Digital Assignment - 4
CSE1901 - TECHNICAL ANSWERS FOR REAL WORLD PROBLEMS
Summer Semester Special 2021-2022

App Based Road Safety Violation Recording System

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IMPLEMENTATION SNAPSHOTS

PSEUDO CODE

```
const complaintSchema = new mongoose.Schema ({
    // id: { type: String, required: true },
    reportedBy: { type: String, required: true },
    reportedLocation: { type: String, required: true },
    description: { type: String },
    imageUrl: [String],
    vehicleNumber: { type: String, required: true},
    transporterName: { type: String },
    transporterCode: { type: String },
    comments: { type: String },
    createdOn: { type: Date, default: Date.now },
    status: { type: String, enum: ["OPEN","CLOSED"], default: "OPEN" },
    remarks: { type: String, default: "None" }
});
```

Figure 1. Complaint Schema Code

```
const transporterSchema = new mongoose.Schema({
    name: { type: String, required: true },
    id: { type: String, required: true}
});
```

Figure 2. Transporter Schema Code

```
const locationSchema = new mongoose.Schema({
    name: { type: String, required: true },
    location: {
        type: {
            type: String,
            enum: ["Point"],
            required: true
        },
        coordinates: {
            type: [Number],
            required: true
        }
    }
});
```
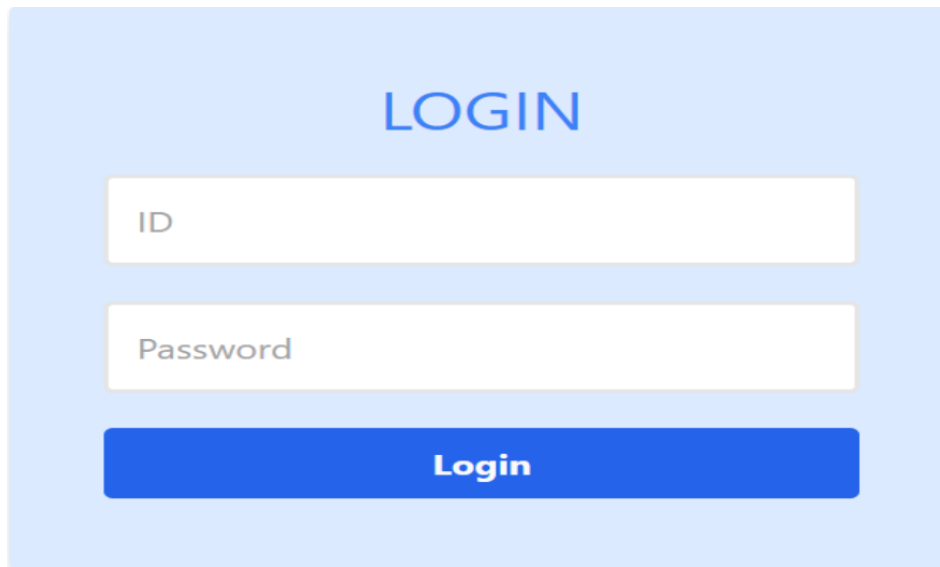
Figure 3. Location Schema Code

```
const userSchema = new mongoose.Schema ({
    id: { type: String, required: true } ,
    password: { type: String, required: true } ,
    type: { type: String, enum: ["ADMIN", "VIEWER"], required: true } ,
    lastLogin: { type: Date, default: Date.now },
    createdOn: { type: Date, default: Date.now }
    // currentToken: String,
    // currentTokenTimestamp: Date
    // modifiedOn: Date
});
```

