Case Study for Electricity Board
Full Stack Developer- Submission

Introduction:

Documentation for the Fullstack Web Application designed according to case study requirement for an electric board.
This comprehensive web application is tailored to meet the evolving needs of the electricity sector by providing an efficient platform for managing connection requests and streamlining the workflow of the electricity board's staff.

Note: Refer README.md for installation

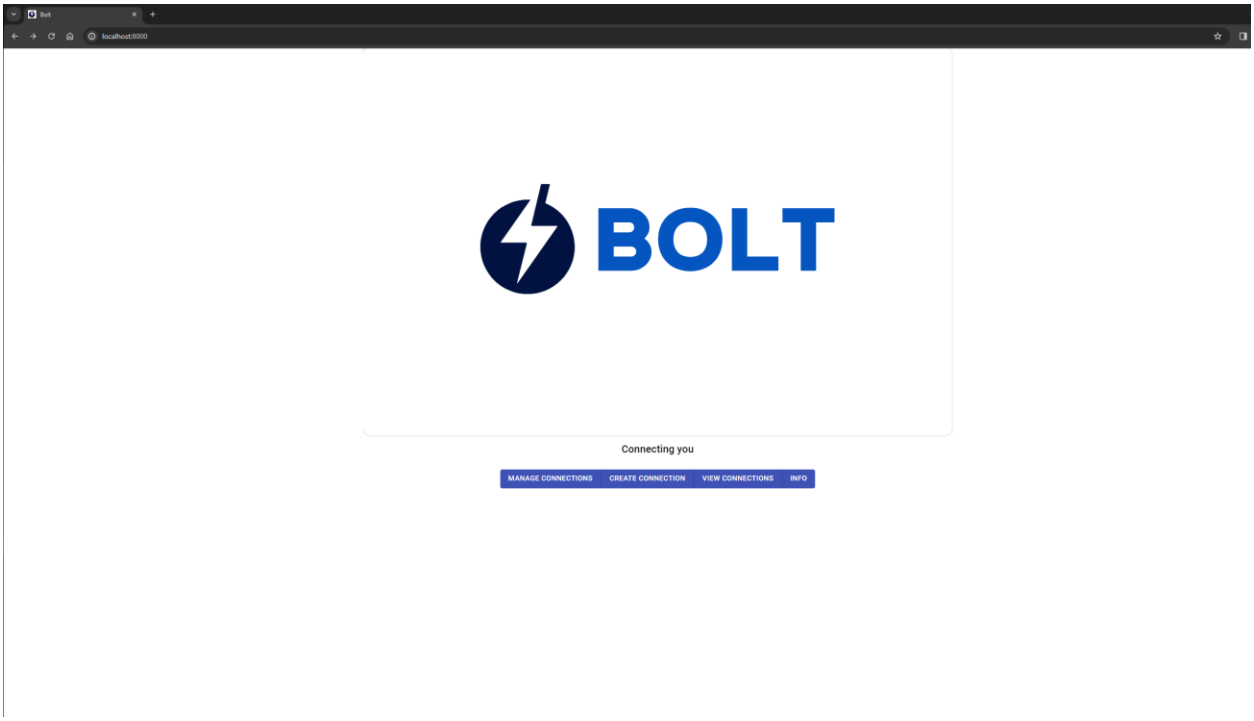
Note: Refer /screenshots folder for all screens of the application.

