Github: https://github.com/vaterprawira/Project-PAT

# API

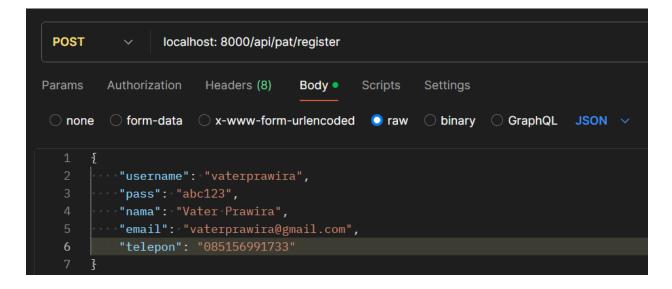
Services	Method	API	Parameters	Deskripsi	
Register	POST	/api/pat/regist er	Username, password, nama, email, no hp	Mobile client dan desktop client login	
Login	POST	/api/pat/login	Username, password	Mobile client dan desktop client membuat akun	
Retrieve user by id	GET	/api/pat/regist er/:id	Username, nama, email, no hp	Menampilkan data user berdasarkan id di mobile client	
Update user by id	PUT	/api/pat/regist er/:id	Username, password, nama, email, no hp	Memperbarui data user berdasarkan id di mobile client	
Create event	POST	/api/pat/event	Event ID, nama konser, artis, deskripsi, kategori tiket, harga, jumlah tiket, lokasi, tanggal, metode pembayaran	Desktop client membuat event	
Update event by id	PUT	/api/pat/event /desktop/:id	Event ID, nama konser, artis, deskripsi, kategori tiket, harga, jumlah tiket, lokasi, tanggal, metode pembayaran	Desktop client memperbarui data event berdasarkan id	
Delete event by id	DELETE	/api/pat/event /desktop/:id	Event ID	Desktop client menghapus event berdasarkan id	
Retrieve all event	GET	/api/pat/event	Event ID, nama konser, artis, deskripsi, kategori tiket, harga, jumlah tiket, lokasi, tanggal, metode	Menampilkan event pada mobile client dan desktop client	

			pembayaran		
Order event	POST	/api/pat/order	Event ID, kategori tiket, jumlah tiket, total harga	Mobile client membuat order	
Retrieve all order	GET	/api/pat/order	Event ID, kategori tiket, jumlah tiket, total harga	Menampilkan order pada desktop client	
Payment event	POST	/api/pat/paym ent	Order ID, metode pembayaran, virtual account, status	Mobile client membuat payment	
Retrieve all payment	GET	/api/pat/paym ent	Order ID, metode pembayaran, virtual account, status	Menampilkan payment pada desktop client	
Retrieve payment by id	GET	/api/pat/paym ent/:id	Order ID, metode pembayaran, virtual account, status	Menampilkan payment berdasarkan id pada mobile client	
Confirm payment	POST	/api/pat/confir m	Order ID, status, kode booking	Membuat confirm	
Retrieve all confirm	GET	/api/pat/confir m	Order ID, status, kode booking	Menampilkan confirm pada desktop client	
Retrieve confirm by id	GET	/api/pat/confir m/:orderId	Order ID, status, kode booking	Menampilkan confirm pada mobile client	

## Register

```
app.post('/api/pat/register/', function (req, res) {
   let data = {
      username: req.body.username,
      pass: req.body.pass,
      nama: req.body.nama,
      email: req.body.email,
      telepon: req.body.telepon
};

let sql = "INSERT INTO register SET ?";
   conn.query(sql, data, function (err, result) {
      if (err) {
            console.error('Error inserting data: ', err);
            res.status(500).json({ error: 'Internal server error' });
            return;
      }
      res.json({
            "status": 200,
            "error": null,
            "response": result
      });
    });
});
```



