured and run via QR code? Every compatible answer for all the above questions would be yes as who are having a major problem in revenue of transport system.

The transport system is having its major failure in authenticating the general bus pass system. A bus pass is a set documentation which would be abided by destination, fair and the validity. People today are misusing this bus pass system in vivid manners. By adding QR codes to each and every bus pass system by digitalizing in synchronizing fashion, the respective administrator (i.e., government transport agency) would have clear demonstration and execution of state transport system.

The administrator will have a transport set of data base which contains number of users travelling to their respective destinations, with corresponding fair.

The summary of a project details about the digitalisation and synchronization of the modern transport system. The major advantage in implementing this project is that one user will be able to know his respective destination with respective to the corresponding fair without any ambiguity and complexity. The user validation is the major asset through which the administrator will be able to generate bus a digital bus pass system followed by a QR code. The project is indulged with friendly interface which has a sign in and sign up portals preceded by administrator authentication. The added advantage in executing the project is that time complexity and database conundrum will be widely reduced. The respective user is always requested to upload his/her passport size photo graph by which the further validation will be preceded.

EXISTING SYSTEM:

- An android application for the user (User Application).
- There is no renewal of user in the registration.

- Admin cannot add the route if there is no route regarding the user request.

PROPOSED SYSTEM:

- We design a real-time smart bus pass with QR code where people can register and use them without any manual process. In that case, people can renewal their bus pass if their the validation is completed. Its gives unique QR code to every user.
- Quick Response Code (QR-Code), an exceptionally powerful and quick decipherable innovation is utilized for Storing and examining different subtle elements of a vehicle.
- We create a website through which user can generate their unique QR-code for their vehicle or can update the details of the vehicles.

IMPLEMENTATION & WORKING:

The system after careful analysis has been identified to be presented with the following modules:

The Modules involved are

1. Authentication and Security Module
2. Users Module
3. Admin Module

1. Authentication and Security Module

The user details should be verified against the details in the user tables and if it is valid user, they should be entered into the system. Once entered, based on the user type access to the different modules to be enabled / disabled.

2. User Module

We develop another website (User website) which is used by user to view and update the personal details of the user

- When we click on login button another webpage opens to view or update the user personal details.
- If user clicks on New Registration, the page is redirected to a form which requests for the user details.
- After filling all the details, a QR is generated for an individual user.
- When the individual QR is scanned, we get the details including the image of the user and validity of the pass whether it's valid or not.

3.Admin Module

We develop a website (Authority website) to generate a QR-code where, this QR-code is integrated with the details of the vehicle like driving license, registration certificate, insurance, pollution under control certificate

