

# Grievance Web Application Documentation

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## 1. Project Overview

The Grievance Web Application is a powerful platform designed to enable users to submit, track, and resolve grievances seamlessly. This system ensures transparency and prompt action on issues reported by users, fostering a responsive environment where concerns are handled efficiently by the appropriate authorities.

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## 2. Technologies Used

### Frontend:

- **React.js:** For building dynamic and interactive user interfaces.
- **React Router:** Manages navigation within the application, ensuring smooth user experience.
- **Axios:** Simplifies HTTP requests and handles communication between the frontend and backend.
- **React Icons:** Adds visually appealing icons to enhance user interaction.
- **CSS:** Custom styling to ensure a clean, user-friendly interface.

### Backend:

- **Node.js:** Provides a robust runtime environment for server-side scripting.
- **Express.js:** Facilitates the creation of RESTful APIs and handling of HTTP requests.
- **MongoDB:** A NoSQL database for storing user data and grievances efficiently.
- **Mongoose:** An ODM library for MongoDB, simplifying data modeling.
- **JSON Web Tokens (JWT):** Secures user authentication and session management.

### Tools:

- **Visual Studio Code:** An efficient code editor with powerful extensions.
- **Git:** Version control system to manage codebase and track changes.
- **Postman:** Used for testing API endpoints and ensuring the backend functions correctly.

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## 3. Pages and Features

### 3.1 Home Page

- **Description:** The landing page introduces users to the platform, highlighting its key features and benefits.
- **Features:**
  - Navigation links for easy access to other sections (Login, Register, Submit Grievance, Admin Dashboard).
  - A search bar enabling quick access to external articles related to grievances.

### 3.2 Login Page

- **Description:** This page allows existing users to log in using their credentials.
- **Features:**
  - Secure login form with email and password fields.
  - Options for social login via Google or Facebook.
  - Link to the registration page for new users.

### 3.3 Register Page

- **Description:** Enables new users to sign up by providing necessary details such as name, email, and password.
- **Features:**
  - A user-friendly registration form with input validation.
  - Options to sign up via Google or Facebook.

### 3.4 Submit Grievance Page

- **Description:** Authenticated users can submit grievances, specifying details like type, title, description, and attaching supporting documents.
- **Features:**
  - A comprehensive form for submitting grievances.
  - File upload functionality to attach relevant documents.

### 3.5 Admin Dashboard

- **Description:** Provides administrators with a comprehensive view of all grievances, allowing them to manage and resolve issues.
- **Features:**
  - A dynamic table listing all grievances, with options to mark them as resolved.
  - Real-time updates to the status of grievances.

### 3.6 Profile Page

- **Description:** Displays the grievances submitted by the logged-in user, along with their current status.
- **Features:**
  - A detailed list of the user's grievances.
  - Status indicators showing the progress of each grievance.

### 3.7 Navbar with Search Functionality

- **Description:** The navbar provides quick navigation to all key sections of the site, including a search feature to find relevant external articles.
  - **Features:**
    - Links to key pages: Home, Submit Grievance, Admin Dashboard, Profile.
    - Search bar for querying Google Scholar articles related to grievances.
    - Logout option for users to securely exit the platform.
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## 4. Setting Up and Running the Project

### 4.1 Prerequisites

- Node.js installed on your system.
- MongoDB running locally or access to a cloud instance.
- Git for version control.
- A code editor like Visual Studio Code.

### 4.2 Cloning the Repository

git clone <https://github.com/meenakshi-m/grievance-web.git>

### 4.3 Setting Up the Backend

1. Navigate to the backend directory: `cd backend`
2. Install the dependencies: `npm install`
3. Create a `.env` file in the root of the backend directory with the following contents:  
MONGO\_URI=your\_mongodb\_uri JWT\_SECRET=your\_jwt\_secret
4. Start the backend server: `npm install`

### 4.4 Setting Up the Frontend

1. Navigate to the frontend directory: `cd frontend`
2. Install the dependencies : `npm install`
3. Start the frontend development server: `npm start`

## Running the Application

Start the backend server:

- `cd backend`
- `npm start`

Start the frontend development server:

- `cd frontend`
- `npm start`

## 4.5 Accessing the Application

- Open your web browser and go to `http://localhost:3000` to start using the application.

