PORTFOLIO

MUHAMMAD RIFKY ZENA YUDHA

Computer Science Fresh Graduate
Software and Mobile Testing Enthusiast
Data Analyst

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About Me

I am a Computer Science graduate from Bina Nusantara University with a strong passion for data analytics, software testing, and game development. My experience includes a hands-on internship at Bank Negara Indonesia (BNI), where I contributed to the testing and documentation of various mobile applications. I am eager to continue to grow in the software engineering field while exploring opportunities to learn and being more involved.

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https://rifkyzena-dev.netlify.app

Technologies

Programming Languages

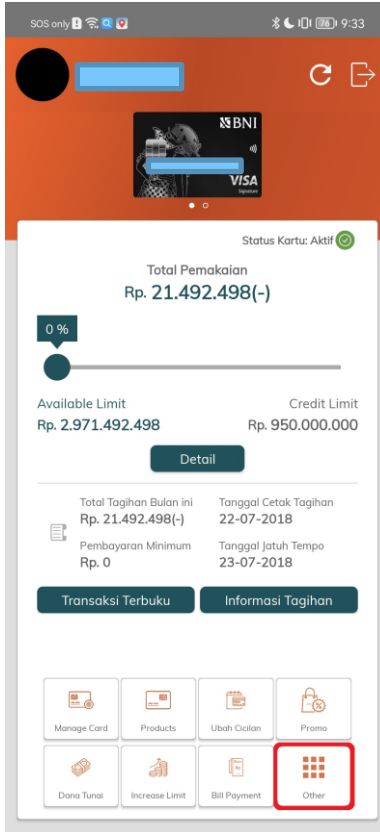Python, C#, Java, JavaScript

…

Frameworks

TensorFlow, Flask

…
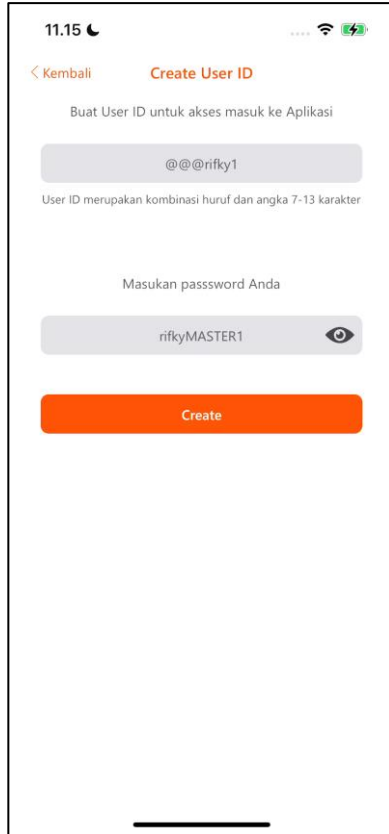
Tools

Postman, Pandas, Matplotlib, Seaborn, Jira, Selenium, Playwright, JMeter, Unity, Microsoft Word, Microsoft Excel
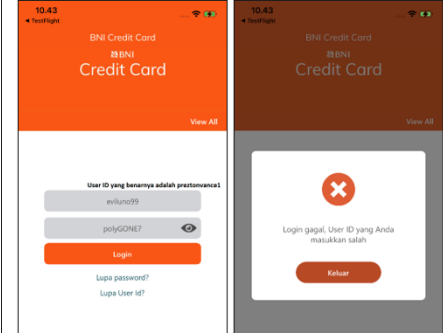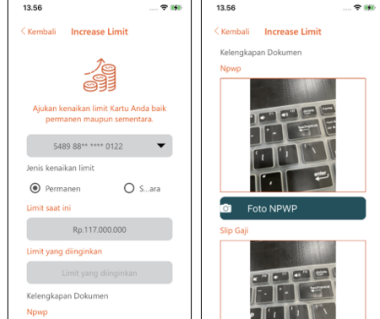
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Internship Task 1 – Testing BNI Credit Card

BNI Credit Card is an application used by BNI customers to manage their credit card accounts. There are 3 phases of step testing carried out to find bugs/defects/errors in the application, starting from the Registration, Login, and Main Page menu steps. The BNI Credit Card application was tested on 3 types of mobile devices, namely Android, Huawei, and IOS.

