

W02-P1: Use express generator to create a server side framework, and display your info

The screenshot shows a development environment with two main windows: a terminal window and a browser window.

Terminal Window:

```
[nodemon] starting 'node app.js'
The server is running on port 3000 successfully
GET / 200 8.008 ms - 207
GET /stylesheets/style.css 200 2.467 ms - 111
[nodemon] restarting due to changes...
[nodemon] starting 'node app.js'
[nodemon] restarting due to changes...
[nodemon] starting 'node app.js'
The server is running on port 3000 successfully
GET / 200 12.881 ms - 231
GET /stylesheets/style.css 304 1.378 ms - -
GET / 304 2.750 ms - -
GET /stylesheets/style.css 304 1.160 ms - -
```

Browser Window:

The browser window displays the URL `localhost:3000`. The page content is:

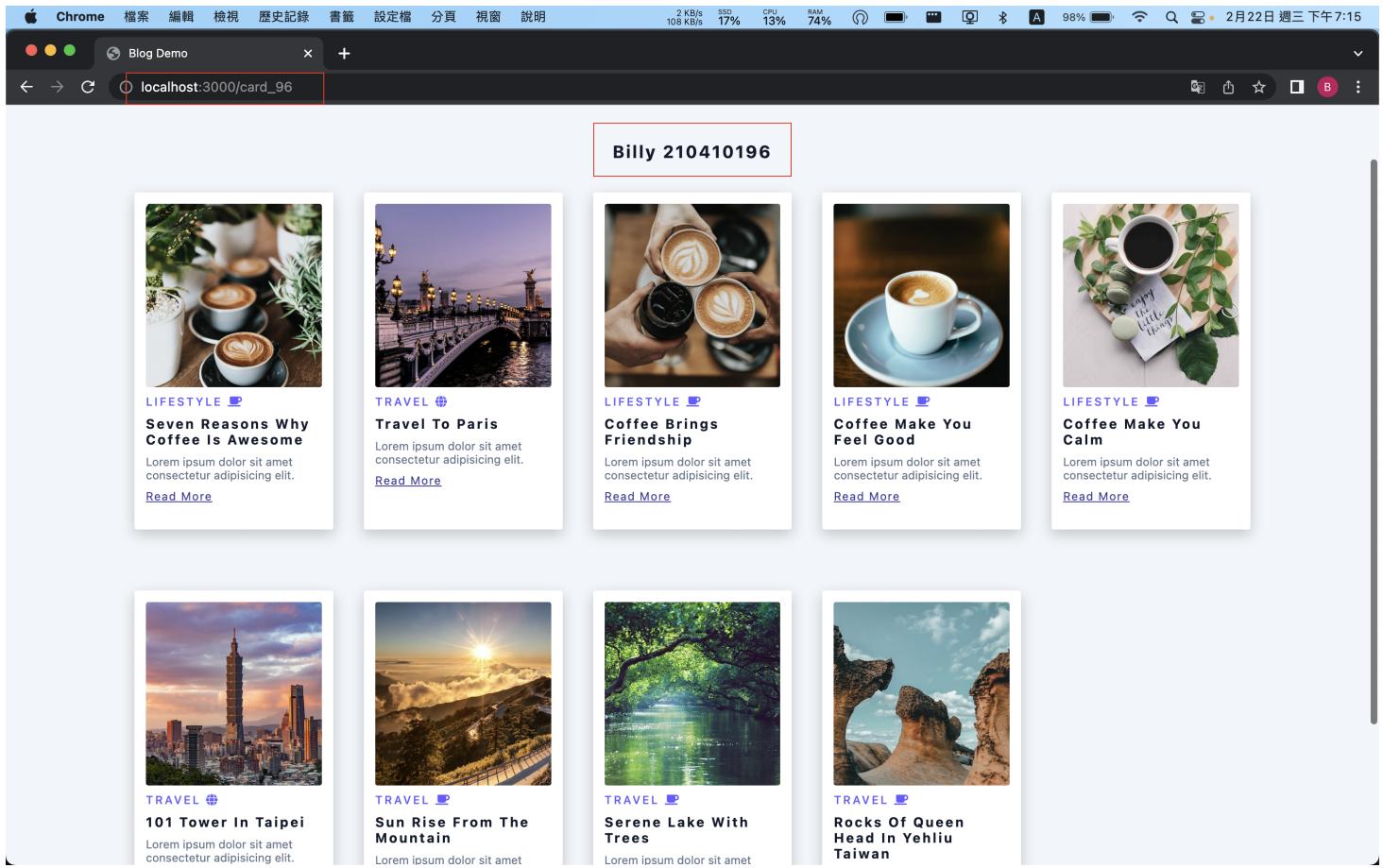
Billy 210410196

Welcome to Billy 210410196

The code in the terminal window corresponds to the code in the VS Code editor, specifically the `index.js` file under the `routes/index.js` route definition:

```
routes: [
  {
    path: '/',
    method: 'get',
    handler: router.get('/', function(req, res, next) {
      res.render('index', { title: 'Billy 210410196' });
    })
  }
]
```

W02-P2: show static page of card demo with your info



```
Code File Edit Selection View Go Run Terminal Window Help 350 Kbps 84 KB/s 17% CPU 12% RAM 71% 98% 2月22日 週三下午7:18
```

EXPLORER ... app.js x

CARD_DEMO_96

bin www

md/w02 w02_96.md w02-p1.png w02-p2.png

node_modules

public

routes

card_96.js index.js users.js

views

card_96

index.ejs

% error.ejs

% index.ejs

app.js

package-lock.json

package.json

app.js > cardRouter_96

```
1 var createError = require("http-errors");
2 var express = require("express");
3 var path = require("path");
4 var cookieParser = require("cookie-parser");
5 var logger = require("morgan");
6
7 var indexRouter = require("./routes/index");
8 var usersRouter = require("./routes/users");
9
10 const cardRouter_96 = require("./routes/card_96");
11
12 var app = express();
13
14 // view engine setup
15 app.set("views", path.join(__dirname, "views"));