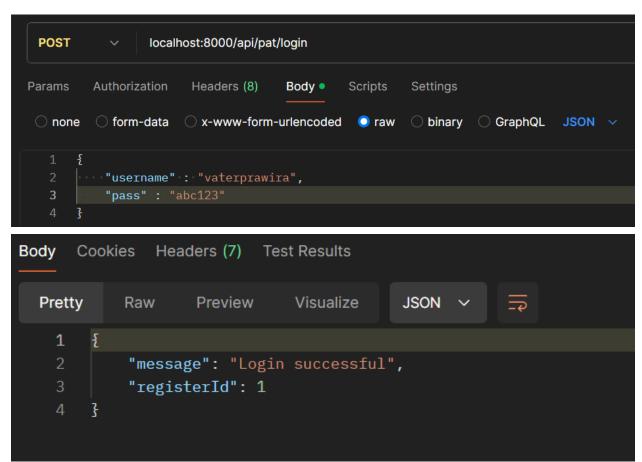
```
Cookies Headers (7) Test Results
Body
          Raw
                          Visualize
                                    JSON ~
 Pretty
                Preview
   1
      {
          "status": 200,
          "error": null,
          "response": {
             "fieldCount": 0,
             "affectedRows": 1,
             "insertId": 1,
             "serverStatus": 2,
             "warningCount": 0,
             "message": "",
  11
             "protocol41": true,
             "changedRows": 0
  12
  13
                                 nama
                     username pass
                                        email
                                                      telepon
```

#### Login

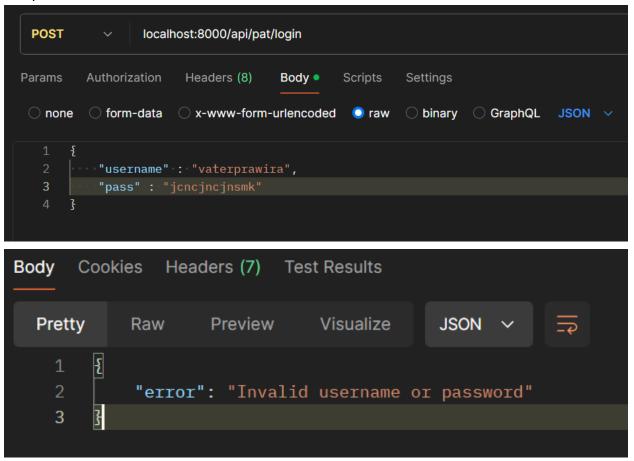
```
app.post('/api/pat/login', function(req, res) {
    let username = req.body.username;
    let password = req.body.pass;

let sql = "SELECT * FROM register WHERE username = ?";
    conn.query(sql, [username], function(err, result) {
        if (err) {
            console.error('Error querying database: ', err);
            res.status(500).json({ error: 'Internal server error' });
            return;
        }

        if (result.length > 0) {
            let user = result[0];
            if (user.pass === password) {
```



Jika password atau username salah



#### Retrieve user by id

```
app.get('/api/pat/register/:id', function(req, res) {
   const userId = parseInt(req.params.id);
   if (isNaN(userId)) {
      return res.status(400).json({ error: 'Invalid user ID' });
   }

let sql = "SELECT * FROM register WHERE id = ?";
   conn.query(sql, [userId], function(err, result) {
      if (err) {
        console.error('Error querying database: ', err);
         res.status(500).json({ error: 'Internal server error' });
      return;
   }
}
```

```
Body Cookies Headers (7) Test Results
                                           JSON V
  Pretty
           Raw
                   Preview
                              Visualize
   1
            "status": 200,
            "error": null,
            "response": {
                "events": [
                        "username": "vaterprawira",
                        "nama": "Vater Prawira",
                        "email": "vaterprawira@gmail.com",
                        "telepon": "085156991733"
  10
  11
  12
  13
  14
```

## Update user by id

```
app.put('/api/pat/register/:id', function(req, res) {
   let id = parseInt(req.params.id);
   if (isNaN(id)) {
      return res.status(400).json({ error: 'Invalid user ID' });
   }

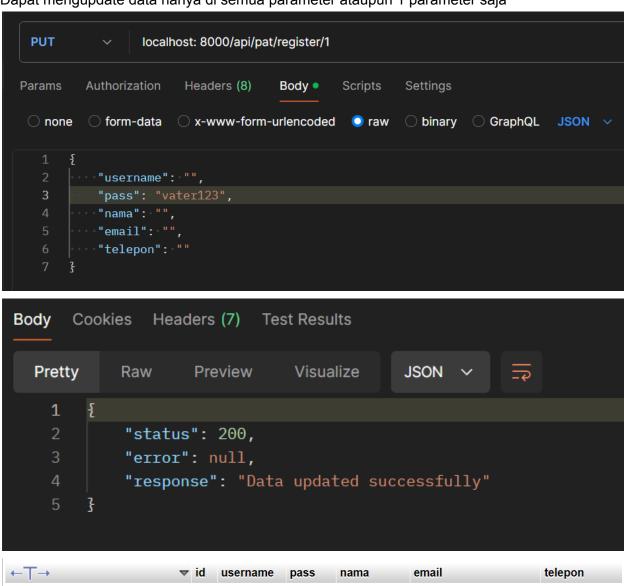
let newData = {
      username: req.body.username,
      pass: req.body.pass,
      nama: req.body.nama,
      email: req.body.email,
      telepon: req.body.telepon
   };

let sql = "UPDATE register SET ";
   let values = [];
```

```
if (newData.username) {
    sql += "username = ?, ";
    values.push (newData.username);
if (newData.pass) {
   sql += "pass = ?, ";
   values.push(newData.pass);
if (newData.nama) {
   sql += "nama = ?, ";
   values.push(newData.nama);
if (newData.email) {
   sql += "email = ?, ";
   values.push(newData.email);
if (newData.telepon) {
   sql += "telepon = ?, ";
   values.push(newData.telepon);
sql = sql.slice(0, -2);
sql += " WHERE id = ?";
values.push(id);
conn.query(sql, values, function(err, result) {
    if (result.affectedRows == 0) {
        res.status(404).json({ error: 'User not found' });
```

```
}
res.json({
    status: 200,
    error: null,
    response: "Data updated successfully"
});
});
});
```