Tech Stack:

Frontend - React, HTML, CSS, Javascript, Libraries{Material UI, HighCharts('highcharts-react-official')}
Backend - Django, Python

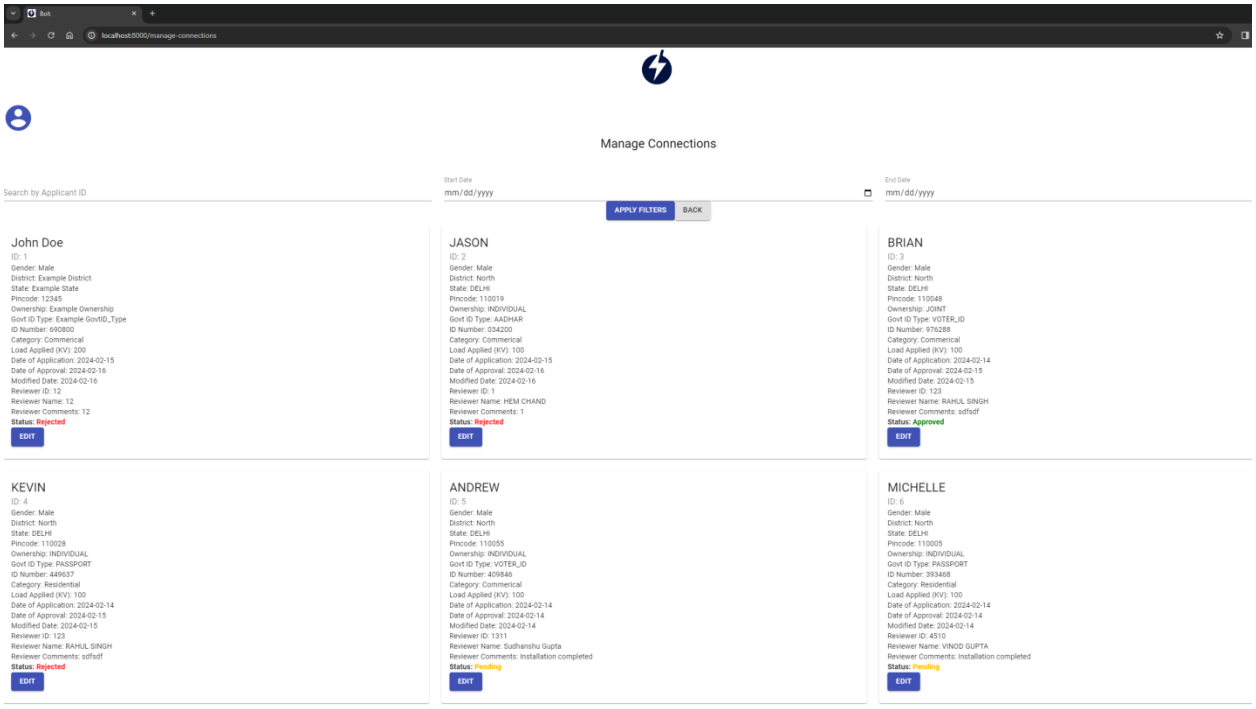
Key Features -

Select Menu

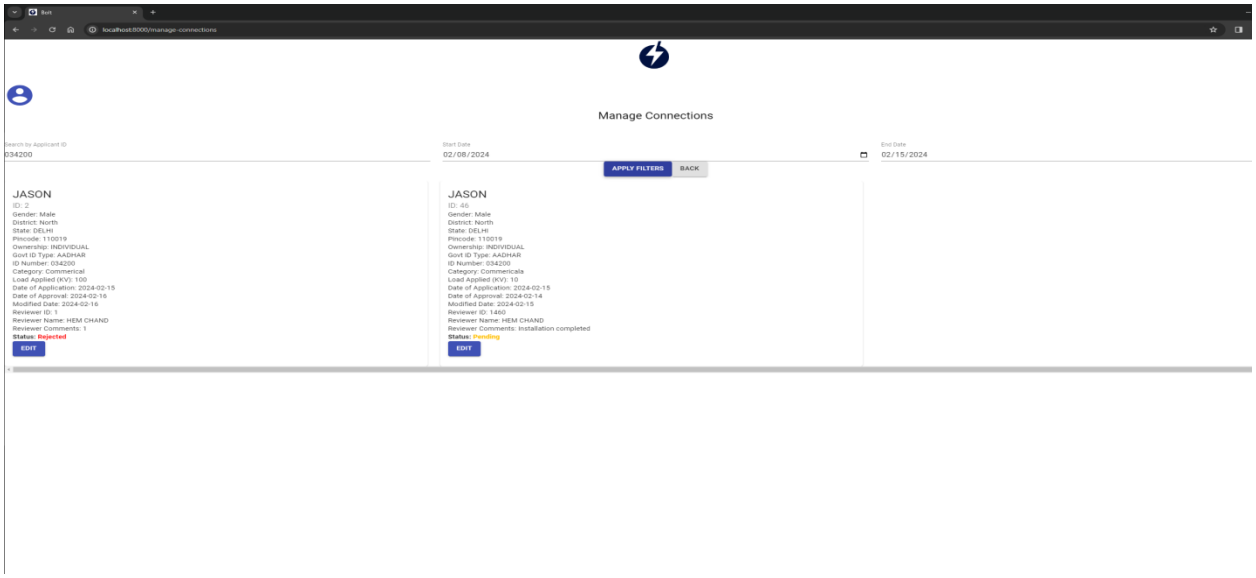


