

Back-End Development

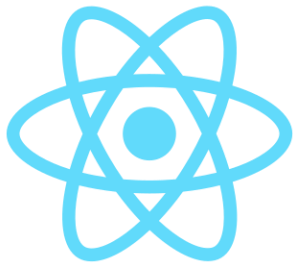
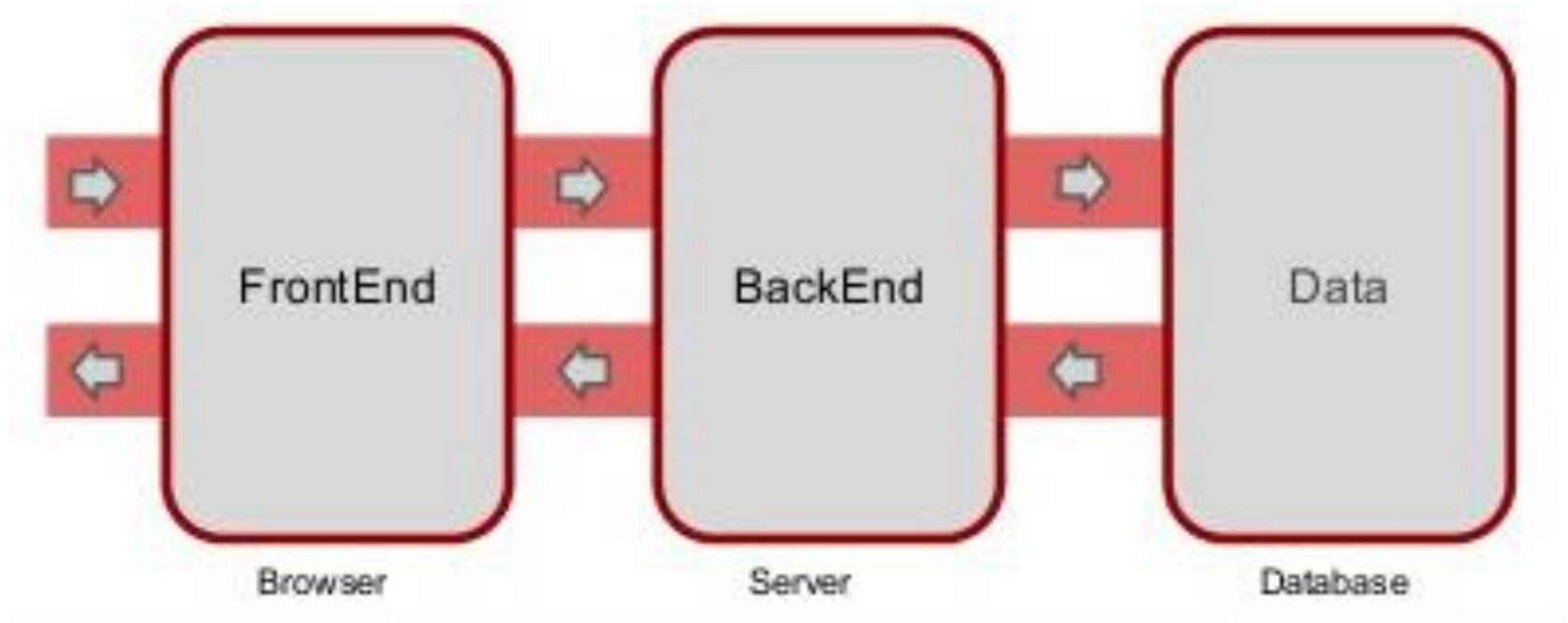
# Connecting

*#13a* Express & MySQL

express



# Web App Architecture



# #1 Activate MySQL Server

- Via command prompt, go to mysql.exe directory **C:\Program Files\MySQL\MySQL Server 5.7\bin** then execute:

```
$ mysql.exe --user=lintang --password=12345
```

- Create database, table & insert an initial data:

```
$ CREATE DATABASE toko;
```

```
$ USE toko;
```

```
$ CREATE TABLE karyawan(  
  no INT NOT NULL AUTO_INCREMENT,  
  nama VARCHAR(30),  
  usia SMALLINT,  
  PRIMARY KEY(no));
```

```
$ INSERT INTO karyawan VALUES('Andi',24);
```



## #2 Install MySQL Package

- MySQL package is a Node.JS driver for MySQL database. It's written in JavaScript, doesn't require compiling & 100% MIT licensed.
- More info: [npmjs.com/package/mysql](https://npmjs.com/package/mysql)
- On project dir, install MySQL package:

```
$ npm install mysqljs/mysql
```

***\*\* your internet connection must be good enough while installing and/or using this package!***

# Using MySQL Package

## *1# Select All Data*

```
const mysql = require('mysql');

const db = mysql.createConnection({
  host : 'localhost',
  user : 'lintang',
  password : '12345',
  database : 'toko'
});

db.connect();

var sql = 'SELECT * FROM karyawan';
db.query(sql, (err, result)=>{
  if(err) throw err;
  console.log(result);
});

db.end();
```