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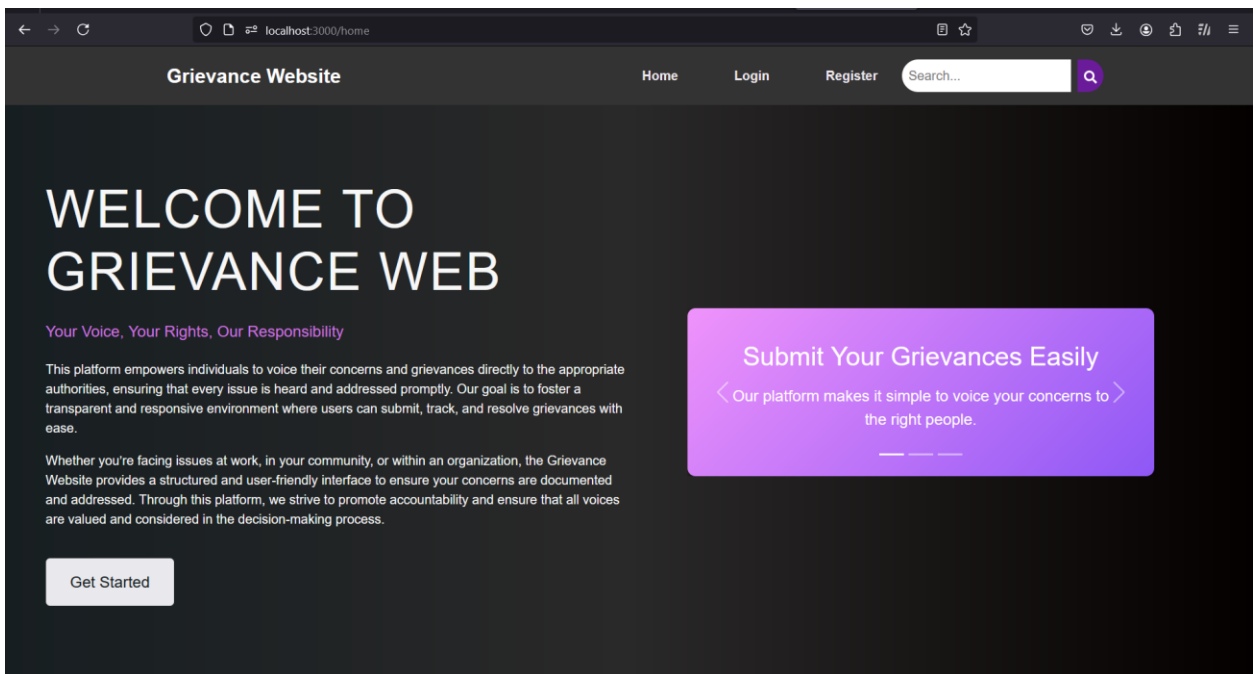
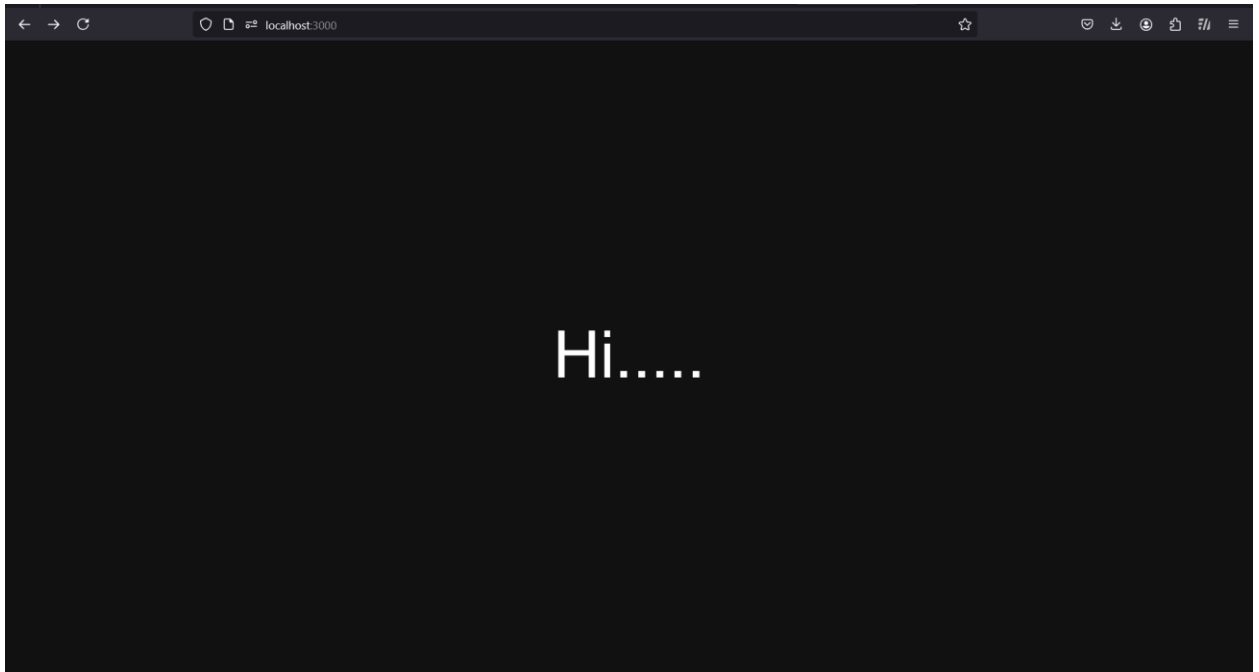
## 5. Future Enhancements

