

Ejemplo de arquitectura MVC

Crear directorio y e instala librerías

- `mkdir todo-app`
- `cd todo-app`
- `npm init -y`
- `npm install express ejs`

Estructura de programa

/todo-app

/models

taskModel.js

/views

index.ejs

add.ejs

/controllers

taskController.js

server.js

Servidor:

server.js:

```
const express = require('express');
const taskRoutes = require('./controllers/taskController');

const app = express();
const PORT = 3000;

app.set('view engine', 'ejs');
app.use(express.urlencoded({ extended: true })); // Middleware para procesar datos de formularios

app.use('/', taskRoutes);

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

Implementación del patrón MVC:

taskModel.js

```
let tasks = []; // Simulando base de datos con un array

module.exports = {
  getAll: () => tasks,
  add: (task) => tasks.push(task),
  delete: (index) => tasks.splice(index, 1)
};
```

index.ejs

```
<!-- index.ejs -->
<h1>Tasks</h1>
<ul>
  <% tasks.forEach((task, index) => { %>
    <li>
      <%= task %>
      <a href="/delete/<%= index %>">Delete</a>
    </li>
  <% }); %>
</ul>
<a href="/add">Add Task</a>
```


add.ejs

```
<!-- add.ejs -->
<h1>Add Task</h1>
<form action="/add" method="post">
  <input type="text" name="task" required>
  <button type="submit">Add</button>
</form>
```

taskController.js

```
const express = require('express');
const router = express.Router();
const taskModel = require('../models/taskModel');

router.get('/', (req, res) => {
  const tasks = taskModel.getAll();
  res.render('index', { tasks });
});

router.get('/add', (req, res) => {
  res.render('add');
});
```

```
router.post('/add', (req, res) => {
  taskModel.add(req.body.task);
  res.redirect('/');
});

router.get('/delete/:id', (req, res) => {
  taskModel.delete(req.params.id);
  res.redirect('/');
});

module.exports = router;
```