# Using MySQL Package

## 2# Select Specific Data

```
const mysql = require('mysql');  
const db = mysql.createConnection({  
  host : 'localhost',  
  user : 'lintang',  
  password : '12345',  
  database : 'toko'  
});
```

```
db.connect();
```

```
var nama = 'Andi';  
var sql = 'SELECT * FROM karyawan WHERE nama = ?';  
db.query(sql, nama, (err, result)=>{  
  if(err) throw err;  
  console.log(result);  
});
```

```
db.end();
```

# Using MySQL Package

## 3# Insert Data

```
const mysql = require('mysql');
const db = mysql.createConnection({
  host : 'localhost',
  user : 'lintang',
  password : '12345',
  database : 'toko'
});
```

```
db.connect();
```

```
var data = {no: null, nama:"Dedi", usia:23};
var sql = 'INSERT INTO karyawan SET ?';
db.query(sql, data, (err, result)=>{
  if(err) throw err;
  console.log(result);
});
```

```
db.end();
```

# Using MySQL Package

## 4# Delete Data

```
const mysql = require('mysql');
const db = mysql.createConnection({
  host : 'localhost',
  user : 'lintang',
  password : '12345',
  database : 'toko'
});
```

```
db.connect();
```

```
var nama = 'Budi';
var sql = 'DELETE from karyawan WHERE nama=?';
db.query(sql, nama, (err, result)=>{
  if(err) throw err;
  console.log(result);
});
```

```
db.end();
```



# Using MySQL Package

## 5a# Update Data

```
const mysql = require('mysql');
const db = mysql.createConnection({
  host : 'localhost',
  user : 'lintang',
  password : '12345',
  database : 'toko'
});
```

```
db.connect();
```

```
var nama = 'Andi';
var sql = 'UPDATE karyawan SET nama="Zizi" WHERE nama=?';
db.query(sql, nama, (err, result)=>{
  if(err) throw err;
  console.log(result);
});
```

```
db.end();
```

# Using MySQL Package

## 5b# Update Data

```
const mysql = require('mysql');
const db = mysql.createConnection({
  host : 'localhost',
  user : 'lintang',
  password : '12345',
  database : 'toko'
});
```

```
db.connect();
```

```
var x = 'Yaya';
var y = 'Caca'
var sql = 'UPDATE karyawan SET nama=? WHERE nama=?';
db.query(sql, [x,y], (err, result)=>{
  if(err) throw err;
  console.log(result);
});
```

```
db.end();
```

# Express & MySQL

express

MySQL®

# Express & MySQL

*#Basic*

```
const express = require('express');  
const app = express();  
const mysql = require('mysql');
```

```
const db = mysql.createConnection({  
  host : 'localhost',  
  user : 'lintang',  
  password : '12345',  
  database : 'toko'  
});
```

```
db.connect();
```

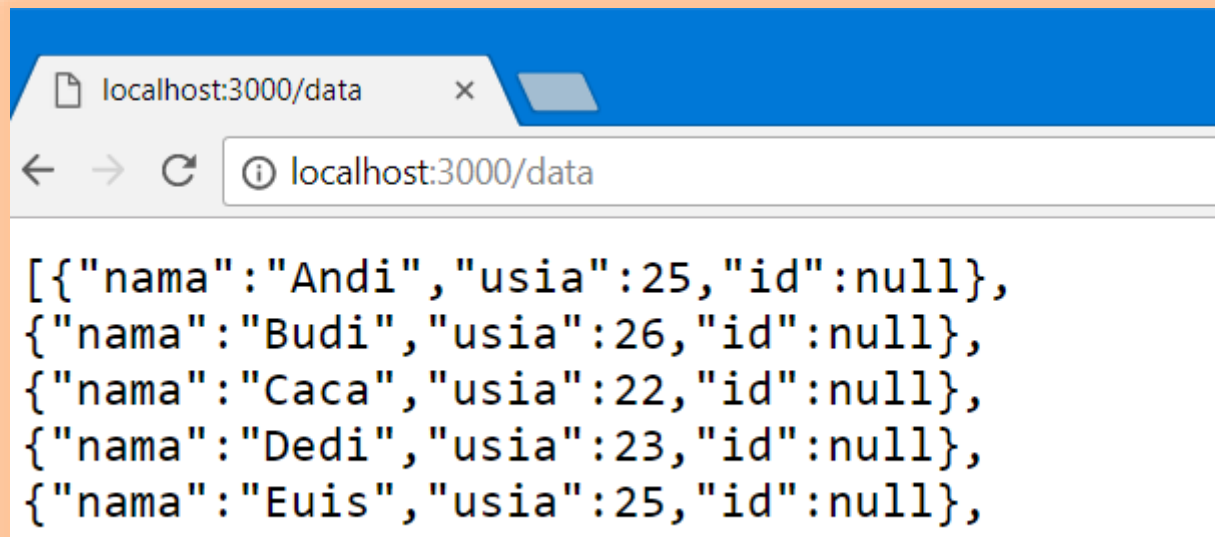
```
## ## route here ## ##
```

```
app.listen(3000, ()=>{  
  console.log('Server @port 3000')  
});
```