Testing is done to test the integration of the entire system before the update for the implementation of the User ID feature during registration and when customers access the application.

Internship Task 1 – Testing BNI Credit Card

8.2.5   Login : ORG 200

8.2.5.1   Login user ID tidak sesuai

8.2.5.1.1   Preparations
- Sudah meregistrasikan Kartu Kredit BNI Corporate / Business untuk membuat akun pada device.
- User ID dan password yang terdaftar pada device.

8.2.5.1.2   Exit Acceptance Criteria
- Muncul notifikasi dan login gagal

8.2.5.1.3   Procedure
- Buka aplikasi Mycard setelah melakukan registrasi akun
- Input User ID salah
- Input password benar
- Klik login

8.2.5.1.4   Output

8.2.5.1.4.1   Mycard

8.2.7.70   Increase limit tanpa menginput limit yang diinginkan (permanen)

8.2.7.70.1   Preparations
- Sudah mendaftarkan kartu kredit BNI menjadi akun pada device dan melakukan login
- Foto NPWP dan foto slip gaji

8.2.7.70.2   Exit Acceptance Criteria
- Increase limit gagal

8.2.7.70.3   Procedure
- Masuk ke menu increase limit
- Pilih nomor kartu
- Tidak menginput limit yang diinginkan
- Pilih jenis kenaikan limit permanen
- Input foto NPWP
- Input foto slip gaji
- Klik persetujuan syarat & ketentuan
- Klik submit

8.2.7.70.4   Output

8.2.7.70.4.1   Mycard

The Testing document has a lot of supporting information, such as Business Requirements, Document Authorization, Test Plan, Test Type, before then listing the attachments which are divided into Preparation, Exit Acceptance Criteria, Procedure, and then output.