User can select from the given options to navigate throught the application at the home page.

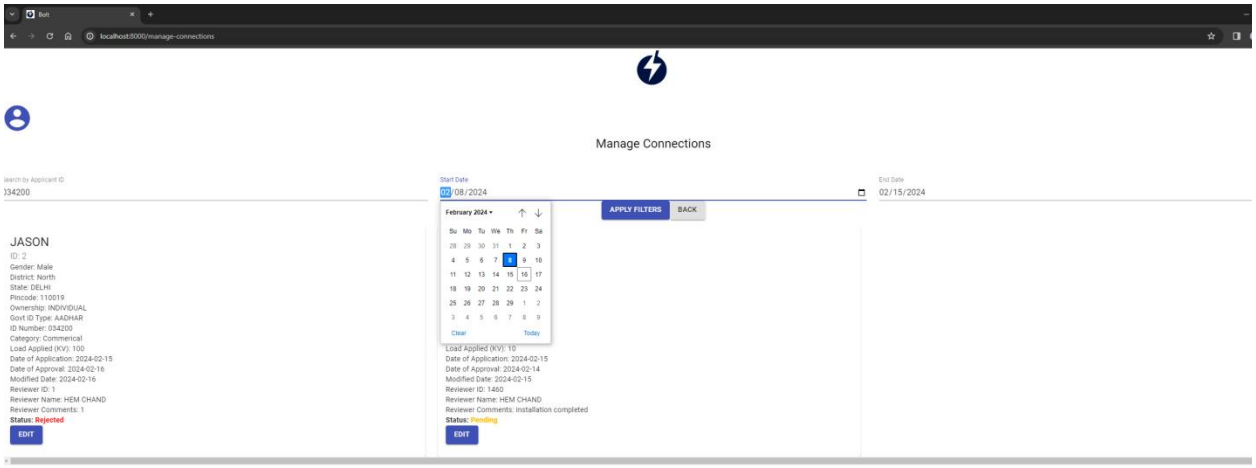
Display Records: The application presents connection records in a user-friendly grid or tabular format, facilitating easy access and navigation for staff members.



