



**BHARATIYA VIDYA BHAVAN'S**

**SARDAR PATEL INSTITUTE OF TECHNOLOGY**

**Munshi nagar, Andheri (W), Mumbai - 400058**

**(Autonomous Institute Affiliated to University of Mumbai)**

**[Department of Computer Science and Engineering (Master of Computer Applications)]**

**CLASS: F.Y. MCA**

**SEM: I**

**AY:24-25**

**COURSE CODE: MC504**

**SUBJECT NAME: WEB TECHNOLOGY LAB**

**ROLL NO.: 2024510001**

**BATCH: A**

**NAME: Atharva Vasant Angre**

**EXPERIMENT NO: 08**

**EXPERIMENT TITLE: Create API.**

**Problem Statement**

Develop a Node.js application using Express to demonstrate the implementation of basic API endpoints. These APIs should handle:

A GET request to greet a user by their first name.

A POST request to calculate the sum of two numbers.

The application should include a frontend HTML form to interact with the APIs and a backend service to process the requests.

**Code:**

Home.html

```
<!DOCTYPE html>

<html>

  <head>

    <title>LAB 8</title>

  </head>

  <body>

    <form action="/greeting" method="GET">

      <input name="firstname" type="text" placeholder="First Name" />

      <button type="submit">Submit</button>

    </form>

    <br />

    <form action="/add" method="POST">

      <input name="num1" type="number" />

      <span>PLUS</span>

      <input name="num2" type="number" />

      <button type="submit">Submit</button>

    </form>

  </body>

</html>
```

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Server.js

```
const express = require("express");
const bodyParser = require("body-parser");
const service = require("./service.js");
const path = require("path");

const app = express();
```

```
const port = 3000;

app.use(bodyParser.json());
app.use(
  bodyParser.urlencoded({
    extended: true,
  })
);

app.get("/", (req, res) => {
  res.sendFile("D:/SPIT-FYMCA/WT PRAC/LAB 8/API/home.html");
});

service.attachService(app);

app.listen(port, () => {
  console.log(`Server running at http://localhost:${port}`);
});
```

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Service.js

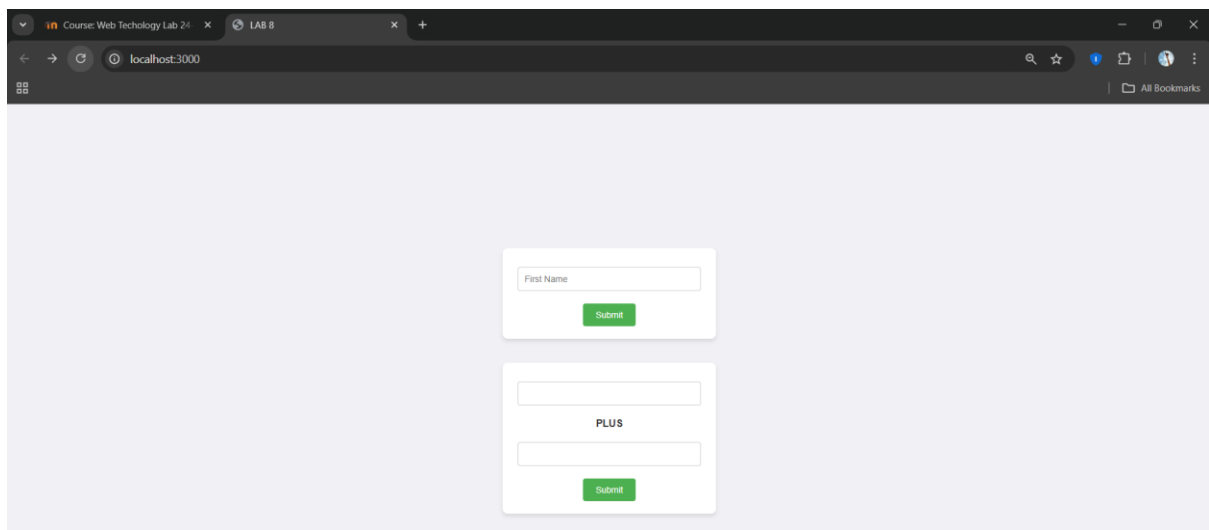
```
function greeting(req, res) {
  var greet = req.query.firstname;
  res.send("Greetings, " + greet);
}

function additon(req, res) {
  var n1 = req.body.num1;
  var n2 = req.body.num2;
  var sum = parseInt(n1) + parseInt(n2);
  res.send(n1 + " plus " + n2 + " = " + sum);
}
```

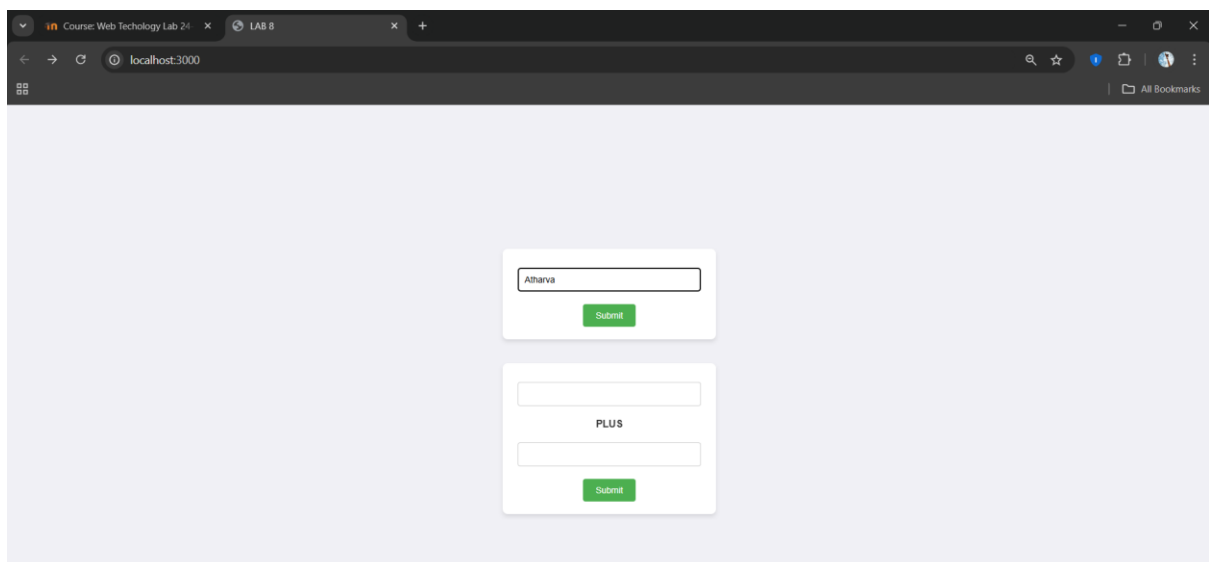
```
}
```

```
var attachService = function (app) {  
  app.get("/greeting", greeting);  
  app.post("/add", additon);  
};  
exports.attachService = attachService;
```

Outputs:



A screenshot of a web browser window. The address bar shows 'localhost:3000'. The page content is a light gray background with a white rectangular form in the center. The form has a single input field labeled 'First Name' and a green 'Submit' button below it.



A screenshot of a web browser window, identical to the one above. The input field now contains the text 'Atharva'. The rest of the form, including the 'Submit' button, remains the same.