Internship Task 2 – BNI TapCash Go Testing
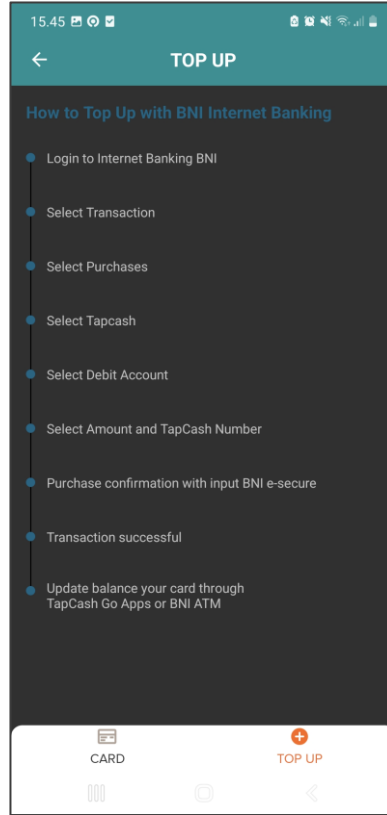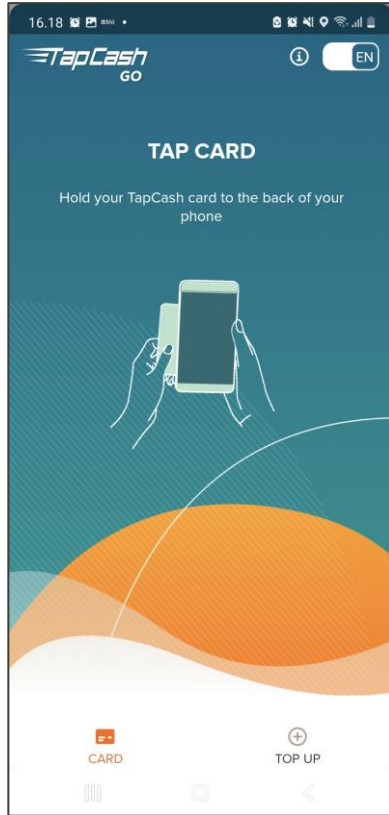
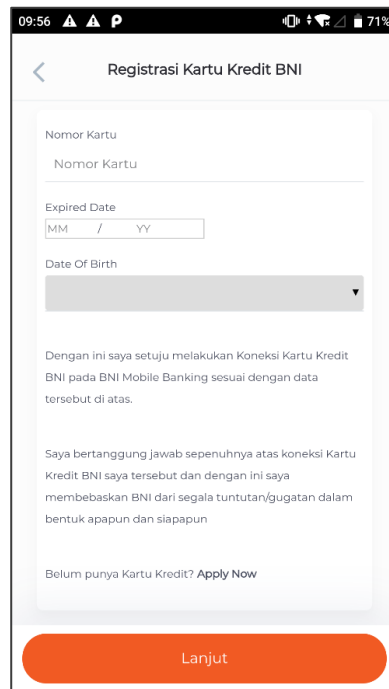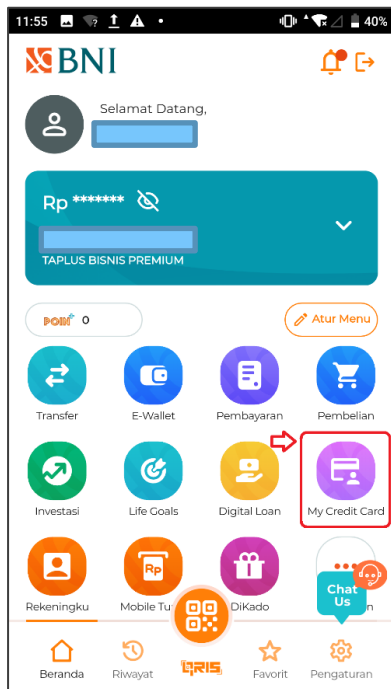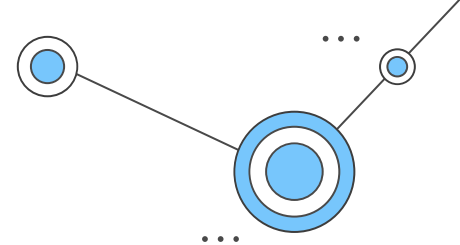TapCash Go is a BNI application used by Electronic Money card users to update their balance. Currently, the TapCash Go application can be used by iOS, Huawei, and Android users equipped with two languages, Indonesian and English.

The TapCash Go application still does not have a Dark Mode feature, so a series of tests were carried out to test the Dark Mode feature before launching to the wider user community.

Internship Task 2 – BNI TapCash Go Testing

Test Case Scenario is done for all features, functions, and pages contained in TapCash Go starting from the Main Screen, Top Up Process, Inquiry, Balance Update, to Error Message. In addition to ensuring the features work as expected, typos and visual bugs are also recorded and reported to the development team.
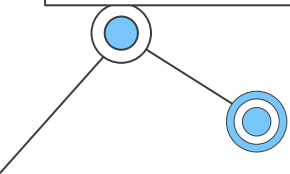
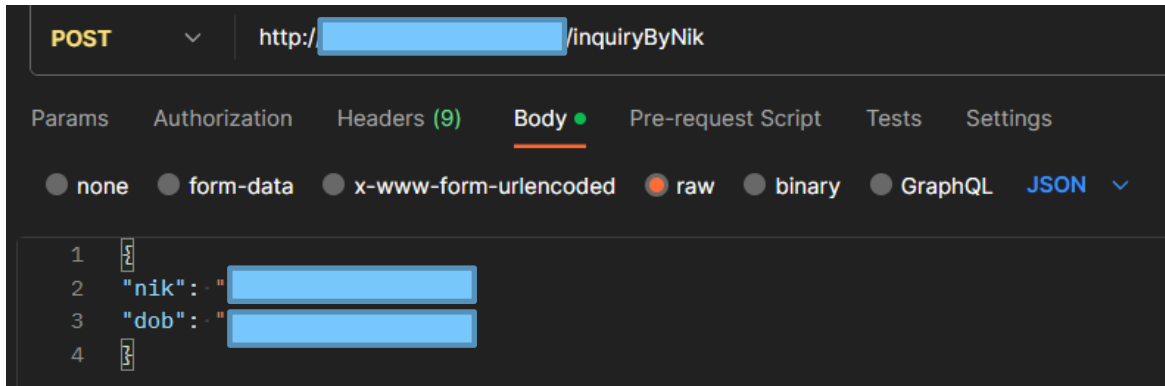# Internship Task 3 – Response 403 of Service Inquiry

