

Intelligent Automation and Security System for Airport Facility

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Abstract In this paper, intelligent automation and security system for airport facility is presented which provide automate airport and airlines system with intelligent security system. Compared to state of the art systems, proposed system is simple to manage with clear all the processes in ease. Therefore proposed system is very useful for security purpose in public places.

Keywords—airport, security, security automation, airline, flight automation (key words)

I. INTRODUCTION

Every year millions of passengers travel around the world through airways. They all have to go through long and tiring duration of security checks, check in & check out, boarding & logging process. Also the airport or airlines authorities have to manage and focus on wide range of ongoing process, its also became very hectic & complex for them to manage and continue it. In this paper we present an idea automates the various manual procedures that occur during Check-In and Check-Out processes at airports and maintain security standards. Our main purpose is to design and develop as an intelligent automation security system as combination web and app that integrates the passengers devices to the airport to airline authorities which will give real time up dates regarding a and very step to the check in procedure, boarding, security scanning, baggage tracking to check out process and reduces the workload, time, capital and making it more efficient & simpler for the user & authorities.

II. PROPOSED SYSTEM

This system consists of 2 views:

1. USER VIEW

In terms of user perspective our project can be used by the users from check into check out process, where they will be connected with the airport facility and get real time up dates and notifications services. They will also provide with services such as navigation, virtual guide, security checks

and tracking updates. After being an automated system, it will be help fulforth users access all the services provided by the airport facility. Users can stay connected with the service providers and can access services or facilities in need.

2. DEVELOPER VIEW

In terms of developer's perspective our project will help the airport authorities to manage and maintain all the process on an automated system, from where they will be connected with each customer and can track the man d provide them services in a simple manner and also to security protocols in an ease. After being an automated system developers or authorities can use this to maintain security standard so airports facility and can keep alive track on there cords of each users. It will reduce man power and chance of failing to maintain protocols.

The project functionalities are as follows:

1. REAL TIME NOTIFICATIONS

Users gets connected to our system as they reach airport facility and gets to the initial verification process, and stay connected still they depart. They access and follows all the protocols and services required by the airlines or the authorities, they get timely notified updates and virtual guide.



2. Baggage tracking

Our project will use RFID chips to enable baggage tracking for advanced bag location detection. The tags contain electronically stored information. The baggage tracking

facility will help the user to be guided about this valuable luggage it enables this comfort and convenience and save a lot of hassle for authorities.



Fig.2Baggagetracking

3. Facial Recognition

By adding facial recognition our system will automatically start tracking users as they enter the facility, which will have great impact on the users and the service provides to keep and upto date track records.



4. Real Time Navigation

Our system provide real time navigation and direction to complete our check in checkout process, And to access our facility with virtual tour guidance. It would be very helpful to the users to access the faculty and its services with a greater ease.

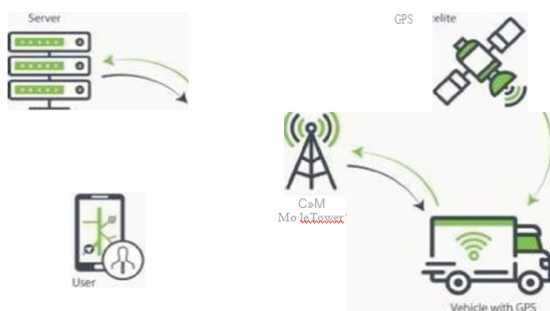


Fig.4RealTimeNavigation

5.QR code scanning and Verification

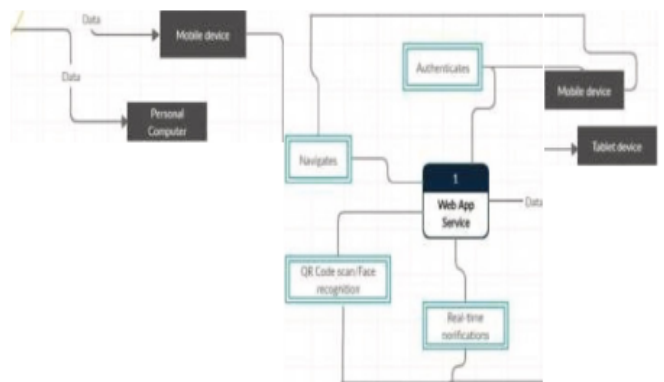
By adding QR code scanning our system will automatically start validating users as soon as they enter the facility, which will have a great impact on the users and the service

provides to keep and up to date validated records. It will slightly increase security standards and maintain protocols.



FUNCTIONLATTY DIAGRAM OF OUR SYSTEM IS AS FOLLOWS

1. ER DIAGRAM



2. DFD DIAGRAM



The requirements for this project are as follows:-

HARDWARE REQUIREMENT

- Rfid Nfc Tag
- Fingerprint Scanner
- Intel I5 And Above

- 2.G Ghz And Above
- 8 Gb Ram And Above
- 2 Gb Vr Ram And Above
- Camera
- Mobile Device (Kitkat And Above)
- Barcode Scanner

SOFTWARE REQUIREMENT

- Android Kit-Kat And Above
- Windows 10 And Above
- Android Studio
- Web Browser
- Anaconda
- Python
- Java
- Firebase
- Vm Ware
- Cloud Services
- Php & Js
- Html, Css, Bootstrap

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III. CONCLUSION

In this paper, intelligent automation and security system for airport facility is presented which provide automate airport and airlines system with intelligent security system. Compared to state of of the art systems, proposed system is simple to manage with clear all the processes in ease. Therefore proposed system is very useful for security purpose in public places.

IV. REFERENCES

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