# Express & MySQL

## #GET Route to Select All Data

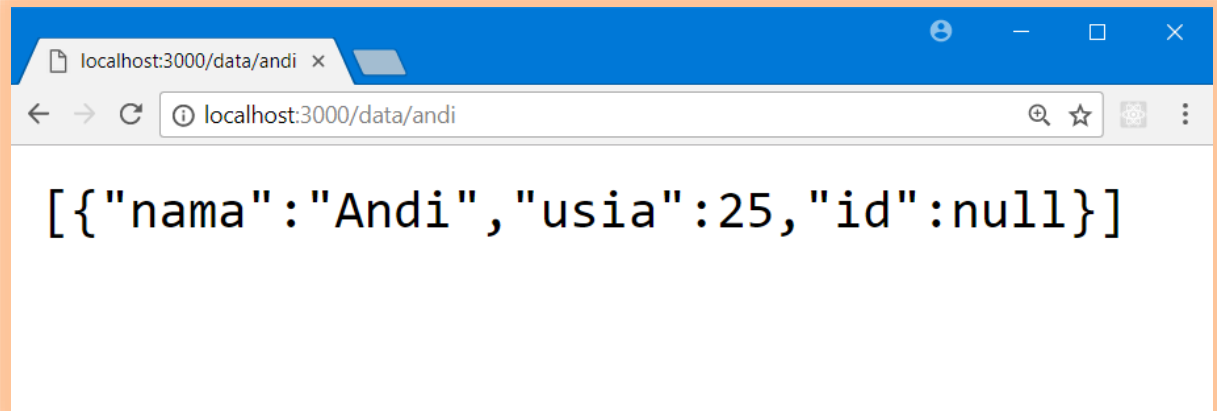
```
app.get('/data', function(req, res){  
  var sql = 'SELECT * FROM karyawan';  
  db.query(sql, (err, result)=>{  
    if(err) throw err;  
    console.log(result);  
    res.send(result);  
  });  
});
```



# Express & MySQL

## #GET Route to Select Spesific Data

```
app.get('/data/:id', function(req,res){  
  
  var sql = `SELECT * FROM karyawan WHERE nama =  
    '${req.params.id}'`;   
  
  db.query(sql, (err, result)=>{  
    if(err) throw err;  
    console.log(result);  
    res.send(result);  
  });  
});
```

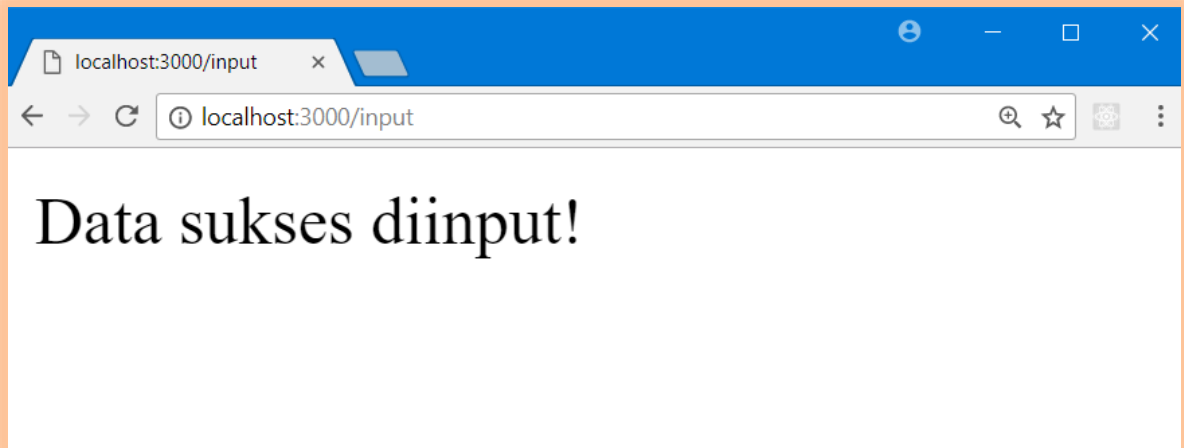


# Express & MySQL

## #GET Route to Insert Data

```
app.get('/input', function(req, res){  
  var data = {nama:"Siti", usia:21};  
  var sql = 'INSERT INTO karyawan SET ?';  
  db.query(sql, data, (err, result)=>{  
    if(err) throw err;  
    console.log(result);  
    res.send('Data sukses diinput!')  
  });  
});
```

*Then see  
data on  
/data or  
MySQL!*



# Express & MySQL Hosting

express

Free MySQL Hosting



Back-End Development

# Connecting

*#13a* Express & MySQL

express

