

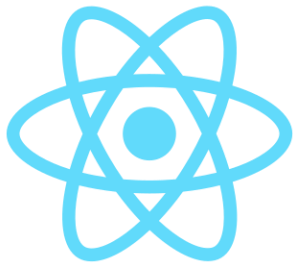
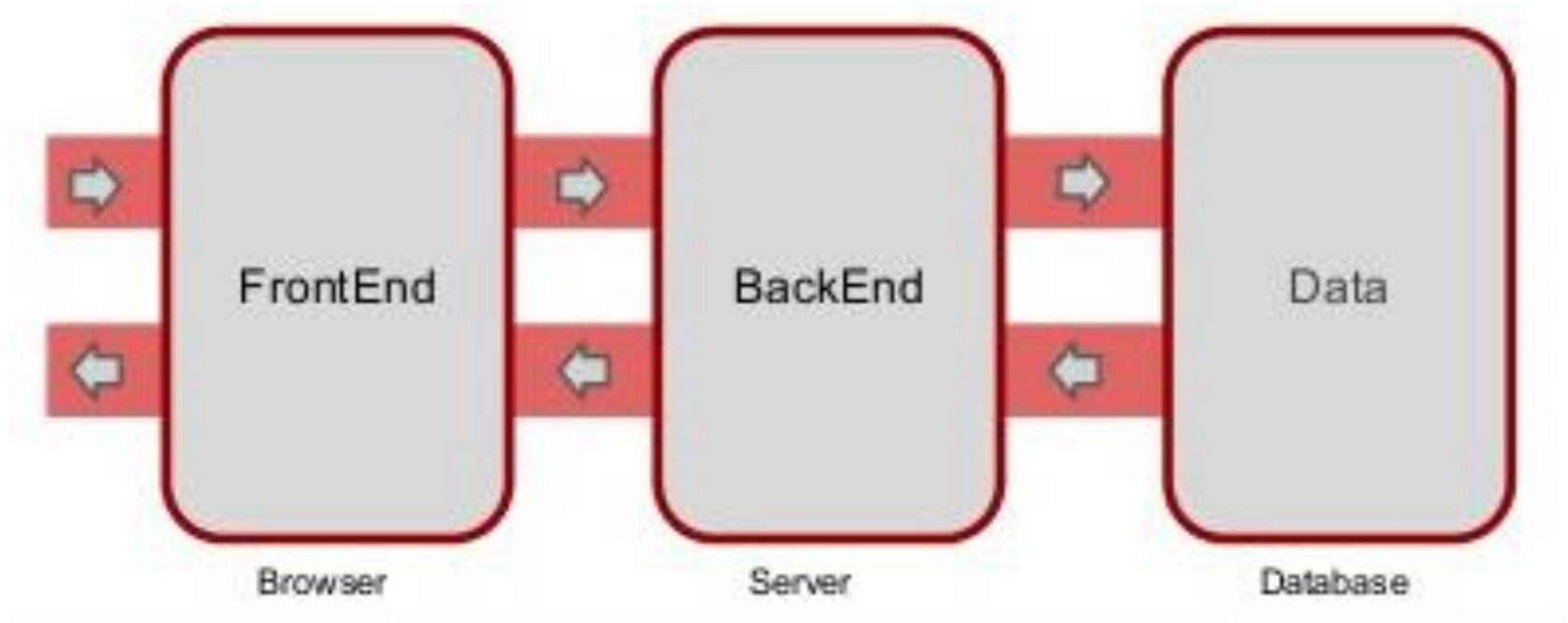
Back-End Development

# Connecting

## *#12a* Loopback & MySQL



# Web App Architecture



# Loopback & MySQL



# #1 Activate MySQL Server

Via Command Prompt, go to *mysql.exe* directory

***C:\xampp\mysql\bin*** then execute:

***\$ mysql.exe --user=root --password=12345***

***or***

***\$ mysql.exe -u lintang -p12345***

```
C:\Users\lintangwisesa>cd C:\Program Files\MySQL\MySQL Server 5.7\bin
```

```
C:\Program Files\MySQL\MySQL Server 5.7\bin>mysql.exe --user=lintang --password=12345
```

```
mysql: [Warning] Using a password on the command line interface can be insecure.
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

```
Your MySQL connection id is 2
```

```
Server version: 5.7.21-log MySQL Community Server (GPL)
```

```
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```

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```

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

## #2 Create Db & Table

- Create database toko on MySQL

```
$ create database toko;  
$ show databases;
```

- Create table karyawan on toko db:

```
$ use toko;  
$ create table karyawan(  
  id smallint not null auto_increment,  
  nama varchar(30),  
  usia smallint,  
  primary key (id));  
$ show tables;  
$ describe karyawan;
```

## #3 MySQL Auth on Loopback

- Untuk MySQL versi 8.0++, gunakan user: root. Untuk mengaktifkan authentication dari Loopback, di database lakukan:

```
$ alter user 'root'@'localhost' identified  
with mysql_native_password by '12345';
```

# #3 Create Loopback App

- Create a Loopback application:

```
$ npm install -g loopback-cli
```

```
$ lb
```

```
$ cd lin_loopback
```

- Comment line *server.enableAuth();* on  
/server/boot/authentication.js

- Activate its server by run `$ node .`

```
Web server listening at:  
http://localhost:3000
```

```
Browse your REST API at  
http://localhost:3000/explorer
```

## #4 Set MySQL Connector

■ Install MySQL connector:

```
$ npm i loopback-connector-mysql
```

```
$ lb datasource
```

```
? Enter the datasource name: mysql_lin //up to you!
? Select connector for mysql_lin: MySQL (StrongLoop)
? Connection String url to override other settings
mysql://root:12345@localhost/toko
? host: localhost
? port: 3306
? user: root
? password: 12345
? database: toko
```



# #5 Create Loopback Model

■ On directory project, type:

`$ lb model`

- [?] Enter the model name: *karyawan //model = table!*
- [?] Select source to attach to: *mysql\_lin (mysql)*
- [?] Select model's base class (*PersistedModel*)
- [?] Expose person via the REST API? *Yes*
- [?] Custom plural form (used to build REST URL):
- [?] Common model or server only? *Common*

Let's add some person properties now.

Enter an empty property name when done.

- [?] Property name: *id*
- [?] Property type: (Use arrow keys) *number*
- [?] Required? (y/N) *y*

# #6 Try to POST & GET

- Run `$ node .` then try to POST & GET directly on Loopback explorer (*karyawan model*) or using Postman, then see your MySQL data (*karyawan table*)!

The screenshot displays two overlapping windows. The background window is the LoopBack API Explorer, showing the 'Response Body' for a GET request to the 'karyawan model'. The response is a JSON array of two employee objects. The foreground window is a MySQL command prompt, showing the execution of a SELECT query to retrieve data from the 'pegawai' table, which matches the data in the API response.

**LoopBack API Explorer** Token Not Set accessToken

**Response Body**

```
[
  {
    "id": 1,
    "nama": "Andi",
    "usia": 22
  },
  {
    "id": 2,
    "nama": "Budi",
    "usia": 24
  }
]
```

**MySQL Command Prompt**

```
C:\WINDOWS\system32\cmd.exe - mysql.exe --user=lintang --p...
mysql> select * from pegawai;
+----+-----+-----+
| id | nama | usia |
+----+-----+-----+
|  1 | Andi |   22 |
|  2 | Budi |   24 |
+----+-----+-----+
2 rows in set (0.00 sec)

mysql> _
```

# Loopback & MySQL Hosting



Free MySQL Hosting

Back-End Development

# Connecting

## *#12a* Loopback & MySQL

