

LAB EXERCISE 07 – EXPRESSJS ROUTING

Program:-

App.js

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

```
const app = express();
```

```
const port = 3000;
```

```
app.use(express.json());
```

```
app.use(express.urlencoded({ extended: true }));
```

```
// Define the course structure to include the "credits" field
```

```
let courses = [
```

```
  { id: 1, title: 'Intellectual Property Rights', instructor: 'Dr. Tanaya Thakur', credits: 3 },
```

```
  { id: 2, title: 'Web Technologies', instructor: 'Dr.Rohit Kumar', credits: 3 },
```

```
  { id: 3, title: 'Artificial Intelligence', instructor: 'Dr. Dhivya', credits: 3 },
```

```
];
```

```
// Serve the HTML file
```

```
app.get('/', (req, res) => {
```

```
  res.sendFile(__dirname + '/index.html');
```

```
});
```

```
app.get('/courses', (req, res) => {
```

```
  res.json(courses);
```

```
});
```

```
app.post('/courses', (req, res) => {
```

```
  const newCourse = req.body;
```

```
    newCourse.id = courses.length + 1; // Generate a new ID (this is basic; in real apps, use
proper ID management)
    courses.push(newCourse);
    res.status(201).json(newCourse);
  });

app.listen(port, () => {
  console.log(`Learning Management System listening on port ${port}`);
});
```

Index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Learning Management System</title>
</head>
<body>
  <h1>Learning Management System</h1>

  <h2>Add Course</h2>
  <form action="/courses" method="post">
    <label for="title">Course Title:</label>
    <input type="text" id="title" name="title" required><br>
    <label for="instructor">Instructor:</label>
    <input type="text" id="instructor" name="instructor" required><br>
    <label for="credits">Number of Credits:</label>
    <input type="number" id="credits" name="credits" required><br>
```

```
<button type="submit">Add Course</button>
</form>
```

```
<h2>Courses</h2>
<ul id="courses">
  <!-- Course list will be displayed here -->
</ul>
```

```
<script>
  // Fetch and display the list of courses
  fetch('/courses')
    .then(response => response.json())
    .then(courses => {
      const coursesList = document.getElementById('courses');
      courses.forEach(course => {
        const li = document.createElement('li');
        li.textContent = `Title: ${course.title}, Instructor: ${course.instructor}, Credits:
${course.credits}`;
        coursesList.appendChild(li);
      });
    });
</script>
</body>
</html>
```

Output:-

```
1 const express = require('express');
2 const app = express();
3 const port = 3000;
4
5 app.use(express.json());
6 app.use(express.urlencoded({ extended: true }));
7
8 // Define the course structure to include the "credits" field
9 let courses = [
10   { id: 1, title: 'Intellectual Property Rights', instructor: 'Dr. Tanaya Thakur', credits: 3 },
11   { id: 2, title: 'Web Technologies', instructor: 'Dr. Rohit Kumar', credits: 3 },
12   { id: 3, title: 'Artificial Intelligence', instructor: 'Dr. Dhivya', credits: 3 },
13 ];
14
15 // Serve the HTML file
16 app.get('/', (req, res) => {
17   res.sendFile(__dirname + '/index.html');
18 });
19
20 app.get('/courses', (req, res) => {
21   res.json(courses);
22 });
23
24 app.post('/courses', (req, res) => {
25   const newCourse = req.body;
26   newCourse.id = courses.length + 1; // Generate a new ID (this is basic; in real apps, use proper ID management)
27 });
```

PS C:\Users\Aman Bhat\OneDrive\Desktop\Web Technologies - Sem V\CS3809 - Web Tech Lab\Lab Ex 07> node app.js

Learning Management System listening on port 3000



Learning Management System

Add Course

Course Title:

Instructor:

Number of Credits:

Courses

- Title: Intellectual Property Rights, Instructor: Dr. Tanaya Thakur, Credits: 3
- Title: Web Technologies, Instructor: Dr. Rohit Kumar, Credits: 3
- Title: Artificial Intelligence, Instructor: Dr. Dhivya, Credits: 3
- Title: Cyber Security, Instructor: Dr. Divya S, Credits: 3

