## APPLICATION DEVELOPMENT PROBLEM
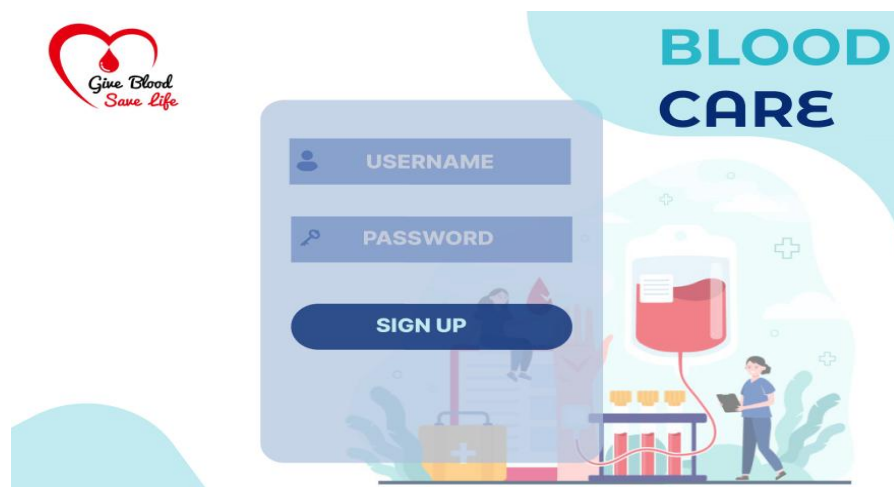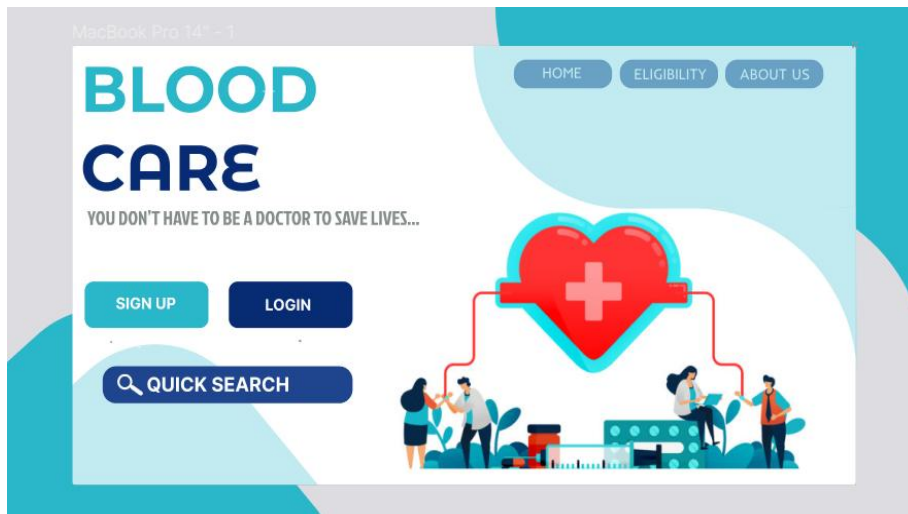
**AIM:**

Develop a Application Program of Personal Information System With MongoDB Backend  Database

# DATABASE SCHEMA

```
un  Terminal  Help                               userSchema.js - PROJECT - Visual Studio Code
JS userRoutes.js        JS userController.js      JS userSchema.js ×      JS App.js          JS Homepage.

server > models > JS userSchema.js > [@] UserSchema
    1    const mongoose = require("mongoose");
    2    const UserSchema = mongoose.Schema(
    3      {
    4        name: String,
    5        email: String,
    6        password: String,
    7        category: String,
    8        bloodgroup: String,
    9        location:Object
   10      },
   11      {
   12        timestamps: true,
   13        collection: "user",
   14      }
   15    );
   16
   17    module.exports = mongoose.model("User", UserSchema);
   18
```