There is an increased response with code 403 on the monitoring dashboard for the MyCredit Card feature in BNI Mobile Banking, specifically on the "Inquiry by NIK" endpoint. Every time a user clicks on the My Credit Card feature, the system will check whether the user has a digital credit card that has not been activated.

This 403 code increase occurs when the user's NIK data is not found, so the My Credit Card menu display will be different. To prevent an increase in errors and excessive resource usage, it is necessary to test and adjust the Cardlink Service regarding this 403 code response.

Internship Task 3 – Response 403 of Service Inquiry

POST http:/ _____ /inquiryByNik

Params | Authorization | Headers (9) | **Body** ● | Pre-request Script | Tests | Settings

○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL **JSON** ∨

```
1  {
2    "nik":"_____"
3    "dob":"_____"
4  }
```

"hpNumber": "0
"blockCode": "
"org": "100",
"homePhone": "
"customerNumbe
"type": "070",
"expiryDate":
"nik": "327101
"postingFlag":
"dob": "1982-0
"reffNumber":
"creditLimit":
"cardNumber":
}
],
"message": "Inquiry Sukses"
}

Database: mycardmbank Table: mycard_service_log Data Query*

mycardmbank.mycard_service_log: 61,045 rows total (approximately), limited to 1,000 | Next | Show all | Sorting (1) | Columns

id	request_method	request_address	request	response	date
61,172	Inq By NIK	192.168.151.65	{nik=3271********0003, dob=***...	{code=200, data=[{"hpNumber":"08211114590...	2023-10-10 16:56:30
61,171	Inq By NIK	192.168.151.65	{nik=3271********0003, dob=***...	{"request":200,"result":"{"SOAC002":{"BNSOA_...	2023-10-10 16:56:30
61,170	Inq By NIK	192.168.151.65	{nik=3271********0003, dob=***...	{"request":200,"result":"{"SOAC002":{"BNSOA_...	2023-10-10 16:56:30
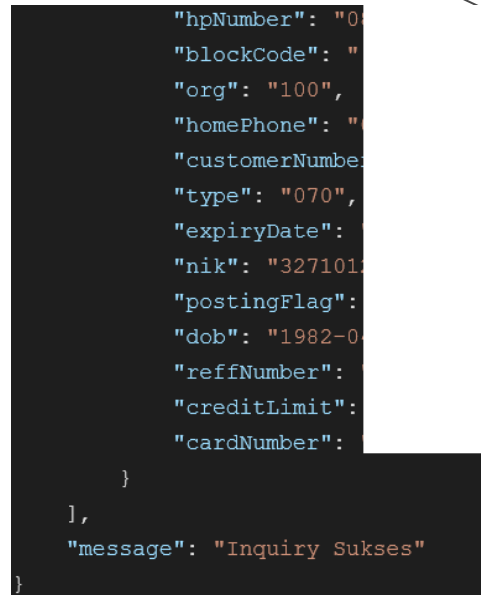
2023-10-02 13:28:27.543 [http-nio-46000-exec-3] INFO i.co.bni.cgt.lib.utilities.ApiLogger - requestId|b3546aa5-5210-4f66-a6ee-61404ab69a4d|remoteAddr|10.70.131.219|host|192.168.150.226:46000|date|2023-10-02 13:28:27.000|method|POST|url|/inquiryByNik|userAgent|PostmanRuntime/7.33.0|contentLength|53|contentType|application/json|statusCode|200|responseTime|152 ms|