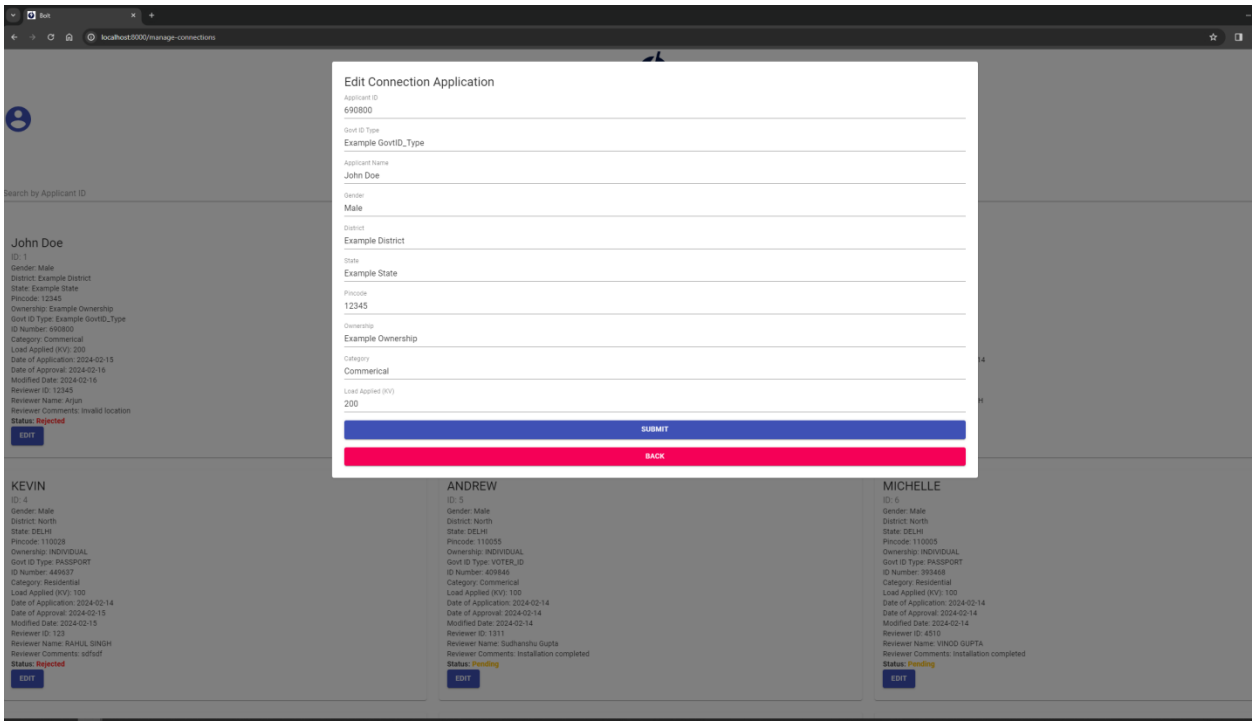
Search Functionality: Staff members can swiftly retrieve connection details using the Applicant ID and/or start date and end date search option, ensuring quick access to relevant information.



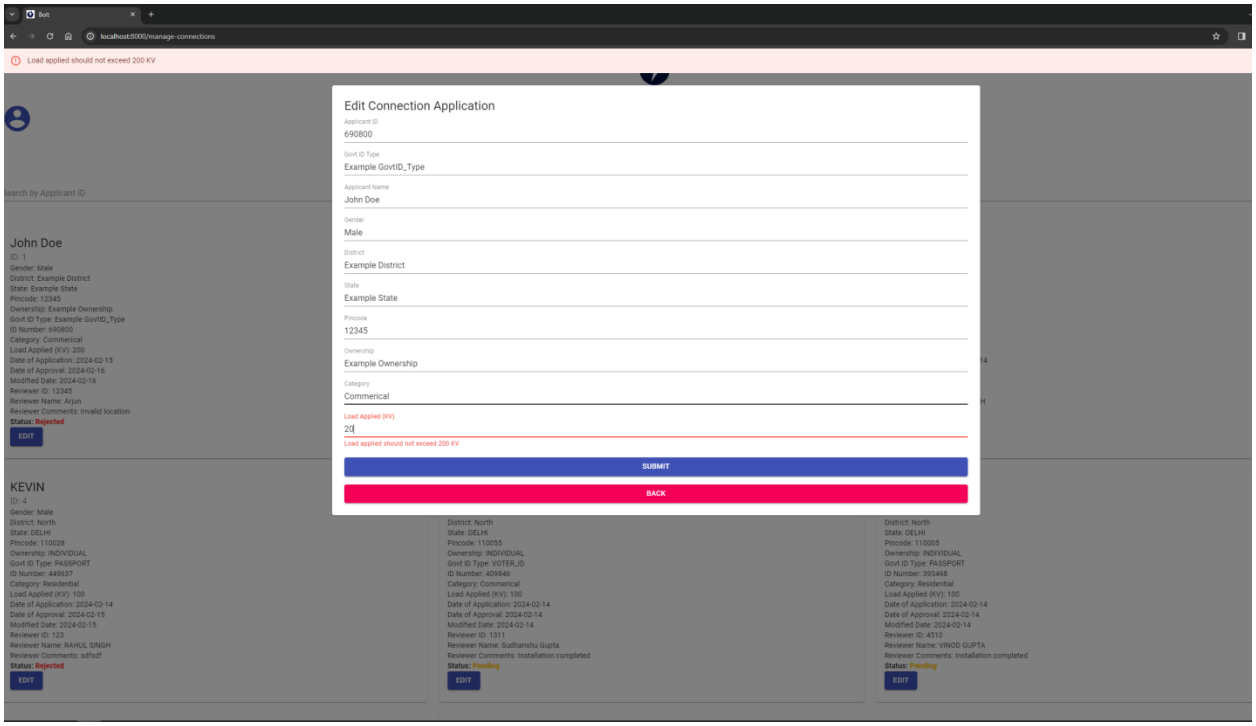
Date Filtering: A convenient date picker feature allows users to filter connection records based on the date range of application, enhancing data organization and retrieval.