Dapat mengupdate data hanya di semua parameter ataupun 1 parameter saja



#### **Create event**

```
app.post('/api/pat/event', function(req, res) {
       let nama konser = req.body.nama konser;
       let artis = req.body.artis || ''; // Set default value if not
       let deskripsi = req.body.deskripsi;
       let kategoriTiket = req.body.kategori tiket;
       let lokasi = req.body.lokasi;
       let tanggal = req.body.tanggal;
       let metodePembayaran = req.body.metode pembayaran;
       if (typeof kategoriTiket === 'string') {
            kategoriTiket = JSON.parse(kategoriTiket);
       if (typeof metodePembayaran === 'string') {
           metodePembayaran = JSON.parse(metodePembayaran);
       let jumlahTiket = kategoriTiket.reduce((total, kategori) => total
 (kategori.jumlah || 0), 0);
       let data = {
           nama konser,
           artis,
           deskripsi,
            kategori tiket: JSON.stringify(kategoriTiket), // Convert
            jumlah tiket: jumlahTiket, // Use calculated total tickets
           lokasi,
           tanggal,
           metode pembayaran: JSON.stringify(metodePembayaran) // Convert
```

```
// Insert data into database
let sql = "INSERT INTO event SET ?";
conn.query(sql, data, function(err, result) {
    if (err) {
        console.error('Error inserting event: ', err);
        res.status(500).json({ error: 'Internal server error' });
        return;
    }
    res.json({
        "status": 200,
        "error": null,
        "response": "Event created successfully",
        "event_id": result.insertId
        });
    });
} catch (error) {
    console.error('Error processing request: ', error);
    res.status(400).json({ error: 'Invalid request data' });
}
});
```

```
POST
             localhost:8000/api/pat/event
Params
       Authorization
                 Headers (8)
                            Body •
                                   Scripts
                                          Settings
○ none ○ form-data ○ x-www-form-urlencoded ○ raw ○ binary ○ GraphQL JSON ∨
     "nama_konser": "Nicole",
     "artis": "NIKI",
     "deskripsi": "World Tour",
     "kategori_tiket": [
     www." "kategori": "VIP",
     "harga" : 1000,
     "jumlah": 150
     },
     "kategori": "Reguler",
     "harga" : 700,
 14
     "lokasi": "California",
     "tanggal": "7 Juli 2024",
     "metode_pembayaran" : [
     "bank" : "BCA",
     "kode" : 1890
     ....},
     "bank" : "BNI",
     "kode" : 7826
```

```
Pretty Raw Preview Visualize JSON > 

1 {
2     "status": 200,
3     "error": null,
4     "response": "Event created successfully",
5     "event_id": 1
6 }
```

id				kategori_tiket	jumlah_tiket	lokasi	tanggal	metode_pembayaran
1	Nicole	MIIZI	World Tour	[{"kategori":"VIP","harga":1000,"jumlah":150},	800 California	California	7 Juli	[{"bank":"BCA","kode":1890},
		INITXI	vvorid Tour	{"ka		2024	{"bank":"BNI"."kode":7	

# Update event by id

```
app.put('/api/pat/event/desktop/:id', upload.single('gambar'),
function(req, res) {
    let id = req.params.id;
    let newData = {
        nama_konser: req.body.nama_konser,
        artis: req.body.artis,
        deskripsi: req.body.deskripsi,
        kategori_tiket: req.body.kategori_tiket ?

JSON.stringify(req.body.kategori_tiket) : null, // Convert to JSON string
if present
        jumlah_tiket: req.body.jumlah_tiket,
        lokasi: req.body.lokasi,
        tanggal: req.body.tanggal,
        metode_pembayaran: req.body.metode_pembayaran ?

JSON.stringify(req.body.metode_pembayaran) : null, // Convert to JSON
string if present
};
```

