

## PLATFORM TICKET RESERVATION FOR RAILWAYS USING BIOMETRICS

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**Abstract:** In this paper another technique for disconnected stage ticket reservation utilizing biometrics is recommended. This will improve the income gathering and will vanquish the security rupture. Biometrics alludes to measurements identified with human attributes. Biometrics verification (or practical confirmation) is utilized as a part of software engineering as a type of recognizable proof and access control[2]. . Biometric identifiers are regularly ordered as physiological versus behavioral qualities. Physiological attributes are identified with the state of the body Index terms- Biometrics, Security, Biometrics Applications, railway ticketing.

### 1. Introduction

Biometrics alludes to measurements identified with human attributes. Biometrics confirmation is utilized as a part of software engineering as a type of recognizable proof and access control. It is likewise used to recognize people in bunches that are under reconnaissance. Biometric identifiers are then particular, Measurable attributes used to mark and depict people. Biometric identifiers are regularly classified as physiological versus behavioral attributes. Physiological qualities are identified with the state of the body[1] . Cases incorporate, yet are not constrained to unique finger impression, palm veins, confront acknowledgment, DNA, palm print, hand geometry, iris acknowledgment, retina and smell/fragrance. Behavioral qualities are identified with the example of conduct of a man, including however not constrained to writing cadence, stride, and voice. A few specialists have authored the term conduct measurements to more customary methods for get to control incorporate token-based recognizable proof frameworks, for example, a driver's permit or international ID, and learning based ID frameworks, for example, a secret key or individual ID number. Since biometric identifiers are novel to people, they are more solid in confirming character than token and learning based techniques; be that as it may, the gathering of

biometric identifiers rises security worries about a definitive utilization of this data[3].

#### 1.1 Fingerprint recognition

A live acquisition of a person's fingerprint.

Dots (very small ridges).

Space between two temporarily divergent ridges.

Spurs (a notch protruding from a ridge)

Bridges (small ridges joining two longer adjacent ridges),

crossovers (two ridges that cross each other[4].

#### 1.2 Facial Recognition

Face capture

Find face in image

Extract features (store template).

Compare templates

Declare templates.

#### 1.3 Hand geometry

Hand figure or hand geometry is an automated measurement of many dimensions of the hand and fingers[5-6].

#### 1.4 Iris recognition

Iris scanning measures the iris pattern in the colored part of the eye.

#### 1.5 Retina recognition

Images back of the eye and compares blood vessels with existing data.

#### 1.6 Behavioral recognition

Speaker voice recognition

Signature/handwriting

Keystroke/patterning

## 2. Literature survey

John Michael (Mike) McConnell, a previous bad habit chief of naval operations in the United States Navy, a previous Director of U.S. National Intelligence, and Senior Vice President of Booz Allen Hamilton advanced the improvement of a future ability to require biometric confirmation to get to certain open systems in his keynote discourse at the 2009 Biometric Consortium Conference [8]. A fundamental preface in the above proposition is that the individual that has particularly verified themselves utilizing biometrics with the PC is in reality additionally the specialist performing conceivably malevolent activities from that PC. In any case, if control of the PC has been subverted, for instance in which the PC is a piece of a botnet controlled by a programmer, at that point information of the character of the client at the terminal does not tangibly enhance organize security or help law implementation exercises. As of late, another way to deal with biometric security was created; this technique examines the whole collection of prospects to ensure a superior distinguishing proof of this prospect. This technique is not all around acknowledged in light of the fact that it is exceptionally intricate and prospects are worried about their protection[9-10].

## 3. Existing system

The present type of ticketing framework is way mind boggling structure and brimming with non replaceable contentions. The framework is loaded with issues, for example, no confirmation of security, cost gathering, observing of particulars and so on. The procedure takes part of time and in this manner brings about wealth of issues. The procedure is an obsolete type of ticket law and ought to be supplanted with to some degree more up to date innovation related technique. In this procedure bit of paper is exhibited as ticket which is at high shot of being lost. Additionally there is a prerequisite of manual ticket analyst for inspecting the tickets which is exceedingly great condition for defilement and other false strategies[11].

Issues came about of the present frame –

This process doesn't restrict the passage of unapproved individual inside the railroad grounds.

This process doesn't constrain the measure of income to be gathered quite the way toward ticketing in the railroads[12].

No records of subtle elements of record accessibility is kept up all through; therefore at specific purpose of time no record is available[13].

## 4. Proposed work

In this paper a substitute strategy for Present ticketing framework is proposed with the assistance of Biometrics. The entire procedure will help in decreasing security rupture and improving income gathering. The ticket counter will have every one of the information put away identified with Aadhar card introduces in the database of Indian government[14]. For creating a ticket the Aadhar card points of interest will be connected to the biometrics utilizing unique mark of specific individual requesting ticket and online ticket will be issued which will be spared in the database and there will be no utilization of prior type of ticket as bit of paper. At the passage of railroad intensify, another biometrics will be introduced which will read the unique mark of specific individual who has acquired the ticket. The database will coordinate with the past record of bought ticket and will concede access to the individual if there should be an occurrence of coordinating. In this manner, the specific individual will be allowed access inside the grounds [15].