# LOGIN WORKING

```
Json   Xml   Text   Form   Form-encode   Graphql   Binary

Json Content                                        Format
    1    {
    2      "name":"xyz",
    3      "email":"xyz@gmail.com",
    4      "password":"123",
    5      "category":"donor",
    6      "bloodgroup":"AB+VE",
    7      "location":{
    8        "lat":"11.6854",
    9        "lon":"76.1320"
   10      }
   11    }
```
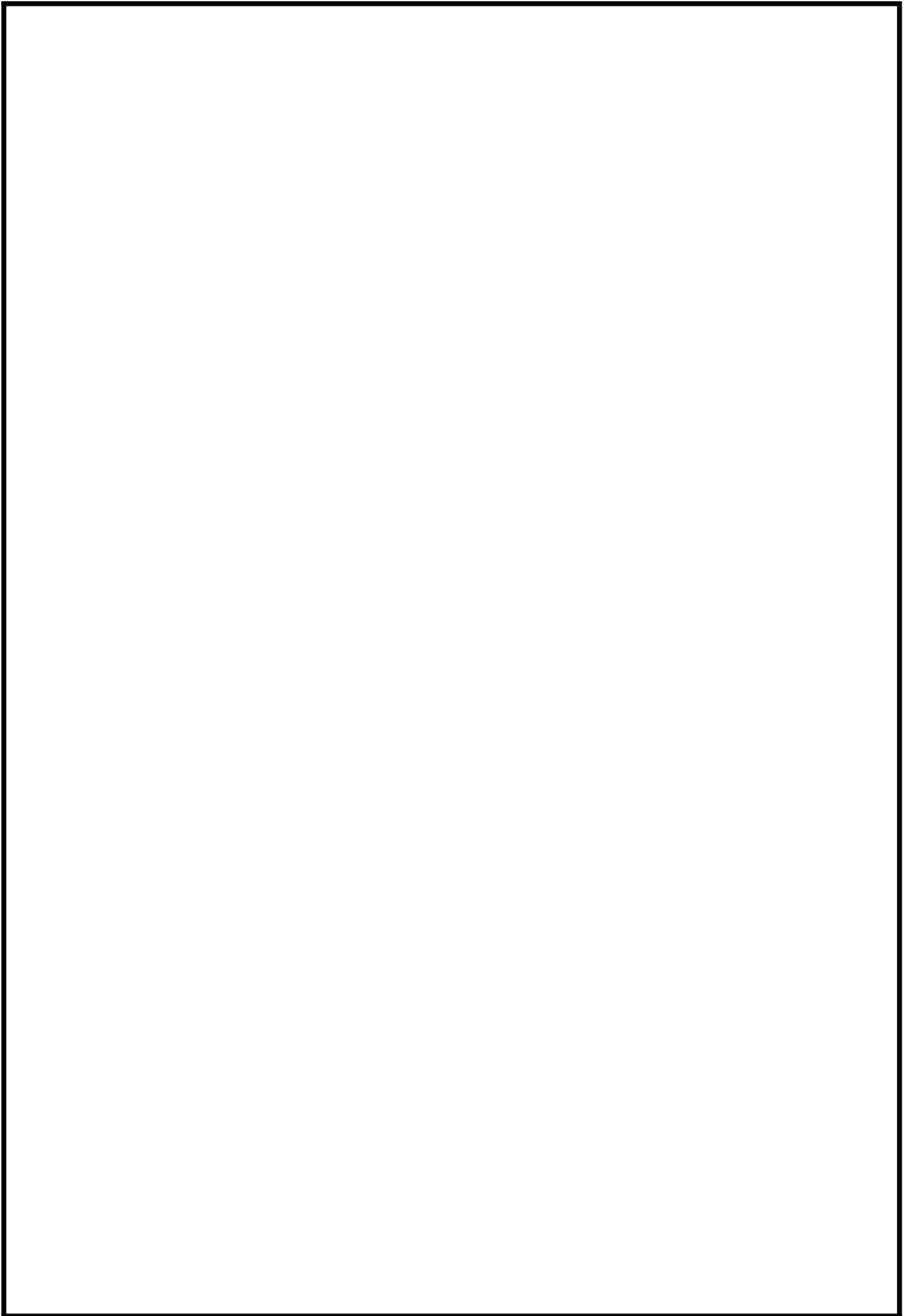
```
    1    {
    2      "success": true,
    3      "data": {
    4        "name": "xyz",
    5        "email": "xyz@gmail.com",
    6        "password": "123",
    7        "category": "donor",
    8        "bloodgroup": "AB+VE",
    9        "location": {
   10          "lat": "11.6854",
   11          "lon": "76.1320"
   12        },
   13        "_id": "63dfc1156ee541bccc15d68b",
   14        "createdAt": "2023-02-05T14:45:41.119Z",
   15        "updatedAt": "2023-02-05T14:45:41.119Z",
   16        "__v": 0
   17      }
   18    }
```