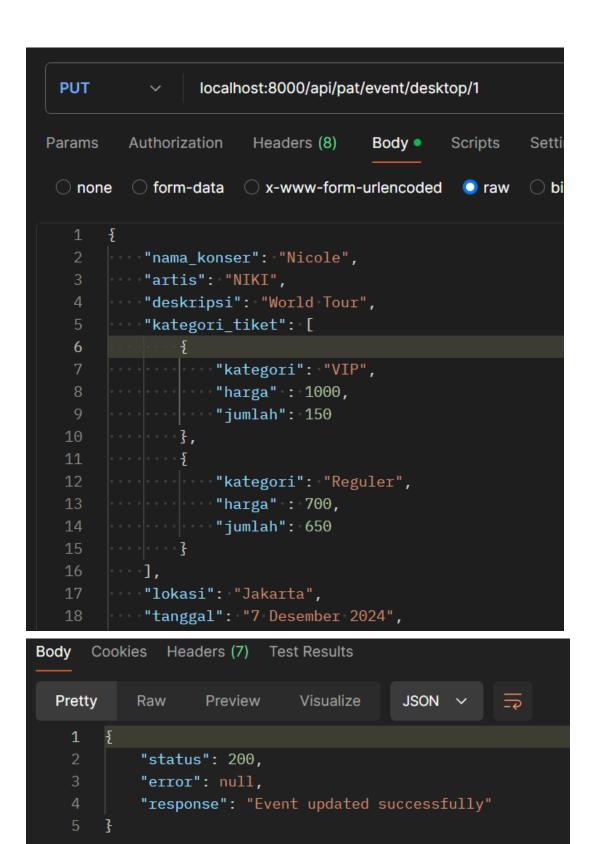
```
let sql = "UPDATE event SET ";
let values = [];
if (newData.nama konser) {
   sql += "nama konser = ?, ";
   values.push(newData.nama konser);
if (newData.artis) {
   sql += "artis = ?, ";
   values.push(newData.artis);
if (newData.deskripsi) {
   sql += "deskripsi = ?, ";
   values.push(newData.deskripsi);
if (newData.kategori tiket) {
   sql += "kategori tiket = ?, ";
   values.push(newData.kategori tiket);
if (newData.jumlah tiket) {
   sql += "jumlah tiket = ?, ";
   values.push(newData.jumlah tiket);
if (newData.lokasi) {
   sql += "lokasi = ?, ";
   values.push(newData.lokasi);
if (newData.tanggal) {
   sql += "tanggal = ?, ";
   values.push(newData.tanggal);
if (newData.metode pembayaran) {
   sql += "metode pembayaran = ?, ";
   values.push(newData.metode pembayaran);
sql = sql.slice(0, -2);
```

```
// Add the WHERE clause
sql += " WHERE id = ?";
values.push(id);

conn.query(sql, values, function(err, result) {
    if (err) {
        console.error('Error updating event: ', err);
        res.status(500).json({ error: 'Internal server error' });
        return;
}

if (result.affectedRows == 0) {
        // No rows were affected, meaning the event doesn't exist
        res.status(404).json({ error: 'Event not found' });
        return;
}

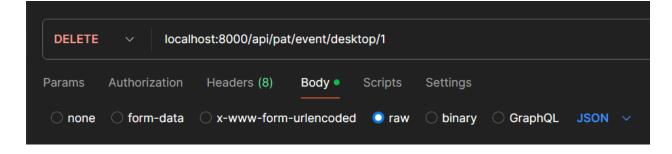
res.json({
        "status": 200,
        "error": null,
        "response": "Event updated successfully"
        });
});
```