### 4.1 Merits over the proposed work

This process will help in upgrading the income accumulation concerning entering inside the railroad grounds one will require a ticket which was before not an issue[16].

This process will help in diminishing security ruptures as the grounds will be security secured and the passageway will be watched utilizing arms men and other security innovations.

Government will have the capacity to keep a tally of individual present at a specific timeframe consequently will help in Recognizing people if there should be an occurrence of any wrongdoing or crisis sort of circumstance.

This will help in cost viability of all through procedures as there will be no need of voyaging ticket analyst in the process so government can use the same in other employment.

## 5. Conclusion

More or less this paper is a far productive and less expensive type of disconnected ticket reservation. Where the present ticketing framework requires more observation, support and economy, the proposed technique is mix of separation in these yet in addition is new innovation based framework which will be considered as new point of reference in ticketing arrangement of Indian railroads.

## References

- [1] Udayakumar R., Kaliyamurthie K.P., Khanaa, Thooyamani K.P., Data mining a boon: Predictive system for university topper women in academia, *World Applied Sciences Journal*, v-29, i-14, pp-86-90, 2014.
- [2] Kaliyamurthie K.P., Parameswari D., Udayakumar R., QOS aware privacy preserving location monitoring in wireless sensor network, *Indian Journal of Science and Technology*, v-6, i-SUPPL5, pp-4648-4652, 2013.
- [3] BrinthaRajakumari S., Nalini C., An efficient cost model for data storage with horizontal layout in the cloud, *Indian Journal of Science and Technology*, v-7, i-, pp-45-46, 2014.
- [4] BrinthaRajakumari S., Nalini C., An efficient data mining dataset preparation using aggregation in relational database, *Indian Journal of Science and Technology*, v-7, i-, pp-44-46, 2014.
- [5] Khanna V., Mohanta K., Saravanan T., Recovery of link quality degradation in wireless mesh networks, *Indian Journal of Science and Technology*, v-6, i-SUPPL.6, pp-4837-4843, 2013.
- [6] Khanaa V., Thooyamani K.P., Udayakumar R., A secure and efficient authentication system for distributed wireless sensor network, *World Applied Sciences Journal*, v-29, i-14, pp-304-308, 2014.
- [7] Udayakumar R., Khanaa V., Saravanan T., Saritha G., Retinal image analysis using curvelet transform and multistructure elements morphology by reconstruction, *Middle - East Journal of Scientific Research*, v-16, i-12, pp-1781-1785, 2013.
- [8] Khanaa V., Mohanta K., Saravanan. T., Performance analysis of FTTH using GEAPON in direct and external modulation, *Indian Journal of Science and Technology*, v-6, i-SUPPL.6, pp-4848-4852, 2013.
- [9] Kaliyamurthie K.P., Udayakumar R., Parameswari D., Mugunthan S.N., Highly secured online voting system over network, *Indian Journal of Science and Technology*, v-6, i-SUPPL.6, pp-4831-4836, 2013.
- [10] Thooyamani K.P., Khanaa V., Udayakumar R., Efficiently measuring denial of service attacks using appropriate metrics, *Middle - East Journal of Scientific Research*, v-20, i-12, pp-2464-2470, 2014.
- [11] R.Kalaiprasath, R.Elankavi, Dr.R.Udayakumar, Cloud Information Accountability (Cia) Framework Ensuring Accountability Of Data In Cloud And Security In End To End Process In Cloud Terminology, *International Journal Of Civil Engineering And Technology (Ijciety)* Volume 8, Issue 4, Pp. 376–385, April 2017.
- [12] R.Elankavi, R.Kalaiprasath, Dr.R.Udayakumar, A fast clustering algorithm for high-dimensional data, *International Journal Of Civil Engineering And Technology (Ijciety)*, Volume 8, Issue 5, Pp. 1220–1227, May 2017.
- [13] R. Kalaiprasath, R. Elankavi and Dr. R. Udayakumar. Cloud. Security and Compliance - A Semantic Approach in End to End Security, *International Journal Of Mechanical Engineering And Technology (Ijmet)*, Volume 8, Issue 5, pp-987-994, May 2017.
- [14] Thooyamani K.P., Khanaa V., Udayakumar R., Virtual instrumentation based process of agriculture by automation, *Middle - East Journal of Scientific Research*, v-20, i-12, pp-2604-2612, 2014.
- [15] Udayakumar R., Thooyamani K.P., Khanaa, Random projection based data perturbation using geometric transformation, *World Applied Sciences Journal*, v-29, i-14, pp-19-24, 2014.
- [16] Udayakumar R., Thooyamani K.P., Khanaa, Deploying site-to-site VPN connectivity: MPLS VsIPSec, *World Applied Sciences Journal*, v-29, i-14, pp-6-10, 2014.

