

MOBILE VIRTUAL CARD APP

FEATURES

- Mobile APP supports Bluetooth and QR Code technology at the same time
- Scramble QR code: Access QR code scrambles every 5 seconds to preventing others copying
- Bluetooth : Three operation mode : Button , Shaking and Hands-free
- Can access doors , turnstile , lift , washroom , car park , locker , and different facilities, etc.
- Environmental friendly and sustainable as reduce card production and waste
- Hygienic solution as totally contactless
- Android and iOS available



Mobile Virtual Card APP

SCRAMBLE QR CODE

- Access QR code changes in every second to prevent being copied
- Adjustable screen captured QR code validation time, default 5 seconds

BLUETOOTH

- Three operation mode: Button, Swing and Hands-free
- Use define active scan range for individual operation mode

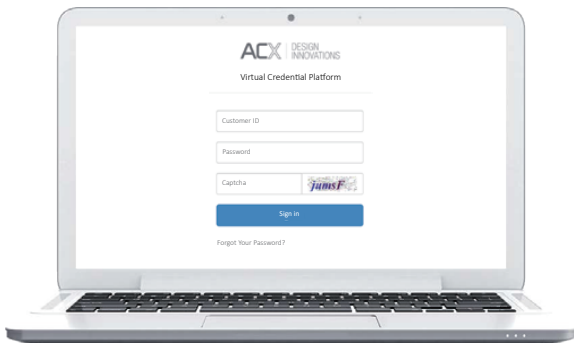


Scramble QR Code Access

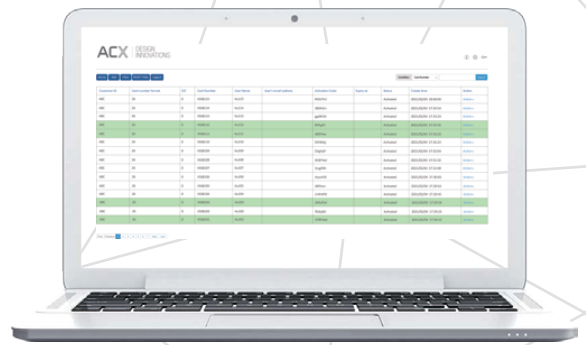


Bluetooth Access

OPERATION FLOW



Admin login in web platform



Create virtual card for user



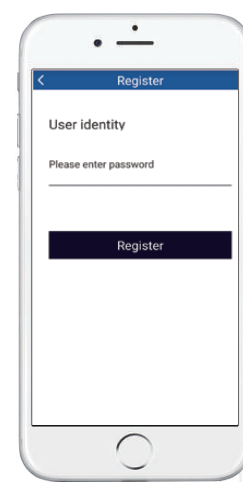
User download
Virtual Card App



User received card
activation code via email



User can access via
mobile virtual card



User enter
activation code

ACX VIRTUAL CARD PLATFORM (VCP)

INTRODUCTION

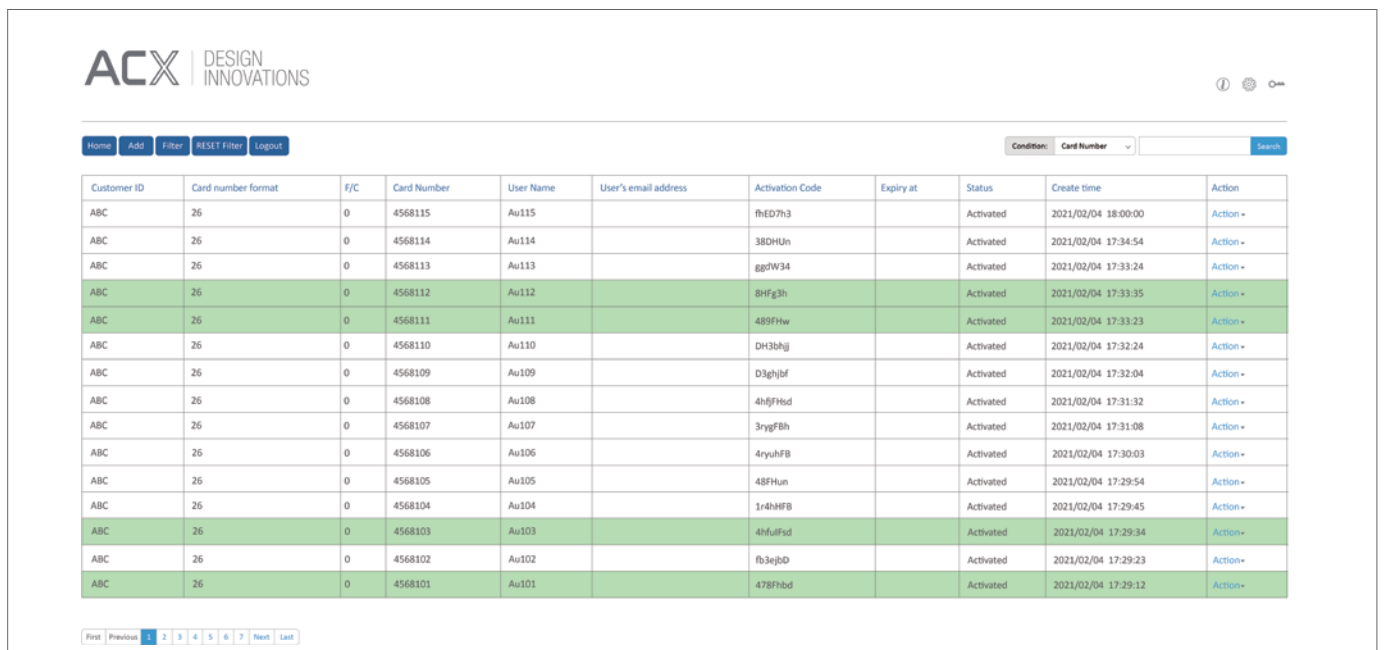
ACX Virtual Card Platform is a web based application which can be installed on internet or intranet. Admin can create, delete, expire and re-use the virtual card.