16 app.set("view engine", "ejs");
17
18 app.use(logger("dev"));
19 app.use(express.json());
20 app.use(express.urlencoded({ extended: false }));
21 app.use(cookieParser());
22 app.use(express.static(path.join(__dirname, "public")));
23
24 app.use("/", indexRouter);
25 app.use("/users", usersRouter);
26
27 app.use('/card_96', cardRouter_96);
28
29 // catch 404 and forward to error handler
30 app.use(function (req, res, next) {
31   next(createError(404));
32 });
33
34 // error handler
35 app.use(function (err, req, res, next) {
36   // set locals, only providing error in development
37   res.locals.message = err.message;
38   res.locals.error = req.app.get("env") === "development" ? err :
39
40   // render the error page
41   res.status(err.status || 500);
42   res.render("error");
43 });

card_96.js x
```

routes > card_96.js > ...

```
1 var express = require("express");
2 var router = express.Router();
3
4 /* GET home page. */
5 router.get("/", function (req, res, next) {
6   res.render("card_96/index", { name: "Billy", id: "210410196" });
7 });
8
9 module.exports = router;
10 |
```

index.ejs x

```
views > card_96 > % index.ejs > html > body > section.blogs > div.section-title >
11   integrity="sha384-xno/CRQoPwUd1UqerAPV01SpC9AAXCnZ2P"
12   crossorigin="anonymous"
13   referrerPolicy="no-referrer"
14   />
15   <link rel="stylesheet" href="/blog_xx.css" />
16   </head>
17   <body>
18     <section class="blogs">
19       <div class="section-title">
20         <h2>%= name %> <%= id %></h2>
21       </div>
22       <div class="blogs-center2">
23         <article class="blog">
24           
29           <div class="blog-content">
30             <span>lifestyle <i class="fa-solid fa-mug-saucer"></i>
```

W02-P3: database connection to wp2_demo_xx

The screenshot shows a Mac OS X desktop environment with a VS Code window open. The title bar indicates it's 2月22日 週三下午 8:00.

File Explorer: Shows the project structure for 'CARD_DEMO_96'. The 'utils' folder contains 'database.js'. Other files include 'bin', 'md/w02' (with 'w02_96.md' and 'w02-p1.png'), 'public', 'routes', and 'package.json'.

