[IOT and QR/Bar Code Based Toll Booth Manager System](http://nevonprojects.com/iot-based-toll-booth-manager-system/%22%20%5Ct%20%22_blank%22%20%5Co%20%22IOT%20Based%20Toll%20Booth%20Manager%20System)

 Managing multiple toll booths is a very complicated task. We here propose a QR/Bar code based toll booth system that is monitored over IOT. The Internet server maintains all the data of user accounts and also their balance. All vehicle owners would possess an QR/Bar code based tags that stores their account number. Our system at toll booths will monitor the tags scanned when a car arrives at the toll booth. The system now connects to the on embeded server to check if the tag is valid and if valid what is the balance. If user balance is sufficient, the user balance is deducted online and intranet web system sends signal back to the card scanner system that the user has been billed. On receiving this signal the system operates a Servo motor to open the toll gate for that car. The system is controlled by a microcontroller to achieve this purpose. The microcontroller uses wifi connection to connect to the intranet through which system interacts with web server to perform the online verification process. This system thus automates the entire toll booth collection and monitoring process with ease using QR/Barcode tags IOT based system.

**Hardware Specifications**

* Microcontroller
* Wifi Modem
* LCD Display
* Transformer
* Resistors
* Capacitors
* Diodes
* QR/Bar Code reader over Android app
* Bluetooth Modem
* Servo Motor

**Software Specifications**

* PICC Compiler
* MC Programming Language: C

**BLOCK DIAGRAM**