The unique activation code will be sent to user by email. Once entered the activation code in the ACX mobile virtual card APP, user can access with Bluetooth or Scramble QR Code.

FEATURES

- VCP is a WEB based application on internet or intranet
- Admin password for operation
- Engineer password for Bluetooth reader configuration
- Virtual Card number has expiry date
- Virtual Card number can be re-used
- On-line record by different filter conditions
- Max. 64 bits card number length and any card number format
- Unique activation code for each virtual card number generation

OPERATION SCREEN



ACX | DESIGN INNOVATIONS

Home Add Filter RESET Filter Logout

Condition: Card Number Search

| Customer ID | Card number format | F/C | Card Number | User Name | User's email address | Activation Code | Expiry at | Status | Create time | Action |
|-------------|--------------------|-----|-------------|-----------|----------------------|-----------------|-----------|-----------|---------------------|----------|
| ABC | 26 | 0 | 4568115 | Au115 | | fhED7h3 | | Activated | 2021/02/04 18:00:00 | Action - |
| ABC | 26 | 0 | 4568114 | Au114 | | 38DHUn | | Activated | 2021/02/04 17:34:54 | Action - |
| ABC | 26 | 0 | 4568113 | Au113 | | ggPW34 | | Activated | 2021/02/04 17:33:24 | Action - |
| ABC | 26 | 0 | 4568112 | Au112 | | 8Hfg3h | | Activated | 2021/02/04 17:33:35 | Action - |
| ABC | 26 | 0 | 4568111 | Au111 | | 489FHw | | Activated | 2021/02/04 17:33:23 | Action - |
| ABC | 26 | 0 | 4568110 | Au110 | | DH3bhj | | Activated | 2021/02/04 17:32:24 | Action - |
| ABC | 26 | 0 | 4568109 | Au109 | | D3ghjbf | | Activated | 2021/02/04 17:32:04 | Action - |
| ABC | 26 | 0 | 4568108 | Au108 | | 4hJfHsd | | Activated | 2021/02/04 17:31:32 | Action - |
| ABC | 26 | 0 | 4568107 | Au107 | | 3rygFBh | | Activated | 2021/02/04 17:31:08 | Action - |
| ABC | 26 | 0 | 4568106 | Au106 | | 4ryuhFB | | Activated | 2021/02/04 17:30:03 | Action - |
| ABC | 26 | 0 | 4568105 | Au105 | | 48FHun | | Activated | 2021/02/04 17:29:54 | Action - |
| ABC | 26 | 0 | 4568104 | Au104 | | 1r4hHFB | | Activated | 2021/02/04 17:29:45 | Action - |
| ABC | 26 | 0 | 4568103 | Au103 | | 4hJfHsd | | Activated | 2021/02/04 17:29:34 | Action - |
| ABC | 26 | 0 | 4568102 | Au102 | | fh3ejbD | | Activated | 2021/02/04 17:29:23 | Action - |
| ABC | 26 | 0 | 4568101 | Au101 | | 478Fhbd | | Activated | 2021/02/04 17:29:12 | Action - |

First Previous 1 2 3 4 5 6 7 Next Last

Admin can edit, delete, deactivate, reuse and copy virtual card in the virtual card web platform.

TECHNICAL SPECIFICATION

| Technology | NFC | Bluetooth | Fixed QR | Scramble QR |
|----------------------------|---|---|---|--|
| Contactless | RFID | | Image | |
| Frequency | 13.56MHz | 2.45GHz | NA | |
| Data Communication | Peer to Peer | | Single way | |
| Data Security | Secure on communication, random key encryption | | Not Secure | Secure on the QR image changes in every second |
| Min. Scan Range | 1cm- 2cm | 0.5meter | 2cm- 4cm | |
| Typical Scan Range | 3cm- 7cm | 1meter- 3meters | 4cm- 20cm | |
| Max. Scan Range | 10cm | 5meters | 2meters | |
| Scan Range Adjustable | NA | Mobile & Reader | NA | |
| Application Advantages | (Short Range) Door Access, Lift Access | (Short, Middle & Long Range) Door Access, Lift Access, Carpark | (Short, Middle Range) Door Access, Lift Access, Carpark | |
| Mobile Hardware Limitation | The mobile must have NFC feature, some iPhone OS cannot support NFC | Different Bluetooth chip set performance on different Andriod mobile manufacturer is different. iPhone Bluetooth performance is good. | No Limitation | |
| Response Time | Less than 0.2 sec | | Less than 0.1 sec | |
| Run on Background Mode | CAN | | CANNOT | |
| When Access | Turn on APPS | | | |
| Use Mobile Internet Data | NOT NECESSARY | | | |
| ACX Mobile APPS Advantages | Combines NFC, Bluetooth & Scramble QR code technology in the same mobile apps | | | |