Code Editor: The 'database.js' file is open. It uses the 'pg' module to connect to a PostgreSQL database. The connection details are as follows:

```
const { Pool } = require("pg");
const pool = new Pool({
  user: "postgres",
  host: "db.hzllwkixijuoqbropnat.supabase.co",
  port: 5432,
  database: "postgres",
  password: "0p;/0L>8ik",
});
console.log("connect database", pool.options.database);
module.exports = pool;
```

Terminal: The terminal shows two command-line entries:

```
apple ~ /T/1112-wp2-demo-210410196/card_demo_96/utils > on main !5 ?1 node database.js
connect database postgres
apple ~ /T/1112-wp2-demo-210410196/card_demo_96/utils > on main !5 ?1
```

Status Bar: Shows system information like battery level (93%), signal strength, and network status.

W02-P4: create table card_xx with 2 data

The screenshot shows the pgAdmin 4 interface for PostgreSQL. The left sidebar displays the database schema, including the 'public' schema which contains tables like 'Aggregates', 'Collations', and 'Tables'. A red box highlights the 'Tables' section, specifically the 'card_96' table and its columns.

The main pane shows the SQL query used to create the table:

```
CREATE TABLE card_96 (
    id INT NOT NULL PRIMARY KEY,
    title VARCHAR(255),
    descrip VARCHAR(255),
    category VARCHAR(255),
    img VARCHAR(255),
    remote_img VARCHAR(255)
);
```

The 'Data Output' tab shows the two rows of data inserted into the table:

	id [PK] integer	title character varying (255)	descrip character va
1	1	Seven Reasons Why Coffee Is Awesome	Lorem ipsum
2	2	Travel To Paris	Lorem ipsum

Total rows: 2 of 2 Query complete 00:00:01.427 Ln 8, Col 3

pgAdmin 4 Object Tools 編輯 視窗 Help

2 KB/s
79 KB/s

← → 🔍 card_demo_96

database.js data.sql

```
utils > data > data.sql
1 CREATE TABLE card_96 (
2   id INT NOT NULL PRIMARY KEY,
3   title VARCHAR(255),
4   descrip VARCHAR(255),
5   category VARCHAR(255),
6   img VARCHAR(255),
7   remote_img VARCHAR(255)
8 );
9
10 INSERT INTO card_96
11 VALUES (1, 'Seven Reasons Why Coffee Is Awesome', 'Lorem ipsum dolor
sit amet consectetur adipisicing elit.', 'lifestyle', '/images/photo-1.
jpg', 'https://hzlwkixijuoqbrpnat.supabase.co/storage/v1/object/public/
demo-96/card-96/photo-1.jpg'),
12 (2, 'Travel To Paris', 'Lorem ipsum dolor sit amet consectetur
adipisicing elit.', 'travel', '/images/photo-2.jpg', 'https://
hzlwkixijuoqbrpnat.supabase.co/storage/v1/object/public/demo-96/
card-96/photo-2.jpg')
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
```

pgAdmin 4

Browser

postgres/post... postgres/postgres@db.hzllwkixjuoqbropnat.supabase.co

Query Query History

```
1 SELECT * FROM card_96;
```

Data Output Messages Notifications

	id [PK] integer	title character varying (255)	descrip character va
1	1	Seven Reasons Why Coffee Is Awesome	Lorem ipsum
2	2	Travel To Paris	Lorem ipsum

Total rows: 2 of 2 Query complete 00:00:01.427 Ln 1, Col 23

W02-P5: card_xx 建立9筆資料，截圖，匯出到 wp2_demo_xx.tar，然後匯入到 wp2_demo2 資料庫中，要能顯示9筆資料

The screenshot shows the pgAdmin 4 interface. At the top, there's a toolbar with various icons for database management. Below it is a connection bar showing 'wp2_demo_96/postgres@db.hzllwkixijuoqbropnat.supabase...' with a dropdown arrow and a refresh icon. The main area has tabs for 'Query' (selected) and 'Scratch Pad'. A query window contains the command: 'select * from card_96'. Below the query window is a table displaying 9 rows of data. The table has columns: id [PK] integer, title character varying (255), descrip character varying (255), category character varying (255), img character varying (255), and remote_img character varying (255). The data rows are as follows:

