**Resourcify User Manual**

**1. Introduction**

Resourcify is a web-based platform designed for managing and allocating resources within a small community or organization. It optimizes resource distribution with features like tracking, request management, and predictive allocation.

**2. System Overview**

**2.1 Features**

* **Resource Tracking:** Monitor available resources and their usage.
* **Request Management:** Submit, approve, and track resource requests.
* **Predictive Allocation:** Forecast resource demand based on historical data.
* **Authentication System:** Secure login and role-based access.
* **Google Maps Integration:** Visualize resource locations.
* **User Dashboard:** View statistics, pending requests, and recent activity.

**2.2 Technologies Used**

* **Backend:** Java (Spring Boot), MySQL
* **Frontend:** HTML, CSS, JavaScript
* **Database:** MySQL/SQLite
* **API Integrations:** Google Maps API for mapping

**3. Getting Started**

**3.1 System Requirements**

* Web Browser: Chrome, Firefox, Edge (Latest Versions)
* Backend Server: Java 11+, Apache Tomcat
* Database: MySQL installed and configured

**3.2 Installation and Setup**

1. **Clone Repository:**
2. git clone https://github.com/yourrepo/resourcify.git
3. **Backend Setup:**
   * Navigate to the backend directory.
   * Configure application.properties with MySQL database credentials.
   * Run the backend using:
   * mvn spring-boot:run
4. **Frontend Setup:**
   * Navigate to the frontend directory.
   * Open dashboard.html in a web browser.

**4. Using Resourcify**

**4.1 User Authentication**

* **Register:** New users can sign up.
* **Login:** Access the dashboard using credentials.
* **Role-Based Access:** Admins manage requests, users request resources.

**4.2 Dashboard Overview**

* **Total Resources:** Displays the count of available resources.
* **Requests Made:** Number of submitted requests.
* **Pending & Fulfilled Requests:** Shows request statuses.
* **Predicted Demand:** Displays AI-based demand forecasts.
* **Recent Requests Table:** Lists submitted resource requests.

**4.3 Submitting a Resource Request**

1. Go to **Requests** section.
2. Click **Submit Request** button.
3. Enter resource name, quantity, and reason.
4. Click **Submit** and wait for approval.

**4.4 Approving/Denying Requests (Admin Only)**

1. Navigate to **Pending Requests**.
2. Click **Approve** or **Deny** on each request.
3. Approved requests are marked as **Fulfilled**.

**4.5 Predicting Resource Demand**

* The system forecasts resource demand using historical data.
* Users can check upcoming needs via the **Predicted Demand** section.

**5. Troubleshooting & FAQs**

**5.1 Common Issues & Fixes**

* **Login Not Working?** Check credentials or reset the password.
* **Requests Not Showing?** Ensure the backend server is running.
* **Predictions Not Loading?** Verify API connectivity to http://localhost:8080/api/predict.
* **Database Connection Issues?** Check MySQL configuration in application.properties.

**5.2 Contact Support**

For technical support, reach out to the development team at: 📧 [**resourcify8@gmail.com**](mailto:resourcify8@gmail.com)

**6. Future Enhancements**

* **AI-Powered Demand Prediction Improvements**
* **Mobile App Development**
* **Real-time Notifications for Requests**

Thank you for using **Resourcify**! 🚀