Figure 4. User Schema

WEBSITE SNAPSHOTS

Figure 5. Login Page

Figure 6. Dashboard

Figure 7. Complaints page
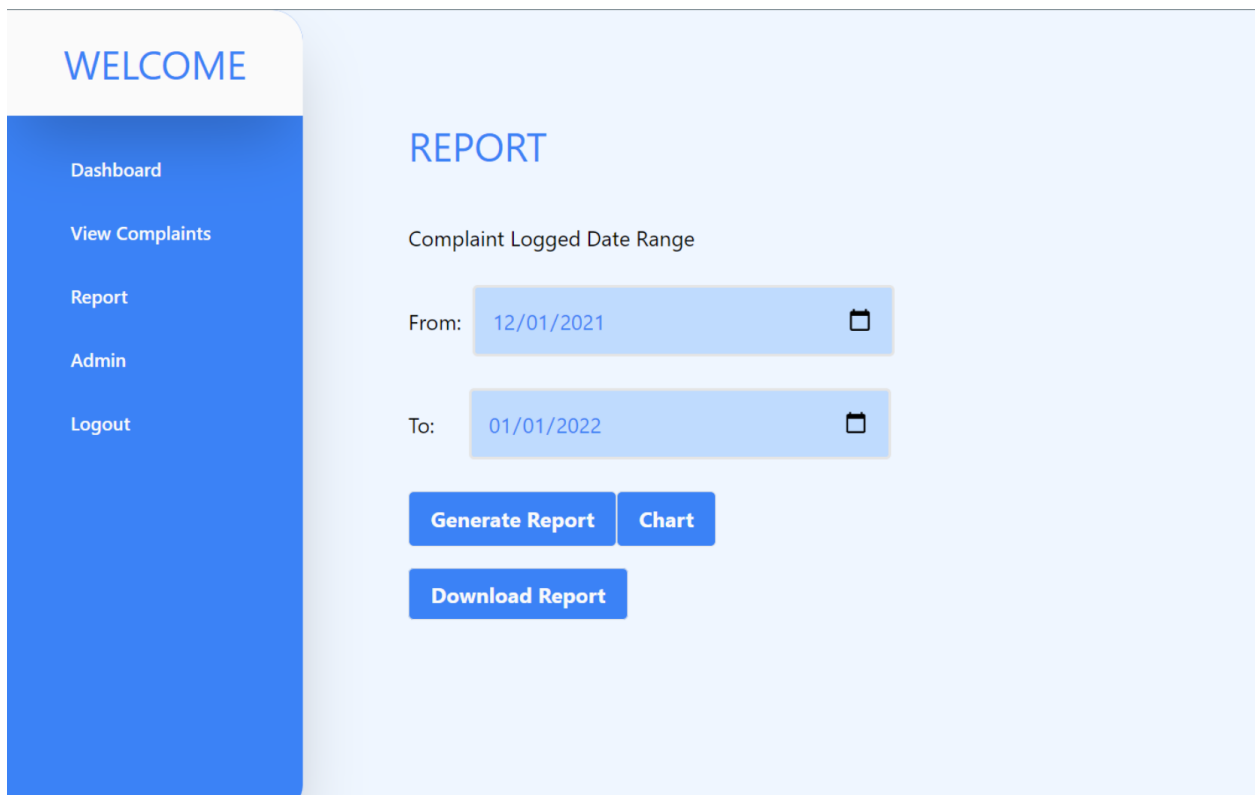
Figure 8. Reports Page