	id [PK] integer	title character varying (255)	descrip character varying (255)	category character varying (255)	img character varying (255)	remote_img character varying (255)
1	1	Seven Reasons Why Coffee Is Aweso...	Lorem ipsum dolor sit amet consectetur adipisicing el...	lifestyle	/images/photo-1.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
2	2	Travel To Paris	Lorem ipsum dolor sit amet consectetur adipisicing el...	travel	/images/photo-2.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
3	3	Coffee Brings Friendship	Lorem ipsum dolor sit amet consectetur adipisicing el...	lifestyle	/images/photo-3.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
4	4	Coffee Make You Feel Good	Lorem ipsum dolor sit amet consectetur adipisicing el...	lifestyle	/images/photo-4.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
5	5	Coffee Make You Calm	Lorem ipsum dolor sit amet consectetur adipisicing el...	lifestyle	/images/photo-5.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
6	6	101 Tower In Taipei	Lorem ipsum dolor sit amet consectetur adipisicing el...	travel	/images/photo-6.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
7	7	Sun Rise From The Mountain	Lorem ipsum dolor sit amet consectetur adipisicing el...	travel	/images/photo-7.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
8	8	Serene Lake With Trees	Lorem ipsum dolor sit amet consectetur adipisicing el...	travel	/images/photo-8.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/
9	9	Rocks Of Queen Head In Yehliu Taiwan	Lorem ipsum dolor sit amet consectetur adipisicing el...	travel	/images/photo-9.jpg	https://hzllwkixijuoqbropnat.supabase.co/storage/v1/object/public/demo-96/

At the bottom left, a status bar shows 'Total rows: 9 of 9' and 'Query complete 00:00:01.474'. At the bottom right, it says 'Ln 1, Col 22'.

pgAdmin 4 Object Tools 編輯 視窗 Help 6 KB/s 24 KB/s SSD 17% CPU 13% RAM 65% 82% 2月22日 週三 下午9:18

Browser

Servers (1) **wp2_demo2_96/postgres@db.hzllwkixijuuoqbropnat.supabas...**

Databases (3) **postgres** **wp2_demo2_96** **wp2_demo_96**

Login/Group Roles Tablespaces

Query History

Query Scratch Pad

1 `select * from card_96`

Data Output Messages Notifications

Total rows: 9 of 9 Query complete 00:00:01.336

✓ Successfully run. Total query runtime: 1 secs 336 msec. 9 rows affected. ✎

Ln 1, Col 22

	id [PK] integer	title character varying (255)	descrip character varying (255)	category character varying (255)	img character varying (255)	remote_img character varying (255)
1	1	Seven Reasons Why Coffee Is Aweso...	... ipsum dolor sit amet consectetur adipisicin...	lifestyle	/images/photo-1.jpg	https://hzllwkixijuuoqbropnat.si...
2	2	Travel To Paris	... ipsum dolor sit amet consectetur adipisicin...	travel	/images/photo-2.jpg	https://hzllwkixijuuoqbropnat.si...
3	3	Coffee Brings Friendship	... ipsum dolor sit amet consectetur adipisicin...	lifestyle	/images/photo-3.jpg	https://hzllwkixijuuoqbropnat.si...
4	4	Coffee Make You Feel Good	... ipsum dolor sit amet consectetur adipisicin...	lifestyle	/images/photo-4.jpg	https://hzllwkixijuuoqbropnat.si...
5	5	Coffee Make You Calm	... ipsum dolor sit amet consectetur adipisicin...	lifestyle	/images/photo-5.jpg	https://hzllwkixijuuoqbropnat.si...
6	6	101 Tower In Taipei	... ipsum dolor sit amet consectetur adipisicin...	travel	/images/photo-6.jpg	https://hzllwkixijuuoqbropnat.si...
7	7	Sun Rise From The Mountain	... ipsum dolor sit amet consectetur adipisicin...	travel	/images/photo-7.jpg	https://hzllwkixijuuoqbropnat.si...
8	8	Serene Lake With Trees	... ipsum dolor sit amet consectetur adipisicin...	travel	/images/photo-8.jpg	https://hzllwkixijuuoqbropnat.si...
9	9	Rocks Of Queen Head In Yehliu Taiwan	... ipsum dolor sit amet consectetur adipisicin...	travel	/images/photo-9.jpg	https://hzllwkixijuuoqbropnat.si...