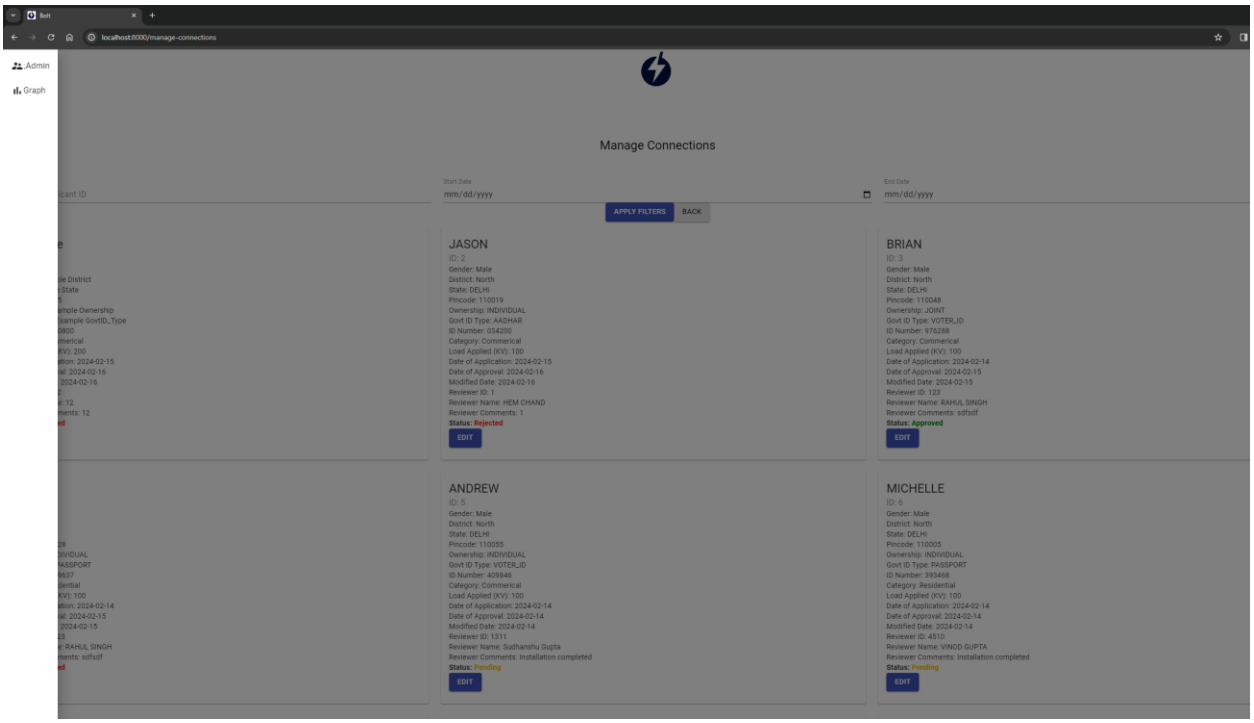
View/Edit Requests: Staff members have the capability to view and edit electricity connection application requests seamlessly. Whether it's reviewing application details or making necessary updates, the application offers a user-friendly interface for efficient management.