- **Role-based Access Control:** Implement distinct roles and permissions for different types of users.
- **Email Notifications:** Automatically notify users about the status of their grievances via email.
- **Third-Party Authentication:** Integrate with popular authentication providers like Google and Facebook.
- **Analytics and Reporting:** Provide detailed reports and analytics on grievances for better decision-making.

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## 6. Screenshots of the Application

- **Home Page:**



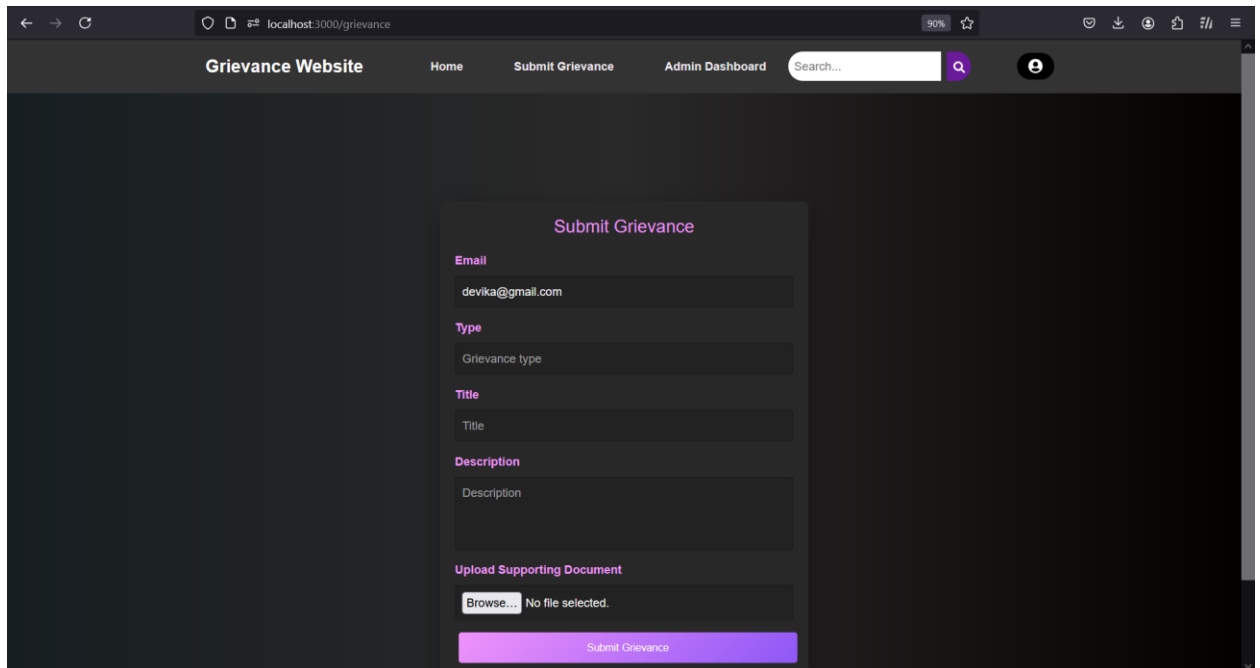
- **Login Page:**

The screenshot shows the Login page of a web application titled "Grievance Website". The page has a dark theme. At the top, there is a navigation bar with links for "Home", "Login", and "Register", along with a search bar. The main content area features a central login form. The form has a title "Login" in red. Below the title, there is a link "Don't have an account yet? [Sign Up](#)". The form contains two input fields: "Email Address" with the value "devika@gmail.com" and "Password" with masked characters "\*\*\*\*\*". There is a checkbox labeled "Remember me" and a link "Forgot Password?". Below the inputs is a red "LOGIN" button. At the bottom of the form, there is a link "or login with" followed by two buttons for "Google" and "Facebook".

- **Registration Page:**

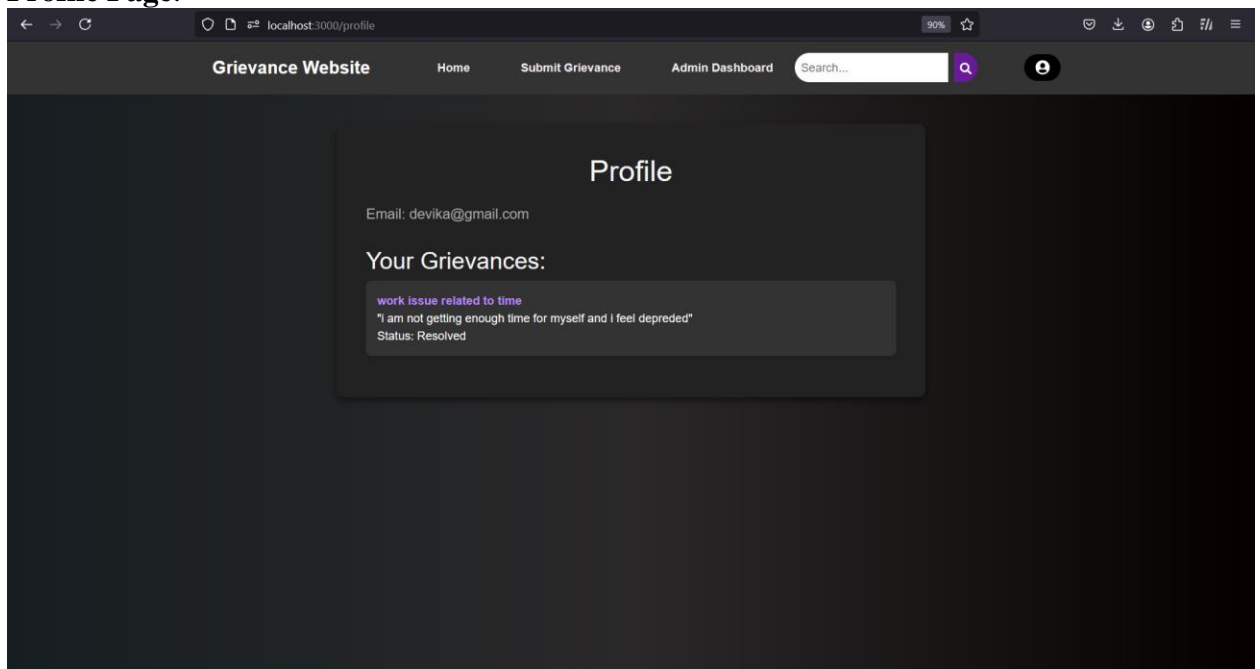
The screenshot shows the Register page of the same web application. The page has a dark theme. At the top, there is a navigation bar with links for "Home", "Login", and "Register", along with a search bar. The main content area features a central registration form. The form has a title "Register" in red. Below the title, there is a link "Already have an account? [Sign In](#)". The form contains four input fields: "Name" with the placeholder "Your Name", "Email Address" with the value "you@example.com", "Password" with the placeholder "Enter 6 characters or more", and "Confirm Password" with the placeholder "Confirm your password". Below the inputs is a red "CREATE ACCOUNT" button. At the bottom of the form, there is a link "or sign up with" followed by two buttons for "Google" and "Facebook".