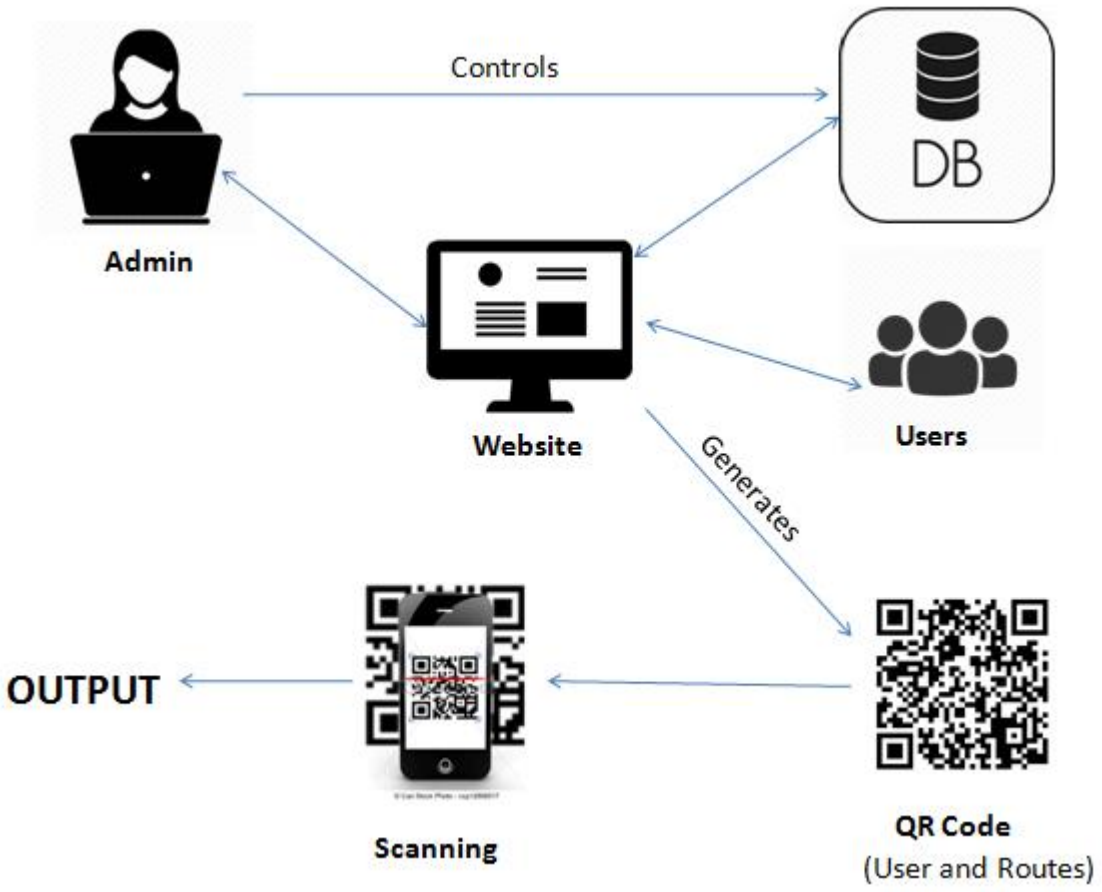
- Admin has access to do the following activities

1. Add Route
2. Generate a QR for that route with the pass details
3. Delete any route if necessary

- When Add Route button is clicked, the page is redirected and asks for the details such as source, destination, pass validity period, amount to be paid.
- After filling all the details, a QR is generated for that route.

- After scanning the QR, it directs us to a page where it asks the user for a Renewal or New Registration.

ARCHITECTURE:



EXPERIMENTAL RESULTS:

After implementing and executing the system we get the following results. Below figure is the description for the android application after installing. We used java programming language and xml along with android operating system. for the connectivity with GPS we used Google API. For web module we used java server pages and tomcat server for connectivity with the Internet.

