Required Installations

NOTE –

The node_modules folder is not included in this repository. Please **run npm install** to install all necessary dependencies.

Frontend Installations Commands -

1.Create React App

npx create-react-app app_name

2.Navigate to the app

cd app_name

3.Essential packages

npm install react-router-dom

npm install react-icons

4.Run the app

npm start

Backend Installation Commands -

1.Initialize backend

npm init -y

2.Install essential packages

npm install express mysql cors dotenv

npm install cors

3.For password hashing (if serverless authentication is used)

npm install bcrypt

4.Inorder to run both frontend and backend concurrently install -

npm install concurrently --save-dev

Also set your outer package.json code to -

```
{
  "name": " app_name",
  "version": "1.0.0",
  "scripts": {
    "start": "concurrently \"npm run server\" \"npm run client\"",
    "server": "cd backend && node index.js",
    "client": "cd src && npm run start-react",
    "start-react": "react-scripts start"
  },
  "devDependencies": {
    "concurrently": "^9.1.2"
  },
  "browserslist": {
    "production": [
      ">0.2%",
      "not dead",
      "not op_mini all"
    ],
    "development": [
      "last 1 chrome version",
      "last 1 firefox version",
      "last 1 safari version"
    ]
  },
  "dependencies": {
    "@fortawesome/fontawesome-free": "^6.7.2",
```

```
    "@fortawesome/free-brands-svg-icons": "^6.7.2",

    "@fortawesome/react-fontawesome": "^0.2.2",

    "react-dom": "^19.1.0",

    "react-icons": "^5.5.0",

    "react-responsive-carousel": "^3.2.23",

    "react-router-dom": "^7.6.1",

    "react-scripts": "^5.0.1"

  }

}
```

To install package.json and node modules files -

npm install

File Structure -

BELONGAPP/

```
|
├── backend/
|   ├── node_modules/
|   ├── routes/
|   |   ├── auth.js
|   |   └── products.js
|   ├── db.js
|   ├── products.json
|   ├── server.js
|   ├── index.js
|   ├── .env
|   ├── package.json
|   └── package-lock.json
|
├── node_modules/
```

```
|
├── public/
│   ├── images/
│   │   └── ... (static image files)
│   └── index.html
│
├── src/
│   ├── assets/
│   │   ├── teams/
│   │   │   └── ... (team-related images)
│   │   └── ... (other image files)
│   │
│   ├── components/
│   │   ├── LoginSignup.js
│   │   ├── Navbar.js
│   │   ├── ProtectedRoute.js
│   │   └── Sample.js
│   │
│   ├── context/
│   │   └── AuthContext.js
│   │
│   ├── frontend/
│   │   ├── About.js
│   │   ├── CartContainer.js
│   │   ├── Contact.js
│   │   ├── FAQ.js
│   │   ├── Home.js
│   │   ├── LensConcepts.js
│   │   ├── OurImpact.js
│   │   ├── ProductCard.js
```

```
|   |   ├── ProductList.js
|   |   └── WhomWeWork.js
|   |
|   ├── styles/
|   |   ├── About.css
|   |   ├── Contact.css
|   |   ├── FAQ.css
|   |   ├── Header.css
|   |   ├── Home.css
|   |   ├── LensConcepts.css
|   |   ├── LoginSignup.css
|   |   ├── OurImpact.css
|   |   ├── ProductCard.css
|   |   ├── ProductList.css
|   |   └── WhomWeWork.css
|   |
|   ├── App.js
|   ├── index.js
|   ├── setupTests.js
|   └── logo.svg
|
├── .gitignore
├── package.json
├── package-lock.json
└── README.md
```

MySQL -

1.Create Table -

```
CREATE TABLE table_name (
    column1 datatype constraints,
    column2 datatype constraints,
    ...
);
```

2.Insert Values -

```
INSERT INTO table_name (column1, column2, ...)
VALUES (value1, value2, ...);
```

3.Update Values -

```
UPDATE table_name
SET column1 = value1, column2 = value2, ...
WHERE condition;
```

4.Drop Table -

```
DROP TABLE table_name;
```

5.Delete Values -

```
DELETE FROM table_name
WHERE condition;
```

Output- My sample database

I have used a single database with 2 tables(1 for Products and 1 for User Credentials) for backend.