- **Submit Grievance Page:**



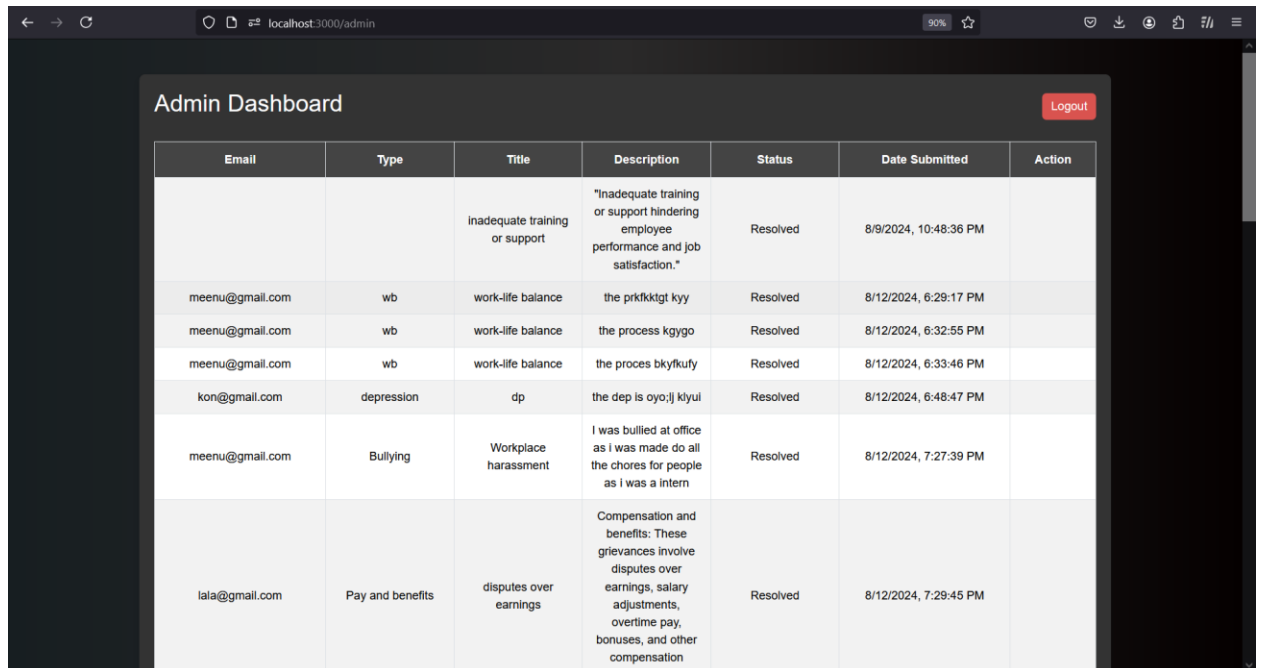
The screenshot shows a web browser window with the address bar displaying 'localhost:3000/grievance'. The website's header includes the title 'Grievance Website' and navigation links for 'Home', 'Submit Grievance', and 'Admin Dashboard'. A search bar is also present. The main content area features a 'Submit Grievance' form with the following fields: 'Email' (filled with 'devika@gmail.com'), 'Type' (filled with 'Grievance type'), 'Title' (filled with 'Title'), and 'Description' (filled with 'Description'). Below these fields is an 'Upload Supporting Document' section with a 'Browse...' button and the text 'No file selected.'. A 'Submit Grievance' button is at the bottom of the form.

- **Profile Page:**



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/profile'. The website's header is identical to the previous page. The main content area features a 'Profile' section with the email 'devika@gmail.com'. Below this is a 'Your Grievances:' section containing a single grievance entry: 'work issue related to time', 'I am not getting enough time for myself and i feel depreded', and 'Status: Resolved'.