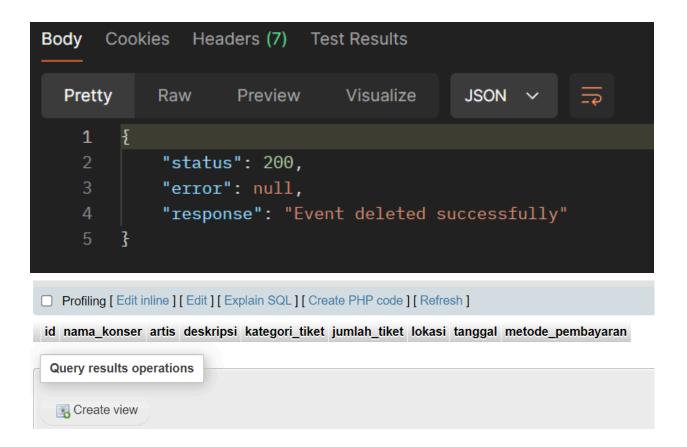


#### Delete event by id

```
app.delete('/api/pat/event/desktop/:id', function(req, res) {
    let id = req.params.id;

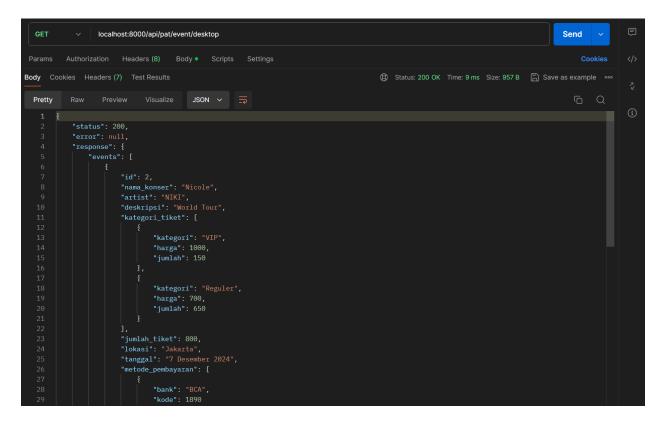
    let sql = "DELETE FROM event WHERE id = ?";
    conn.query(sql, [id], function(err, result) {
        if (err) {
            console.error('Error deleting event: ', err);
            res.status(500).json({ error: 'Internal server error' });
        return;
    }
    if (result.affectedRows == 0) {
            // No rows were affected, meaning the event doesn't exist
            res.status(404).json({ error: 'Event not found' });
            return;
    }
    res.json({
            "status": 200,
            "error": null,
            "response": "Event deleted successfully"
    });
});
```





#### Retrieve all event

Menampilkan seluruh event di desktop client



## Menampilkan seluruh event mobile client

```
app.get('/api/pat/event/mobile', function(req, res) {
    let sql = "SELECT * FROM event";
    conn.query(sql, function(err, result) {
        if (err) {
            console.error('Error fetching events: ', err);
            res.status(500).json({ error: 'Internal server error' });
        res.json({
            "status": 200,
                events: result.map (event => {
JSON.parse(event.kategori tiket);
Math.min(...kategori tiket.map(ticket => ticket.harga));
                        id: event.id,
                        nama konser: event.nama konser,
                        artist: event.artis,
                        harga: harga terkecil,
                        lokasi: event.lokasi,
                        tanggal: event.tanggal
       });
    });
```

```
GET
                  localhost:8000/api/pat/event/mobile
 Params
          Authorization Headers (8)
                                      Body • Scripts
                                                        Settings
Body Cookies Headers (7) Test Results
                                                                                         Status: 200 O
  Pretty
                   Preview
                                          JSON V
            "status": 200,
            "error": null,
            "response": {
                "events": [
                        "id": 2,
                        "nama_konser": "Nicole",
                        "artist": "NIKI",
                        "harga": 700,
                        "lokasi": "Jakarta",
                        "tanggal": "7 Desember 2024"
                        "nama_konser": "The Eras Tour",
                        "harga": 700,
                        "lokasi": "Jakarta",
                        "tanggal": "7 Oktober 2024"
```

