



Vidyavardhini's College of Engineering and Technology

Department of Artificial Intelligence & Data Science

AY: 2025-26

Class:	TE	Semester:	V
Course Code:	28C502	Course Name:	WC

Name of Student:	Yash Kasare
Roll No. :	27
Assignment No.:	05
Title of Assignment:	Node.js appln using Express
Date of Submission:	06/10/25
Date of Correction:	06/10/25

Evaluation

Performance Indicator	Max. Marks	Marks Obtained
Completeness	5	5
Demonstrated Knowledge	3	2
Legibility	2	2
Total	10	9

Performance Indicator	Exceed Expectations (EE)	Meet Expectations (ME)	Below Expectations (BE)
Completeness	5	3-4	1-2
Demonstrated Knowledge	3	2	1
Legibility	2	1	0

Checked by

Name of Faculty : Ms. Kshitija Gharat
Signature : *Kharat*
Date : 6/10/25

1. React Frontend (App.js):

```
import React, {useEffect, useState} from "react";
```

```
function App() {
```

```
  const [items, setItems] = useState([]);
```

```
  useEffect(() => {
```

```
    fetch("http://localhost:5000/items")
```

```
      .then((res) => res.json())
```

```
      .then((data) => setItems(data));
```

```
  }, []);
```

```
  return (
```

```
    <div style={{padding: "20px", fontFamily: "Arial"}} >
```

```
      <h1> ItemList </h1>
```

```
      <ul>
```

```
        {items.map((item) => {
```

```
          <li key={item.id}> {item.name} </li>
```

```
        })}
```

```
      </ul>
```

```
    </div>
```

```
  );
```

```
} export default app;
```

Express Backend (server.js):

```
import express from "express";
```

```
import cors from "cors";
```

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

```
app.use(cors());
```

```
const items = [
  { id: 1, name: "Apple" },
  { id: 2, name: "Banana" },
  { id: 3, name: "Orange" }
];
```

```
app.get("/items", (req, res) => {
  res.json(items);
});
```

```
app.listen(5000, () => {
  console.log("server running on http://localhost:5000");
});
```

OUTPUT:

Item List.

- Apple
- Banana
- Orange

Q.2. Express Server (server.js)

```
import express from "express";
import cors from "cors";
import itemRouter from "./routes/items.js";
```

```
const app = express();
app.use(cors());
app.use(express.json());
app.use("/api/items", itemRouter);
app.get("/", (req, res) => {
  res.send("Welcome to the Express Router Example!");
});
```

```
app.listen(5000, () => {  
  console.log("server running on http://localhost:5000");  
});
```

```
* Router Module (routes/items.js):  
import express from "express";  
const router = express.Router();  
const items = [  
  { id: 1, name: "Laptop" },  
  { id: 2, name: "Phone" },  
  { id: 3, name: "Tablet" }  
];  
router.get("/", (req, res) => {  
  res.json(items);  
});  
router.get("/:id", (req, res) => {  
  const item = items.find(i => i.id === parseInt(req.params.id));  
  if (!item) return res.status(404).json({ message: "Item  
  not found" });  
  res.json(item);  
});  
export default router;
```

OUTPUT :

Welcome to the Express Router Example !

JSON response :

```
[  
  { "id": 1, "name": "Laptop" },  
  { "id": 2, "name": "phone" },  
  { "id": 3, "name": "Tablet" }  
]  
  
{ "id": 2, "name": "Phone" }
```

Q.3.

Express App (server.js) :

```
import express from "express",  
import cookieParser from "cookie-parser",  
const app = express();  
app.use(express.json());  
app.use(cookieParser());
```

```
app.post("/login", (req, res) => {  
  const { username } = req.body;
```

```
  if (!username) {  
    return res.status(400).send("username required");  
  }
```

```
  res.cookie("username", username, {  
    httpOnly: true,  
    maxAge: 60 * 1000  
  });
```

```
  res.send("Welcome, $ {username}! cookie has been set.");  
});
```

```
app.get("/profile", (req, res) => {  
  const username = req.cookies.username;  
  if (!username) {
```

```
res.send("Hello $ {username}, welcome back!");  
});  
app.listen(5000, () => {  
  console.log("server running on http://localhost:5000");  
});
```

Output :

Login Request :

```
{ "username": "Yash" }
```

Response :

Welcome, Yash! Cookie
has been set.

If cookie exists :

Hello Yash, welcome back!

If cookie expired :

No active session.
Please Login.

4.

```
import express from "express";  
const app = express();  
const products = [  
  {id: 1, name: "laptop", price: 55000}  
  {id: 2, name: "Smartphone", price: 30000}  
  {id: 3, name: "Headphone", price: 2000}  
];
```

```
app.get("/products", (req, res) => {  
  res.json(products);  
});
```

```
app.listen(5000, () => {
```

```
  console.log("server running on http://localhost:5000");  
});
```

Example (Request) :

GET http://localhost:5000/products

Example (Response):

[

{ "id": 1, "name": "Laptop", "price": 55000 }

{ "id": 2, "name": "Smartphone", "price": 30000 }

{ "id": 3, "name": "Headphone", "price": 2000 }