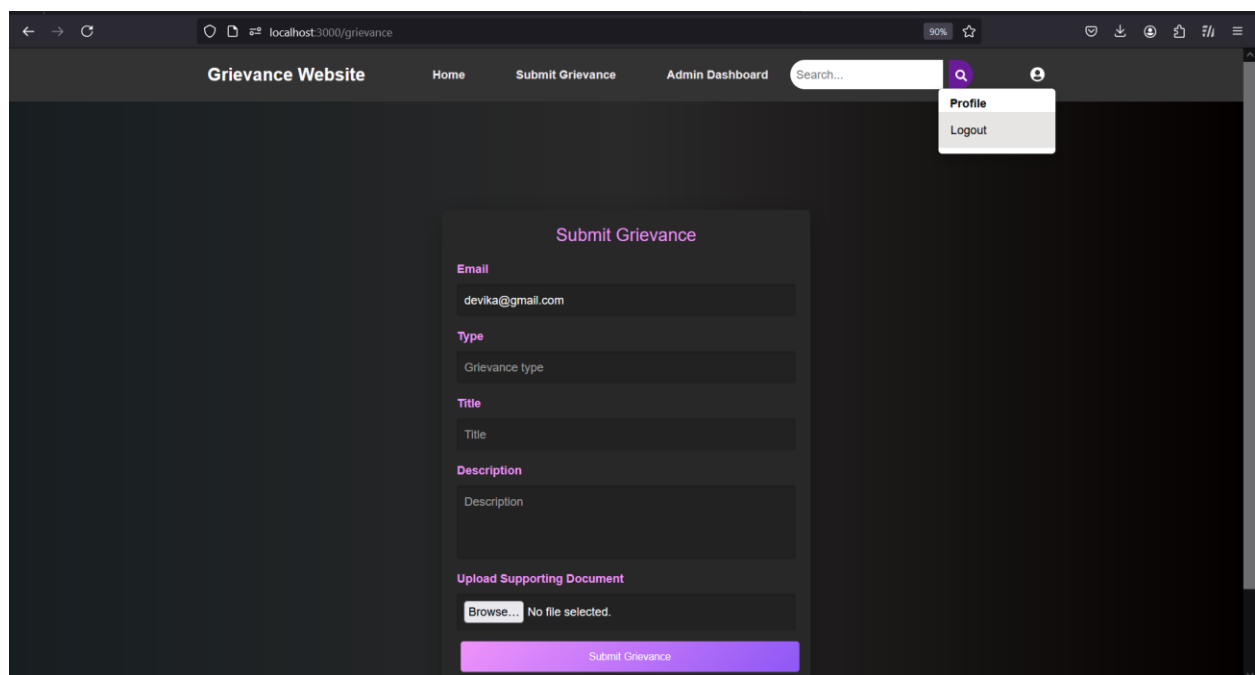
- Admin Dashboard:



The screenshot shows a web browser at localhost:3000/admin. The page is titled "Admin Dashboard" and has a "Logout" button in the top right corner. Below the title is a table with 7 columns: Email, Type, Title, Description, Status, Date Submitted, and Action. The table contains 7 rows of grievance data.

Email	Type	Title	Description	Status	Date Submitted	Action
		inadequate training or support	"Inadequate training or support hindering employee performance and job satisfaction."	Resolved	8/9/2024, 10:48:36 PM	
meenu@gmail.com	wb	work-life balance	the prkfkktgt kyy	Resolved	8/12/2024, 6:29:17 PM	
meenu@gmail.com	wb	work-life balance	the process kgygo	Resolved	8/12/2024, 6:32:55 PM	
meenu@gmail.com	wb	work-life balance	the proces bkyfkufy	Resolved	8/12/2024, 6:33:46 PM	
kon@gmail.com	depression	dp	the dep is oyo;lj klyui	Resolved	8/12/2024, 6:48:47 PM	
meenu@gmail.com	Bullying	Workplace harassment	I was bullied at office as i was made do all the chores for people as i was a intern	Resolved	8/12/2024, 7:27:39 PM	
lala@gmail.com	Pay and benefits	disputes over earnings	Compensation and benefits: These grievances involve disputes over earnings, salary adjustments, overtime pay, bonuses, and other compensation	Resolved	8/12/2024, 7:29:45 PM	

- logout:



The screenshot shows a web browser at localhost:3000/grievance. The page is titled "Grievance Website" and has a navigation bar with links: Home, Submit Grievance, and Admin Dashboard. There is a search bar and a user profile dropdown menu with options "Profile" and "Logout". The main content area is titled "Submit Grievance" and contains a form with the following fields:

- Email: devika@gmail.com
- Type: Grievance type
- Title: Title
- Description: Description
- Upload Supporting Document: Browse... No file selected.
- Submit Grievance button