## Order event

```
app.post('/api/pat/order', function(req, res) {
    const { eventId, kategori_tiket } = req.body;

    if (!Array.isArray(kategori_tiket) || kategori_tiket.length === 0) {
        return res.status(400).json({ error: 'Invalid kategori_tiket

format' });
    }

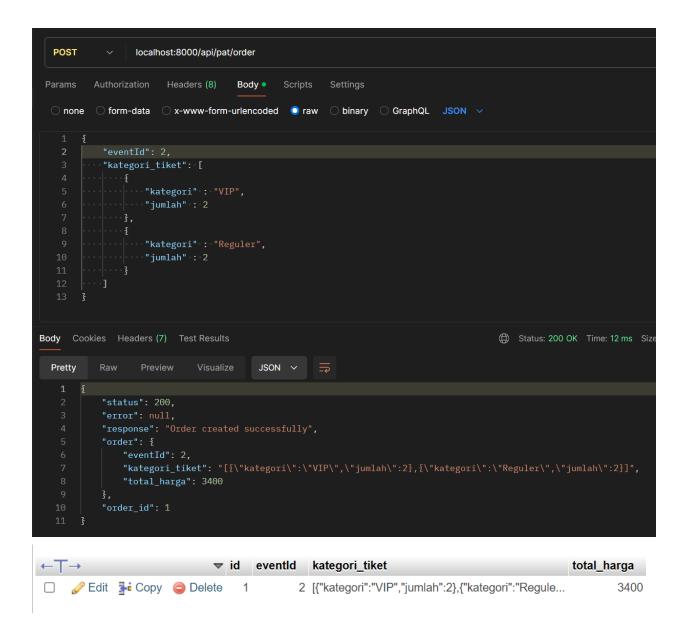
    const sql = "SELECT * FROM event WHERE id = ?";

    conn.query(sql, [eventId], function(err, result) {
        if (err) {
```

```
return res.status(500).json({ error: 'Internal server error'
        if (result.length === 0) {
       const event = result[0];
       let kategori tiket parsed;
           kategori tiket parsed = JSON.parse(event.kategori tiket);
        } catch (error) {
            return res.status(500).json({ error: 'Internal server error'
        let total harga = 0;
            if (isNaN(jumlah) || jumlah < 1) {</pre>
                return res.status(400).json({ error: 'Invalid jumlah for a
ticket category' });
            const ticketCategory = kategori tiket parsed.find(category =>
category.kategori === kategori);
               return res.status(400).json({ error: `Invalid ticket
category: ${kategori}` });
            const harga tiket = ticketCategory.harga;
            if (isNaN(harga tiket)) {
```

```
return res.status(500).json({ error: 'Internal server
error' });
            total harga += harga tiket * jumlah;
            if (ticketCategory.jumlah < jumlah) {</pre>
                return res.status(400).json({ error: `Not enough tickets
available for category: ${kategori}` });
            ticketCategory.jumlah -= jumlah;
        const updatedJumlahTiket = event.jumlah tiket -
total jumlah tiket;
            eventId,
            total harga,
            kategori tiket: JSON.stringify(kategori tiket) // Store as
       const updateEventSql = "UPDATE event SET kategori tiket = ?,
jumlah tiket = ? WHERE id = ?";
        const updatedKategoriTiket =
JSON.stringify(kategori tiket parsed);
        conn.query(updateEventSql, [updatedKategoriTiket,
updatedJumlahTiket, eventId], function(err, result) {
                return res.status(500).json({ error: 'Internal server
error' });
```

```
conn.query(orderSql, [orderData.eventId,
orderData.kategori tiket, orderData.total harga], function(err, result) {
                if (err) {
error' });
                res.json({
                    status: 200,
                    error: null,
                    response: "Order created successfully",
                    order: {
                        eventId: orderData.eventId,
                        kategori tiket: orderData.kategori tiket,
                        total harga: orderData.total harga
});
```



Ketika melakukan order, jumlah tiket yang ada pada database event akan berkurang sesuai dengan tiket yang di order.

```
kategori_tiket jumlah_tiket
[{"kategori":"VIP","harga":1000,"jumlah":148},
{"ka...
```

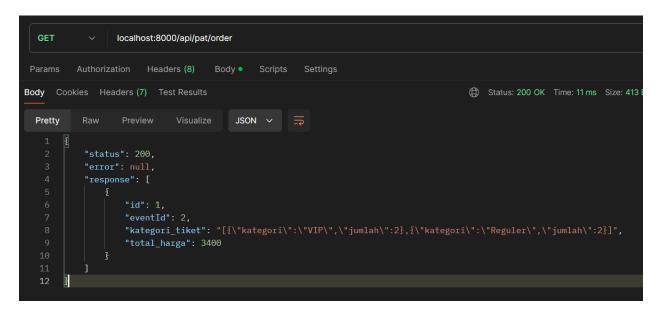
Pengurangan tersebut terjadi untuk setiap kategori yang dipesan dan total ketersediaan tiket.