Figure 9. Edit Complaint Page

SERVER SNAPSHOTS

Figure 10. Backend Server

Figure 11. Frontend Server

COMPARISON CHARTS
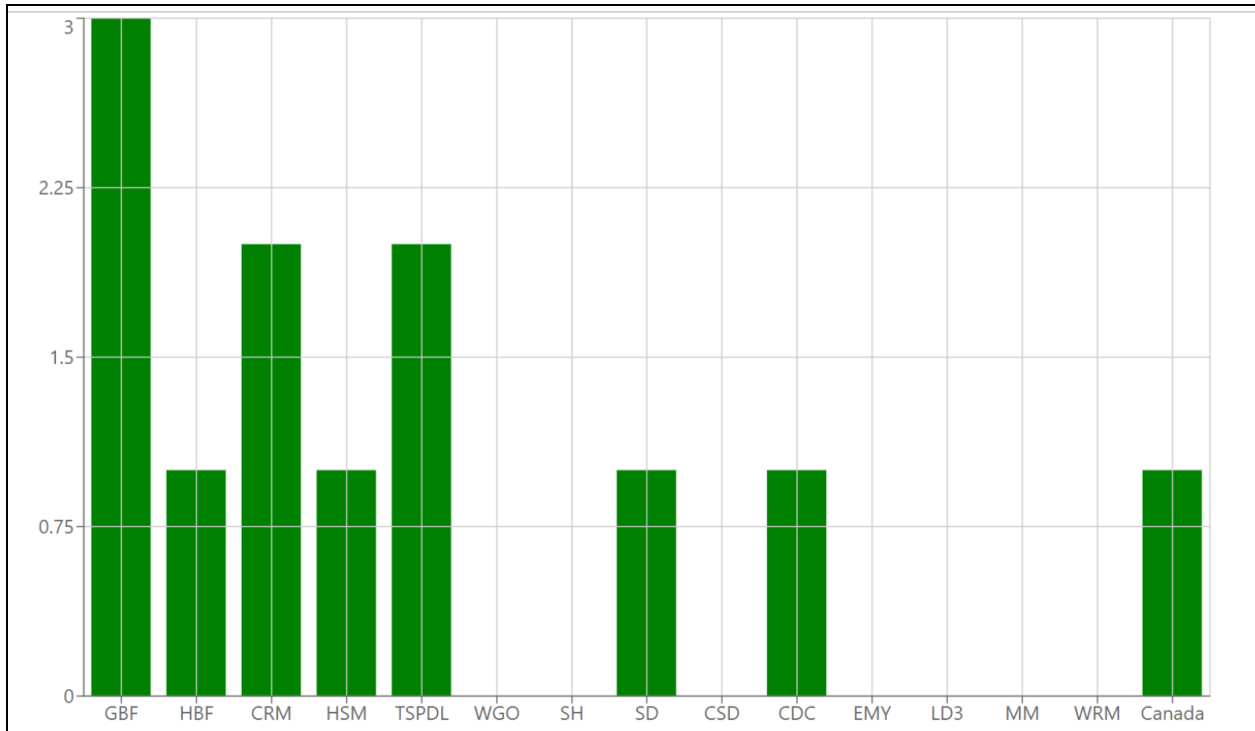

Figure 12. Excel Report

Figure 13. Analysis Chart A

Overall Analysis
1. The green ring suggests the number of complaints distributed across various departments.
2. The inner ring gives the count for the number of open complaints to the closed one.
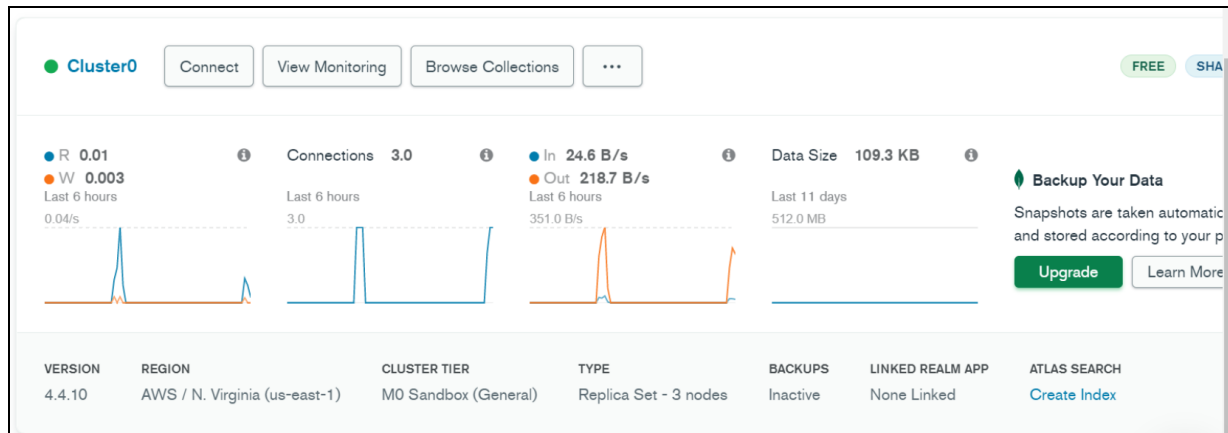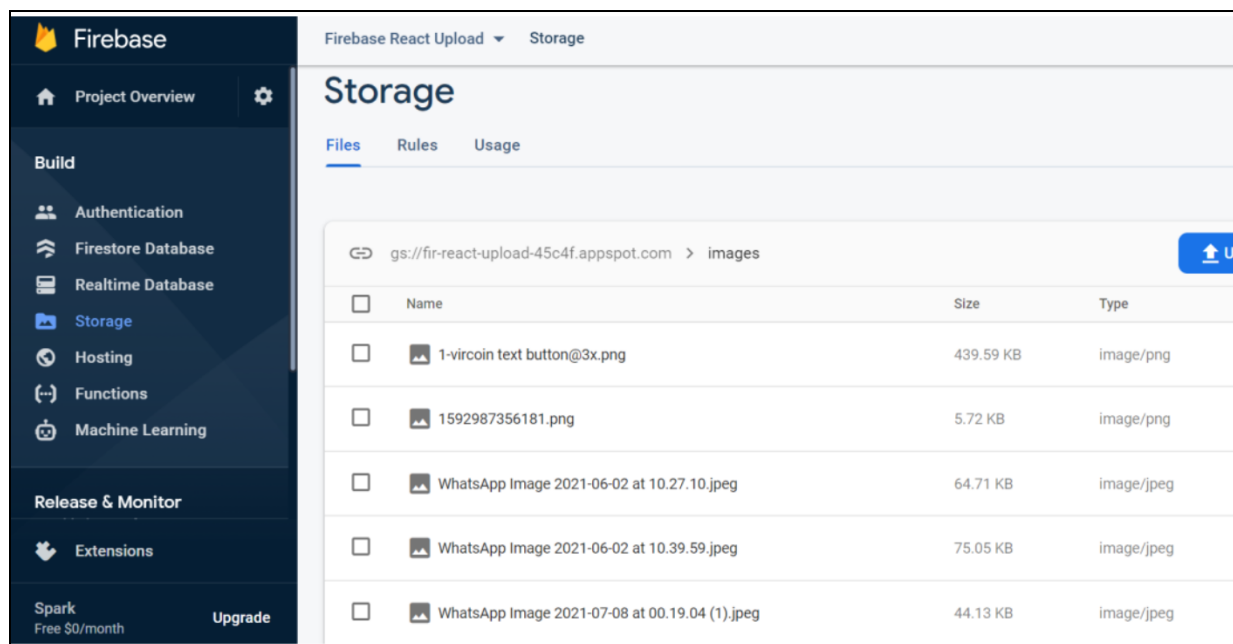

Figure 14. Analysis Chart B

Figure 15. Cloud Database (MongoDB Atlas)

Figure 16. Cloud File Storage (Firestore)