



AUTOMATION OF THE ACCESS SYSTEM FOR CARS

Meryem Amanovna Gurbanberdiyeva*

Oguz Han Engineering and Technology University of Turkmenistan, Ashgabat, Turkmenistan.

*Corresponding author

DoI: <https://doi.org/10.5281/zenodo.7782358>

Special attention is paid to the development of the digital economy in the country. This is evidenced by the approval of the relevant Resolution of the President of the Republic of Turkmenistan “The State Program for the Development of the Digital Economy in Turkmenistan for 2021-2025” and the Action Plan for the implementation of this program.

Nowadays, Radio Frequency (RF) was one of the main technologies in the world. This technique applied with tags was very famous and useful methods to do security control, access control or tracking system. Radio-frequency identification (RFID) is the wireless non-contact use of Radio Frequency Electromagnetic Fields to transfer data. It is basically used for the purposes of automatically identifying and tracking tags attached to objects. RFID technology uses RFID tags, RFID reader and RFID antenna. The application can be used for managing and controlling various reports and operations of parking system. By using this software, the check-ins and check-outs will be in control of the RFID tags, readers and barriers. With this software and technology, the check-ins and check-outs can be done in a fast manner by avoiding the traffic jam problem near the gates of parking lots. Drivers will not have to wait for the identification of their vehicles as it will be done automatically by the tags that are provided to them. This will also ensure security as only the registered tags (users) are allowed to enter.

The RFID parking management system is actual and control the vehicles. This vehicle parking system power consumption can be reduced. It enables user to operate an unattended parking barrier with control parking access. This system is ideal for apartments and condos, gated communities, business parking lots and garages, university parking area. It offers almost efficiency, convenience, safety and the reliability. It is good solution for today’s car parking and reduction of traffic problem.

Advantages:

1. No need for physical contact between data carrier and communication device.
2. Tags can be used repeatedly.
3. Low maintenance cost.
4. Switch is used in place of RFID reader

Applications:

1. Autonomous sensors military and aerospace embedded software applications.
2. Communication application.
3. Industrial automation and process control software.
4. Mastering the complexity of applications.
5. Reduction of product design time.
6. Real time processing of ever increasing amounts of data.

The 21st century is a century of technology. This century is marked by the rapid growth of innovations – the invention of new perfect form. It is worth noting that the limitations of the innovative technologies created by the rapid development of scientific and technological progress. Therefore, in the age of modern innovation “Automation of the access system for cars” is the one of the aspects of our lives are being technological.