When making an inquiry, if the data is found then the response will show a response of 200 in the Postman application the JSON data will also appear, as well as in the HeidiSQL application.
If it doesn't exist then the result will show a response of 403.

# Internship Task 4 – EDC Reader Parkee Testing
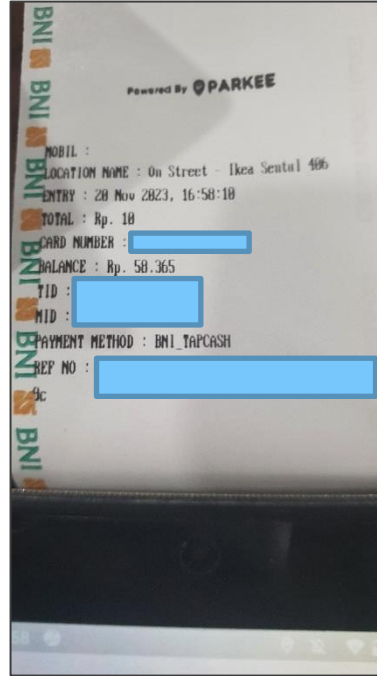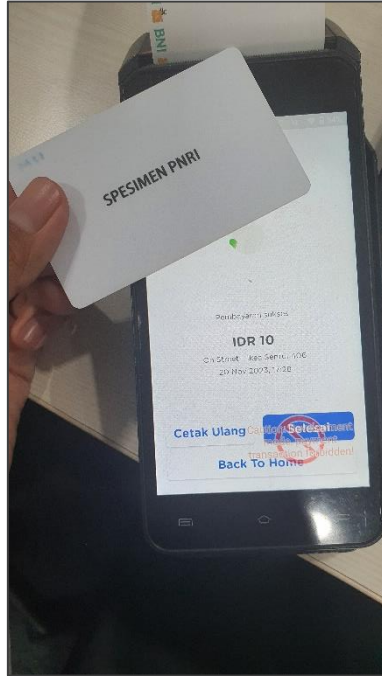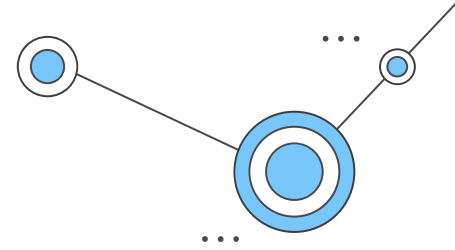
PT Inovasi Anak Indonesia (Parkee) is BNI's new partner working as an integrator for TapCash acceptance at several parking lots. This partner uses three types of readers for payment, which require special certifications and specifications in order to read TapCash cards, with the Ingenico EDC equipped with a touchscreen as one of the main devices.

