

MILESTONE 1: PROJECT SETUP AND CONFIGURATION :

- Setting up a structured environment is crucial for any application. By organising the project into separate folders for the frontend and backend, we ensure that the codebase is manageable and scalable.

```

1  {
2    "name": "forntend",
3  },
4
5  "dependencies": {
6    "@emotion/react": "^11.11.1",
7    "@emotion/styled": "^11.11.0",
8    "@mui/icons-material": "^5.14.0",
9    "@mui/material": "^5.14.0",
10   "@testing-library/jest-dom": "^5.16.5",
11   "@testing-library/react": "^13.4.0",
12   "@testing-library/user-event": "^13.5.0",
13   "antd": "^5.7.0",
14   "axios": "^1.4.0",
15   "bootstrap": "^5.3.0",
16   "mdb-react-ui-kit": "^6.1.0",
17   "moment": "^2.29.4",
18   "react": "^18.2.0",
19   "react-bootstrap": "^2.8.0",
20   "react-dom": "^18.2.0",
21   "react-router-dom": "^6.14.1",
22   "react-scripts": "^5.0.1",
23   "web-vitals": "^2.1.4"
24 },
25 "scripts": {
26   "start": "react-scripts start",
27   "build": "react-scripts build",
28   "test": "react-scripts test",
29   "eject": "react-scripts eject"
30 },
31 "eslintConfig": {
32   "extends": [
33     "react-app",
34     "react-app/jest"
35   ]
36 },
37 "browserslist": {
38   "production": [
39     ">0.2%",
40     "not dead",
41     "not op_mini all"
42   ],
43   "development": [
44     "last 1 chrome version",
45     "last 1 firefox version",
46     "last 1 safari version"
47   ]
48 },
49 "devDependencies": {
50   "@babel/plugin-proposal-private-property-in-object": "^7.21.11"
51 }
52 }
53

```

```

1  {
2    "name": "backend",
3    "version": "1.0.0",
4    "description": "",
5    "main": "index.js",
6    "scripts": {
7      "start": "node index.js",
8      "dev": "nodemon index.js"
9    },
10   "keywords": [],
11   "author": "",
12   "license": "ISC",
13   "dependencies": {
14     "bcryptjs": "^2.4.3",
15     "cors": "^2.8.5",
16     "dotenv": "^16.3.1",
17     "express": "^4.18.2",
18     "jsonwebtoken": "^9.0.1",
19     "mongoose": "^7.3.2",
20     "multer": "^1.4.5-lts.1",
21     "nodemon": "^3.0.1"
22   }
23 }
24

```

PROJECT FOLDERS:

- Frontend Folder: Contains all code related to the user interface, written in JavaScript using frameworks and libraries like React, Material UI, and Bootstrap. This setup helps maintain a clear boundary between UI logic and server logic.
- Backend Folder: Manages the server, API routes, and database interactions, typically handled through Node.js and Express.js. Using separate folders enables a modular structure, allowing changes in one area without affecting the other.

LIBRARY AND TOOL INSTALLATION:

Backend Libraries:

- Node.js: Provides a runtime environment to run JavaScript code on the server side.
- MongoDB: A NoSQL database, perfect for flexible and schema-less data storage, ideal for applications needing frequent updates and various data types.
- Bcrypt: Encrypts passwords for secure authentication, helping protect user data from potential breaches.
- Body-parser: Parses incoming request bodies, making it easy to access data in various formats like JSON.
- Frontend Libraries:
- React.js: Manages component-based UI creation, providing the flexibility to build reusable UI components.
- Material UI & Bootstrap: Provides styling frameworks, ensuring a consistent, responsive, and visually appealing design.
- Axios: Facilitates easy HTTP requests, allowing the frontend to communicate with the backend effectively.