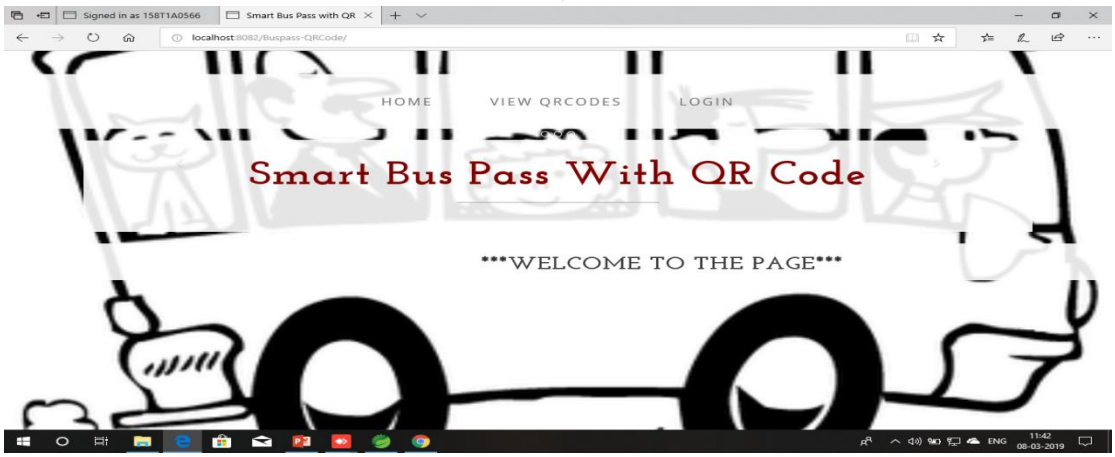


Fig-1: Home Page

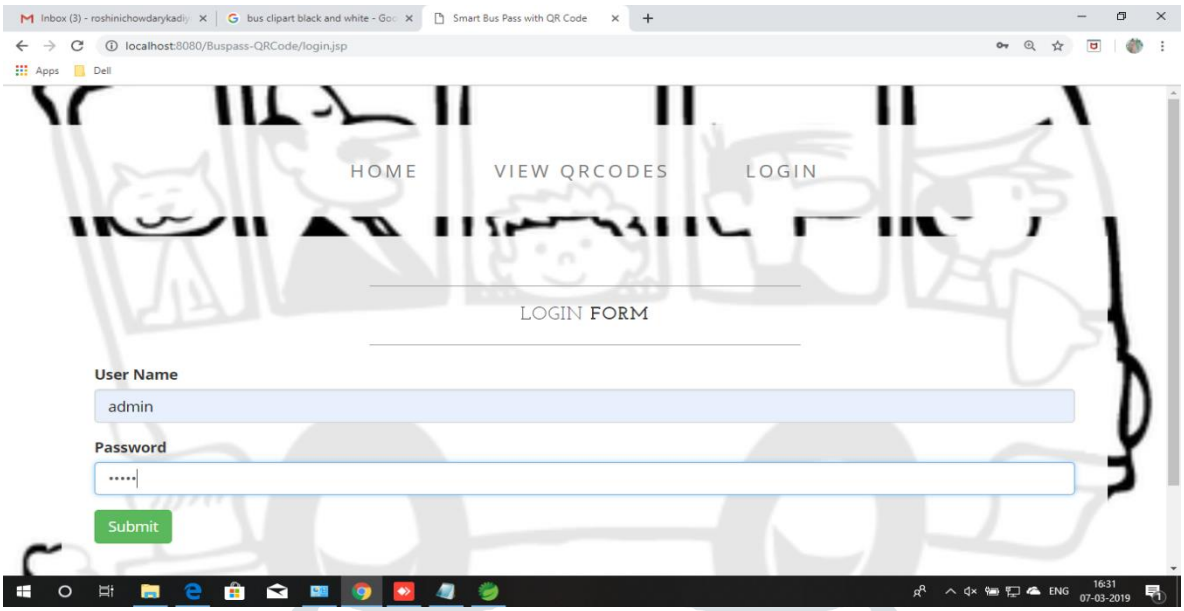


Fig-2: Login Page

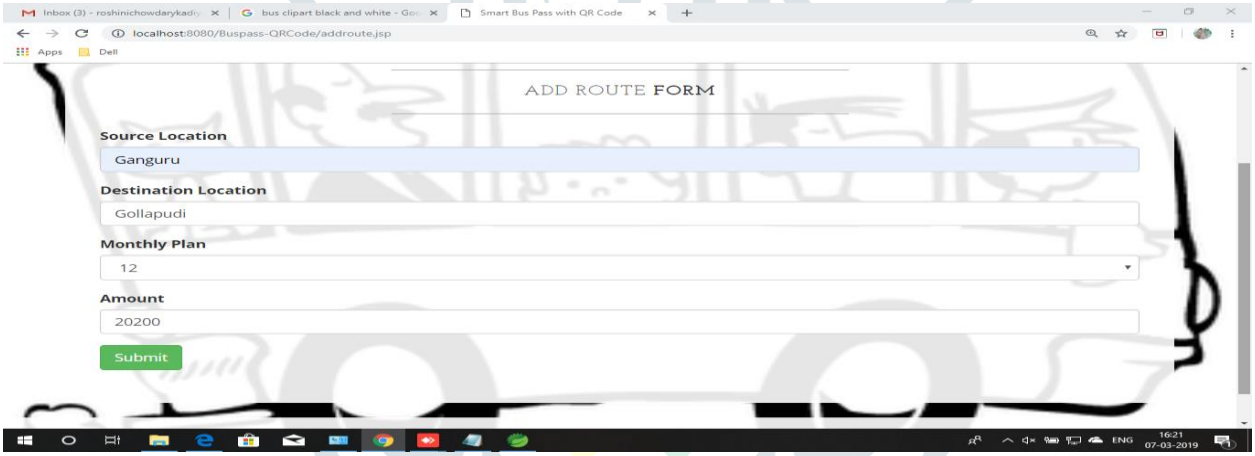


Fig-3: Adding Route

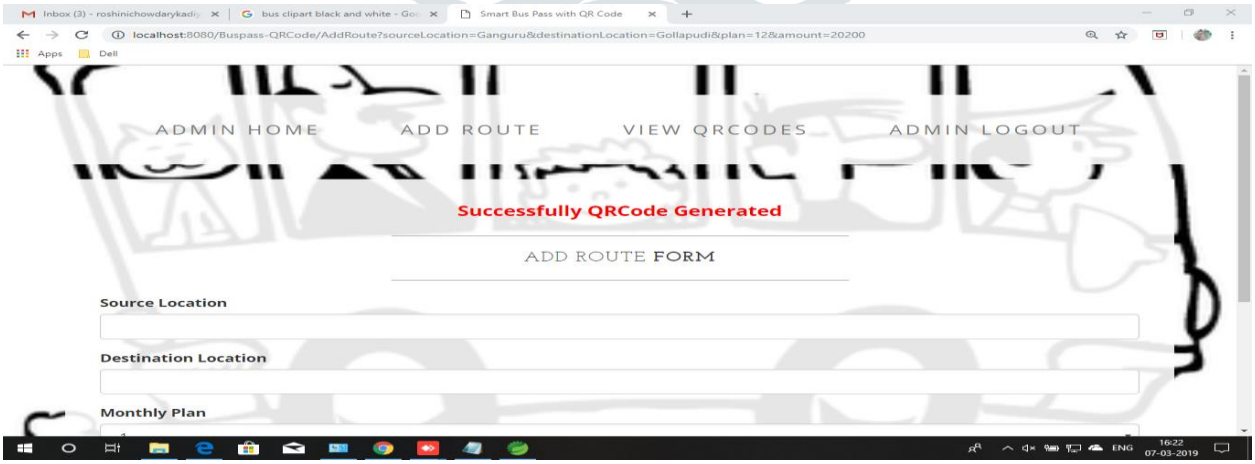


Fig-4: QR Code generation for Route

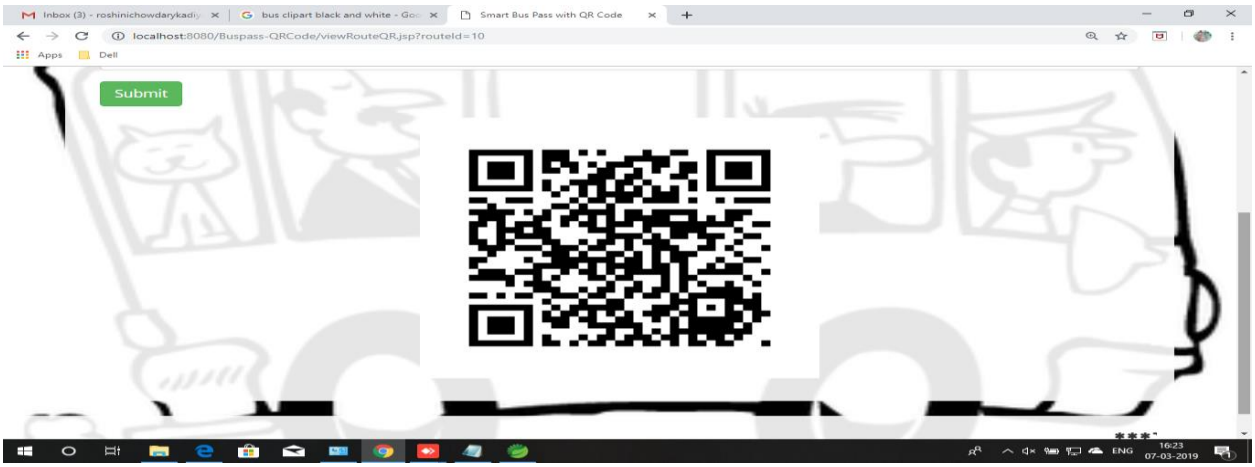


Fig-5: QR Code for independent route