# DATABASE DATA

```
    > location: Object


      _id: ObjectId('63dfc1156ee541bccc15d68b')
      name: "xyz"
      email: "xyz@gmail.com"
      password: "123"
      category: "donor"
      bloodgroup: "AB+VE"
    > location: Object
      createdAt: 2023-02-05T14:45:41.119+00:00
      updatedAt: 2023-02-05T14:45:41.119+00:00
      __v: 0
```
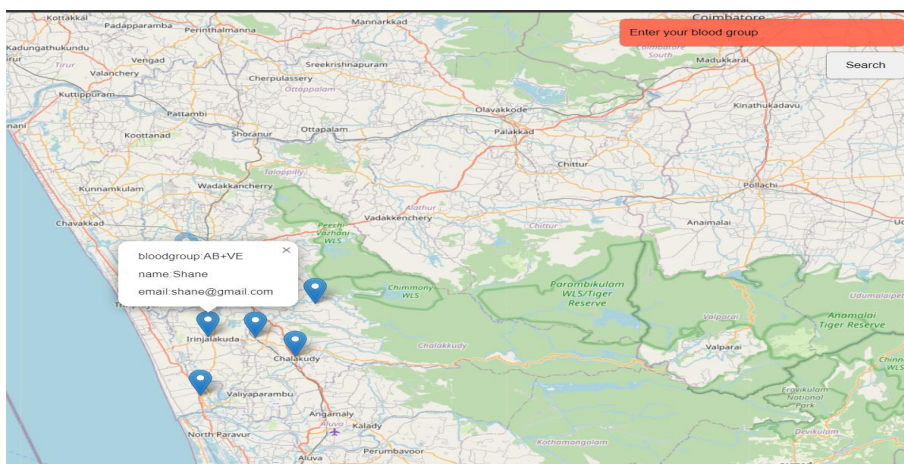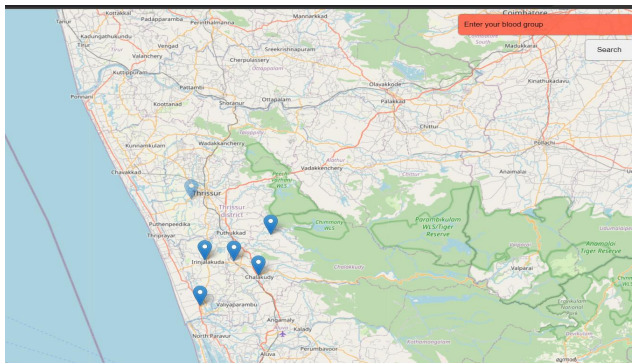
# CODE FOR FILTERING DONORS

```
client > src > pages > Mappage > JS Mappage.js > ...
  1  import React, { useEffect, useState } from "react";
  2  import Searchcomponent from "../../components/SearchComponent/Searchcomponent";
  3  import Mapcompoenent from "../../components/Mapcomponent/Mapcompoenent";
  4  import { toast, ToastContainer } from "react-toastify";
  5  import "react-toastify/dist/ReactToastify.css";
  6  import "./mapPage.css";
  7
  8  function Mappage() {
  9    const [bloodGroup, setBloodGroup] = useState(undefined);
 10    const [location, setLocation] = useState(undefined);
 11    const [data, setData] = useState([]);
 12    const [filtereddata, setFilteredData] = useState([]);
 13
 14    function dataFilter() {
 15      setFilteredData(data.filter((dat) => dat.bloodgroup === bloodGroup));
 16      if (data.filter((dat) => dat.bloodgroup === bloodGroup).length === 0) {
 17        toast.warning("No donor for the blood group",{
 18          position:'bottom-left'
 19        });
 20      }
 21    }
 22    async function fetchDonors() {
 23      await fetch(`http://localhost:8000/user/getallusers`)
 24        .then((response) => {
 25          return response.json();
 26        })
 27        .then((data) => {
 28          setData(data.data);
 29          setFilteredData(data.data);
 30        });
 31    }
 32    useEffect(() => {
 33      fetchDonors();
 34    }, []);
 35    return (
 36      <div className="mappageWrapper">
 37        <Searchcomponent
```

```
    }
    useEffect(() => {
      fetchDonors();
    }, []);
    return (
      <div className="mappageWrapper">
        <Searchcomponent
          bloodGroup={bloodGroup}
          setBloodGroup={setBloodGroup}
          location={location}
          setLocation={setLocation}
          dataFilter={dataFilter}
        />
        <Mapcompoenent data={filtereddata} />
        <ToastContainer />
      </div>
    );
}

export default Mappage;
```

# AVAILABLE DONORS BASED ON SEARCH

## **RESULT:**

Application for blood donation developed successfully.