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| articles_db        |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.01 sec)

mysql> use articles_db;
Database changed
mysql> show tables;
+-----------------------+
| Tables_in_articles_db |
+-----------------------+
| products              |
| users                 |
+-----------------------+
2 rows in set (0.01 sec)
```

```
mysql> select * from products;
+----+------------------------+-----------------------------------------------------------------------------+--------+---------------------------+
| id | name                   | description                                                                 | price  | image                     |
+----+------------------------+-----------------------------------------------------------------------------+--------+---------------------------+
|  1 | Large Vision Kit       | Complete large kit for vision testing.                                      | 800.00 | Largekit.png              |
|  2 | Small Vision Kit       | Compact kit suitable for basic eye exams.                                   | 500.00 | Smallkit.png              |
|  3 | Black Frame            | Durable frame in black color.                                               | 400.00 | Full-Rim Black.jpeg       |
|  4 | Blue Frame             | Durable frame in blue color.                                                | 400.00 | Full-Rim Blue.jpeg        |
|  5 | Brown Frame            | Durable frame in brown color.                                               | 400.00 | Full-Rim Brown.jpeg       |
|  6 | Full Rim Frame         | Durable frame in black color.                                               | 700.00 | Full-Rim Square Frame.jpeg|
|  7 | Oakley Frame           | Durable frame in black color.                                               | 800.00 | Oakley.jpeg               |
|  8 | Distance Vision Tester | Tool to test distance vision clarity.                                       | 700.00 | Distance Vision Tester.png|
|  9 | Microfiber Cloth       | Soft cleaning cloth for lenses.                                             | 40.00  | Lens cloth.jpg            |
| 10 | Pouches                | Protective pouch for glasses.                                               | 50.00  | LensPouch.jpeg            |
| 11 | Microfiber Cloth + Pouch| Combo of cloth and pouch.                                                  | 80.00  | Pouch.jpeg                |
| 12 | Lens -6D               | Lens with -6 Diopters.                                                      | 550.00 | lens-plus6.jpg            |
| 13 | Lens -4D               | Lens with -4 Diopters.                                                      | 450.00 | lens-plus6.jpg            |
| 14 | Lens -2D               | Lens with -2 Diopters.                                                      | 500.00 | lens-plus6.jpg            |
| 15 | Lens 0D                | Neutral lens (0 Diopters).                                                  | 300.00 | lens-plus6.jpg            |
| 16 | Lens +2D               | Lens with +2 Diopters.                                                      | 500.00 | lens-plus6.jpg            |
| 17 | Lens +4D               | Lens with +4 Diopters.                                                      | 450.00 | lens-plus6.jpg            |
| 18 | Lens +6D               | Lens with +6 Diopters.                                                      | 550.00 | lens-plus6.jpg            |
| 19 | Near Vision Tester     | Chart to test near vision.                                                  | 600.00 | nearvisiontester.jpeg     |
| 20 | Eyeglass Cleaner       | A gentle spray cleaner that safely removes smudges and dirt from lenses without scratching. | 150.00 | eyeglass-cleaner.jpg |
+----+------------------------+-----------------------------------------------------------------------------+--------+---------------------------+
20 rows in set (0.00 sec)
```

```
mysql> select * from users;
+----+------------+----------------------------+--------------------------------------------------------------+
| id | full_name  | email                      | password                                                     |
+----+------------+----------------------------+--------------------------------------------------------------+
|  1 | Sri        | akshaya@gmail.com          | $2b$10$iB0NXB.CpDydkHQppks/TeXcmWHvUBFRccWKq1ED2s.i58VHwgCA2  |
|  2 | Akshaya    | chinnukadiyala15@gmail.com | $2b$10$qGsCFZloNmHGgPxp2Or3BurVcAiCRslqBQGuF.Ei/OBcKY/Ak/tnm |
|  3 | Akshaya    | akshaya15@gmail.com        | $2b$10$8/YB5PlIX7BCRuOABpUXYePCqChRe9GsHVGXW0BBo50nugH2h8IRK |
|  5 | Rohan      | rohan@gmail.com            | $2b$10$QpClrR1o8YM8PGZmCOIruuqdjHnnT7g6nQcenLOoE1ciz4XJ2oZJ. |
|  6 | AkshayaSri | akshaya03@gmail.com        | $2b$10$ty0pU27UgZoZ3mKM5NZ9qeS/NzVO5c9V2hVvoZNmoP9CidnLiLy/u |
+----+------------+----------------------------+--------------------------------------------------------------+
5 rows in set (0.00 sec)
```