Fig-6 : User Home

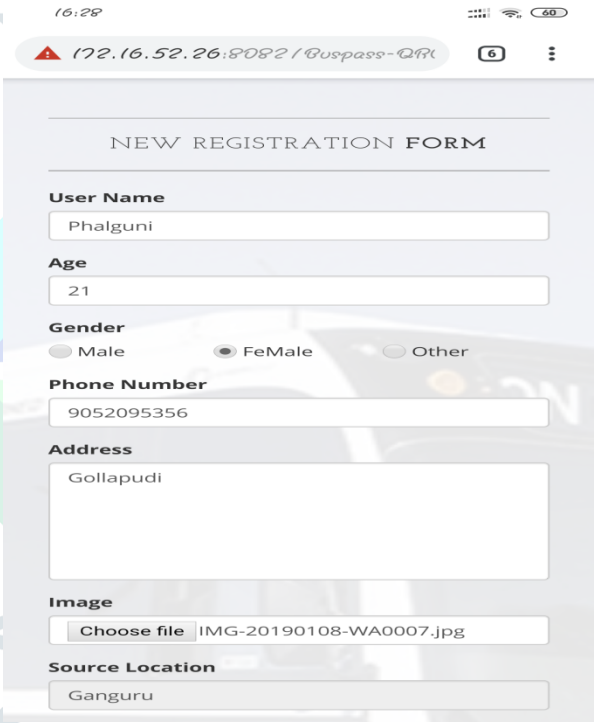


Fig-7 : New Registration

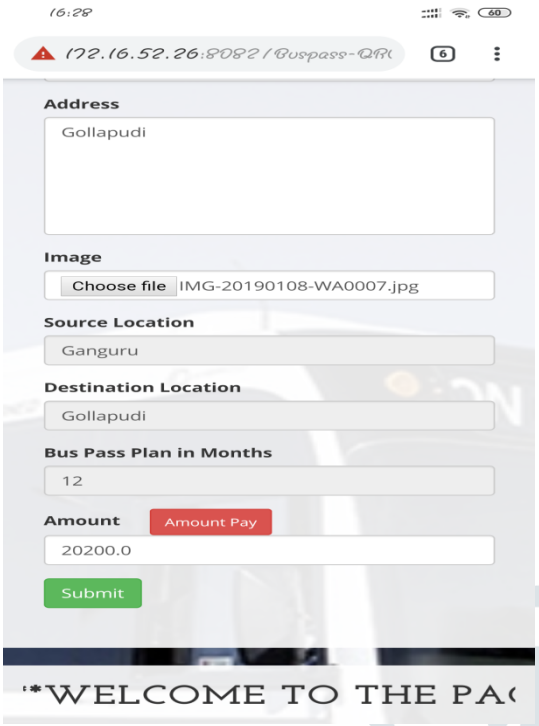


Fig-8 : New Registration

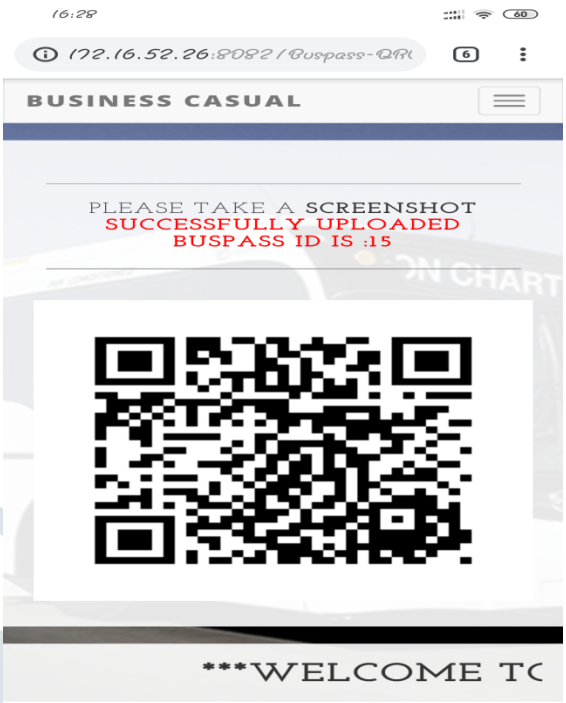
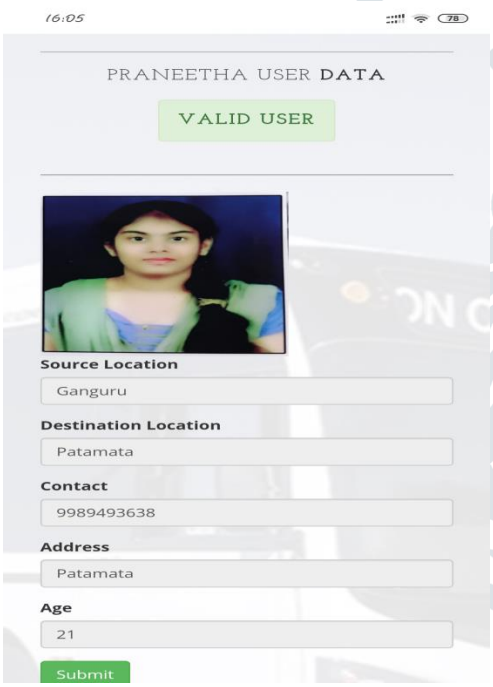


Fig-9 : User QR Code



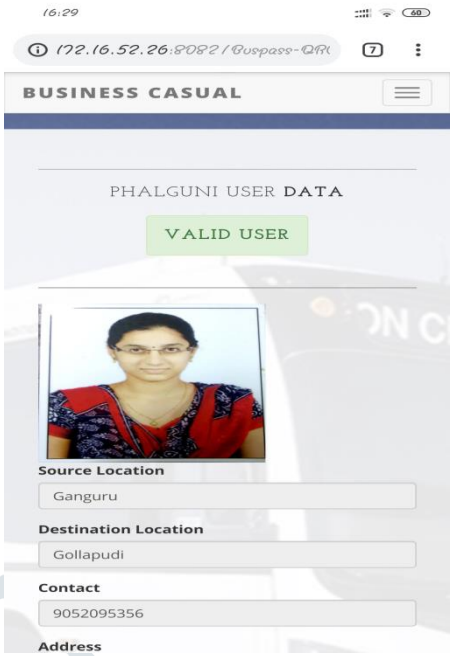


Fig-10,11: Output

GOALS:

- ✓ Reduced entry work
- ✓ Easy retrieval of information
- ✓ Reduced errors due to human intervention
- ✓ User friendly screens to enter the data
- ✓ Portable and flexible for further enhancement
- ✓ Web enabled.
- ✓ Fast finding of information requested

CONCLUSION:

The "Bus Pass Using QR Code" was successfully designed and is tested for accuracy and quality. During this project we have accomplished all the objectives and this project meets the needs of the organization. The developed will be used in searching, retrieving and generating information for the concerned requests.

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