#### Retrieve all order

```
app.get('/api/pat/order', function(req, res) {
    const sql = "SELECT * FROM `order`";

    conn.query(sql, function(err, result) {
        if (err) {
            console.error('Error retrieving orders: ', err);
            res.status(500).json({ error: 'Internal server error' });
            return;
        }

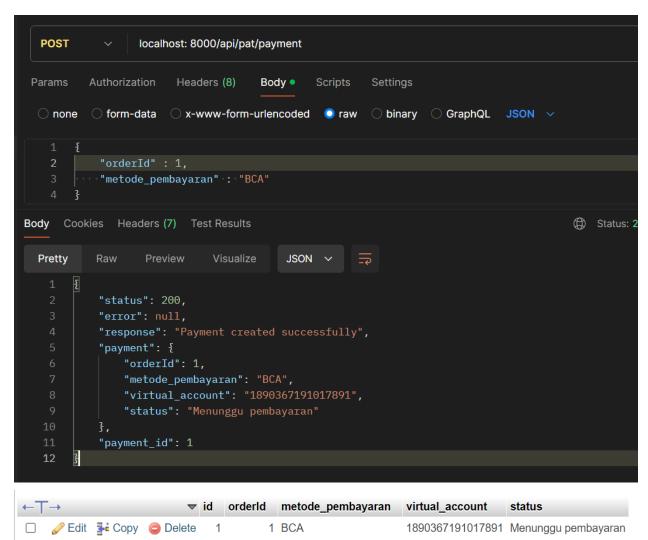
        res.json({
            "status": 200,
            "error": null,
            "response": result
        });
    });
}
```



#### Payment event

```
app.post('/api/pat/payment', function(req, res) {
   const { orderId, metode pembayaran } = req.body;
   if (!orderId) {
       return res.status(400).json({ error: 'Missing orderId' });
   conn.query(orderSql, [orderId], function(err, orderResult) {
             return res.status(500).json({ error: 'Internal server error'
});
       if (orderResult.length === 0) {
           return res.status(404).json({ error: 'Order not found' });
       const eventId = orderResult[0].eventId;
         const eventSql = "SELECT metode pembayaran FROM event WHERE id =
       conn.query(eventSql, [eventId], function(err, eventResult) {
                    return res.status(500).json({ error: 'Internal server
error' });
            if (eventResult.length === 0) {
               return res.status(404).json({ error: 'Event not found' });
           let metode pembayaran parsed;
                                              metode pembayaran parsed
JSON.parse(eventResult[0].metode pembayaran);
           } catch (error) {
```

```
console.error('Error parsing metode pembayaran JSON:
error);
                    return res.status(500).json({ error: 'Internal server
error' });
             const paymentMethod = metode pembayaran parsed.find(method =>
method.bank === metode pembayaran);
                    return res.status(400).json({ error: 'Invalid payment
method' });
            const kode = paymentMethod.kode;
            const randomDigits = () => Math.floor(Math.random() * 10);
             const virtual account = `${kode}${Array.from({ length: 12 },
randomDigits).join('')}`;
               orderId,
                metode pembayaran,
            const paymentSql = "INSERT INTO payment SET ?";
            conn.query(paymentSql, paymentData, function(err, result) {
                    console.error('Error inserting payment: ', err);
                     return res.status(500).json({ error: 'Internal server
error' });
                res.json({
                    status: 200,
                    error: null,
                    response: "Payment created successfully",
```



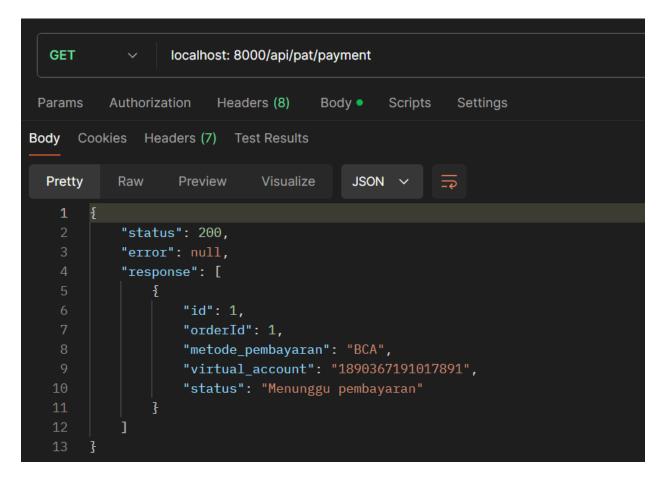
Virtual account terdiri dari 4 angka kode dari bank dan 12 angka yang di generate secara acak.