A series of tests were conducted on these machines, ranging from normal transactions to transactions with special cards such as MSI and Soundrenaline, as well as abnormal transaction scenarios such as insufficient balance. Testing aims to ensure that the application inside the reader can function as expected, such as deducting the balance on a successful transaction or failing the transaction if the card expires.
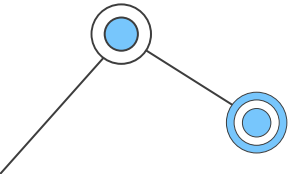
Internship Task 4 – EDC Reader Parkee Testing
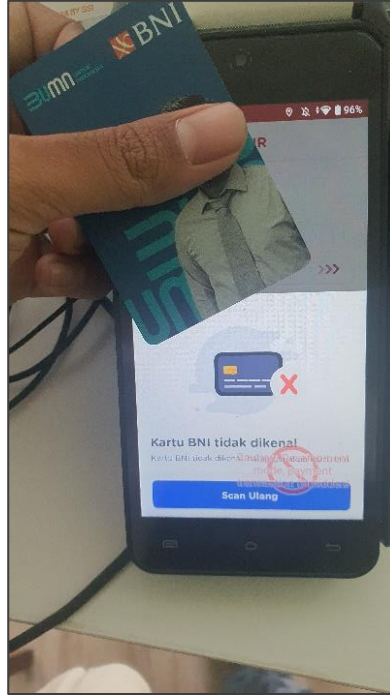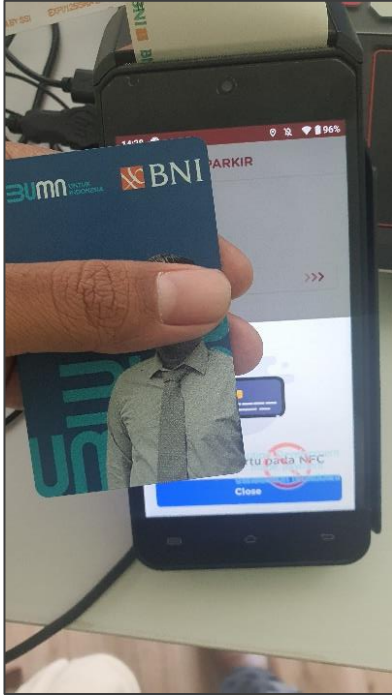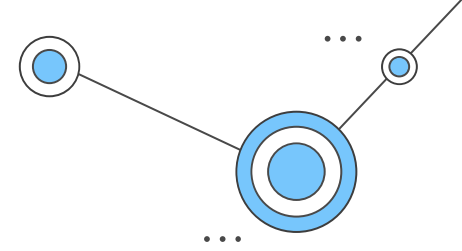
In addition to checking the test results from the application screen or proof of transaction, balance checking can be done using the Tapcash Go application.

For example, there is a transaction test using a different environment card. The different environment card in question is a TapCash card that is already in production and cannot be used for testing. If we use a production card to make transactions on this device, the transaction will fail and the balance will remain the same.
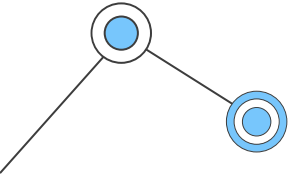
Internship Task 5 – RFID Card Reader MikaParking Testing

Pengaturan

MID :

TID :

Terminal random number :

Marriage code :

SAM slot :

Deduct amount :

Save

◀ Kembali

CODA CPMS V1.6

60   Log Time : 30-11-2023 13:14:38.261
61   Send debit command :
62   Command : 90-34-00-00-25-03-12-01-14-03-82-BA-BB-BA-4F-F9-BC-FE-88-EA-E6-05-3F-AC-08-E3-F7-1A-BE-09-66-91-D3-D8-00-00-00-00-00-00-00-00-18
63   SW1 SW2 = 90 00
64   Response: E6-D1-CB-63-A5-35-2B-D9-4E-79-38-3F-D8-26-3F-DE-5F-29-5A-D5-17-72-EA-79
65
66   Log Time : 30-11-2023 13:14:38.450
67   Verify debit receipt command :
68   Command : 80-11-0D-01-38-75-46-22-00-00-12-27-88-75-46-22-00-00-12-27-96-92-9D-D6-4C-20-5C-4C-E8-E0-7E-17-68-6F-21-55-82-E6-D1-CB-63-A5-35-2B-D9-4E-79-38-3F-D8-26-3F-DE-5F-29-5A-D5-17-72-EA-79
69   SW1 SW2 = 90 00
70   Response: 00-E3-E9-BA-BD-D2-E6-A7-B7-3B-74-00-00-18-00-00-11-00-00
71
72   Log Time : 30-11-2023 13:14:38.680
73   Create settlement file
74   Settlement file created
75
76   Log Time : 30-11-2023 13:14:38.693
77
78   {
79   "DeductAmount": 5,
80   "BalanceBefore": 58350,
81   "BalanceAfter": 58345,
82   "SettlementData": "D01754622000012279601FFFFFB36629A3D120014010000E3EE00E3E90000180000110000BABDD2E6A7B73B74000000000600271035FE6CF71200140101FFFFFB365EBDE10000000000000000000007E73AABC9B3B9FE1000017000011000003510000000079256   ",
83   "StartTime": "2023-11-30T13:14:37.4263756+07:00",
84   "EndTime": "2023-11-30T13:14:38.6938902+07:00"85   }

Another Transaction Device from PT Parkee that needs to be tested is the RFID Card Reader. Before starting the transaction, the built-in application on the device needs to be set-up first by inserting the SAM Card (Secure Access Module) and inputting the required activation code such as Marriage code. The device and application that has been setup with the SAM Card will automatically record every transaction log in a .txt file.

Internship Task 5 – RFID Card Reader MikaParking Testing
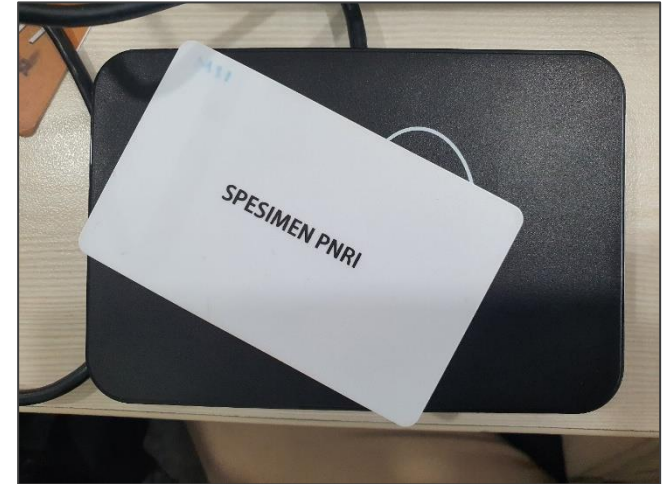
Testing carried out on this device and application for parking payment is in the form of a system integration test. To make a transaction, the TapCash card is simply placed on the card reader. The application will automatically display a notification if the transaction process fails or succeeds.
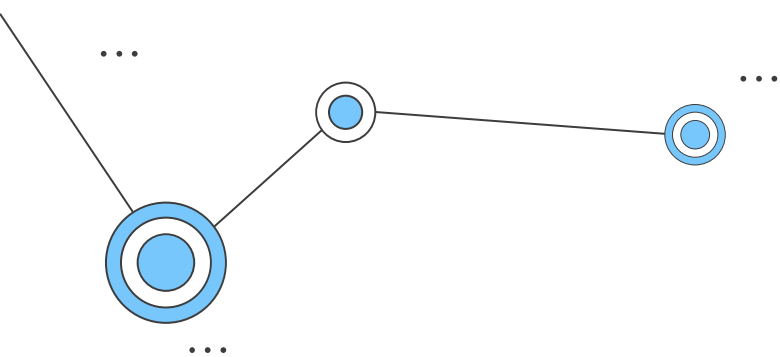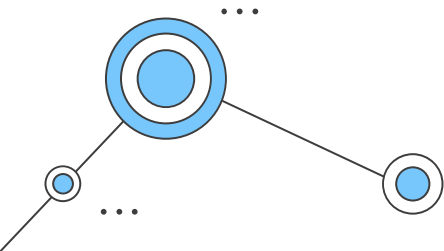
Let's keep in touch!

linkedin.com/in/m-rifky-zena-yudha

rifkyzena26@gmail.com

github.com/rifkyzena