## Retrieve all payment

```
app.get('/api/pat/payment', function(req, res) {
    const sql = "SELECT * FROM payment";

    conn.query(sql, function(err, result) {
        if (err) {
            console.error('Error retrieving payments: ', err);
            res.status(500).json({ error: 'Internal server error' });
            return;
        }

        res.json({
            "status": 200,
            "error": null,
            "response": result
        });
    });
});
```



## Retrieve payment by id

```
app.get('/api/pat/payment/:id', function(req, res) {
   const paymentId = req.params.id;
   conn.query(paymentSql, [paymentId], function(err, result) {
        if (result.length === 0) {
        res.json({
                events: result.map(payment => {
                        id: payment.id,
                        orderId: payment.orderId,
                        metode pembayaran: payment.metode pembayaran,
                        virtual account: payment.virtual account,
                        status: payment.status
    });
```

```
GET
                   localhost: 8000/api/pat/payment/1
          Authorization
                         Headers (8)
                                                          Settings
 Params
                                       Body •
                                                 Scripts
     Cookies Headers (7) Test Results
Body
                               Visualize
  Pretty
            Raw
                    Preview
                                            JSON V
                                                       ==
    1
            "status": 200,
            "error": null,
            "response": {
                "events": [
                         "id": 1,
                         "orderId": 1,
                         "metode_pembayaran": "BCA",
                         "virtual_account": "1890367191017891",
   11
                         "status": "Menunggu pembayaran"
   12
   13
```

## **Confirm payment**

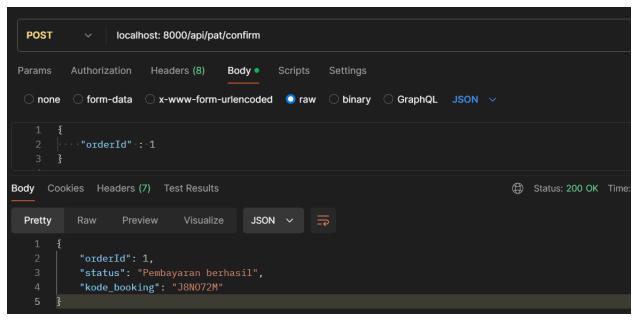
```
app.post('/api/pat/confirm', function(req, res) {
    console.log('Request body:', req.body); // Logging request body
    const { orderId } = req.body;

    // Pastikan orderId ada dalam request body
    if (!orderId) {
        console.log('Missing orderId'); // Logging error
        return res.status(400).json({ error: 'orderId is required' });
    }

    // Tentukan status dan kode_booking
    const status = "Pembayaran berhasil";
    const kode_booking = generateKodeBooking();
```

```
orderId,
       status,
       kode_booking,
   conn.query(sql, data, function(err, result) {
        if (err) {
            console.error('Error inserting confirm: ', err);
             return res.status(500).json({ error: 'Internal server error'
});
        res.json({
           orderId,
           status,
            kode_booking,
       });
});
function generateKodeBooking() {
   const chars = 'ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789';
   let kodeBooking = '';
                 kodeBooking += chars.charAt(Math.floor(Math.random()
chars.length));
   return kodeBooking;
```





Kode booking didapat dari huruf A-Z dan angka 0-9 yang di generate secara acak untuk mendapatkan 6 karakter yang akan digunakan sebagai kode booking.

#### Retrieve all confirm

```
app.get('/api/pat/confirm', function(req, res) {
    const sql = "SELECT * FROM confirm";

    conn.query(sql, function(err, result) {
        if (err) {
            console.error('Error retrieving confirm: ', err);
            res.status(500).json({ error: 'Internal server error' });
            return;
        }

        res.json({
            "status": 200,
            "error": null,
            "response": result
        });
    });
});
```

```
GET
                   localhost: 8000/api/pat/confirm
          Authorization
                         Headers (8)
                                       Body •
Params
                                                 Scripts
                                                          Settings
Body Cookies Headers (7) Test Results
  Pretty
           Raw
                    Preview
                               Visualize
                                            JSON ~
                                                        哥
            "status": 200,
            "error": null,
            "response": [
                     "id": 1,
                    "orderId": 1,
                     "status": "Pembayaran berhasil",
                     "kode_booking": "J8N072M"
   11
            ]
   12
```

## Retrieve confirm by id

```
app.get('/api/pat/confirm/:orderId', function(req, res) {
    const orderId = parseInt(req.params.orderId);
    if (!orderId) {
        return res.status(400).json({ error: 'Missing order ID' });
    }

    const sql = "SELECT orderId, status, kode_booking FROM confirm WHERE
orderId = ?";
    conn.query(sql, [orderId], function(err, result) {
        if (err) {
            console.error('Error fetching order: ', err);
            return res.status(500).json({ error: 'Internal server error'
});
    }

    if (result.length === 0) {
        return res.status(404).json({ error: 'Order not found' });
}
```

```
res.json(result[0]);
});
```