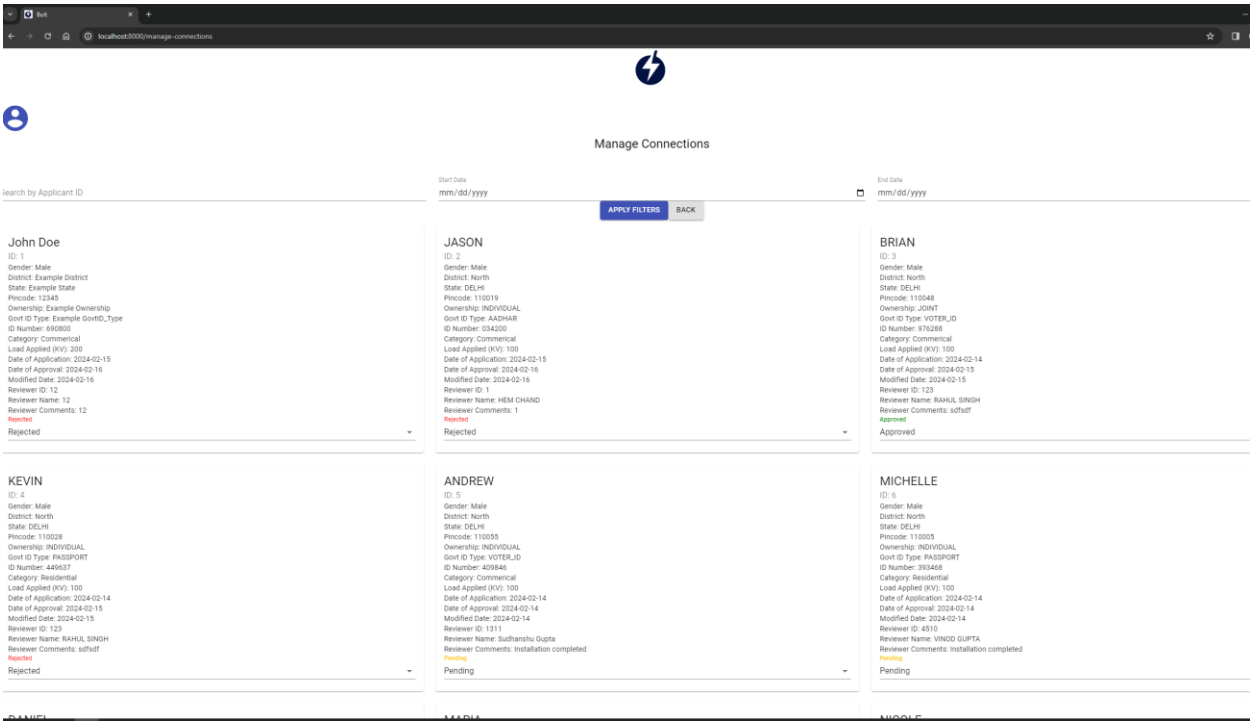
Data Validation: The application incorporates robust data validation mechanisms to ensure data integrity and accuracy. Staff members are restricted from modifying critical fields such as Date of Application, Govt ID Type, and ID Number, thereby maintaining data consistency. Additionally, the application enforces load limits, preventing the submission of applications exceeding 200 KV.



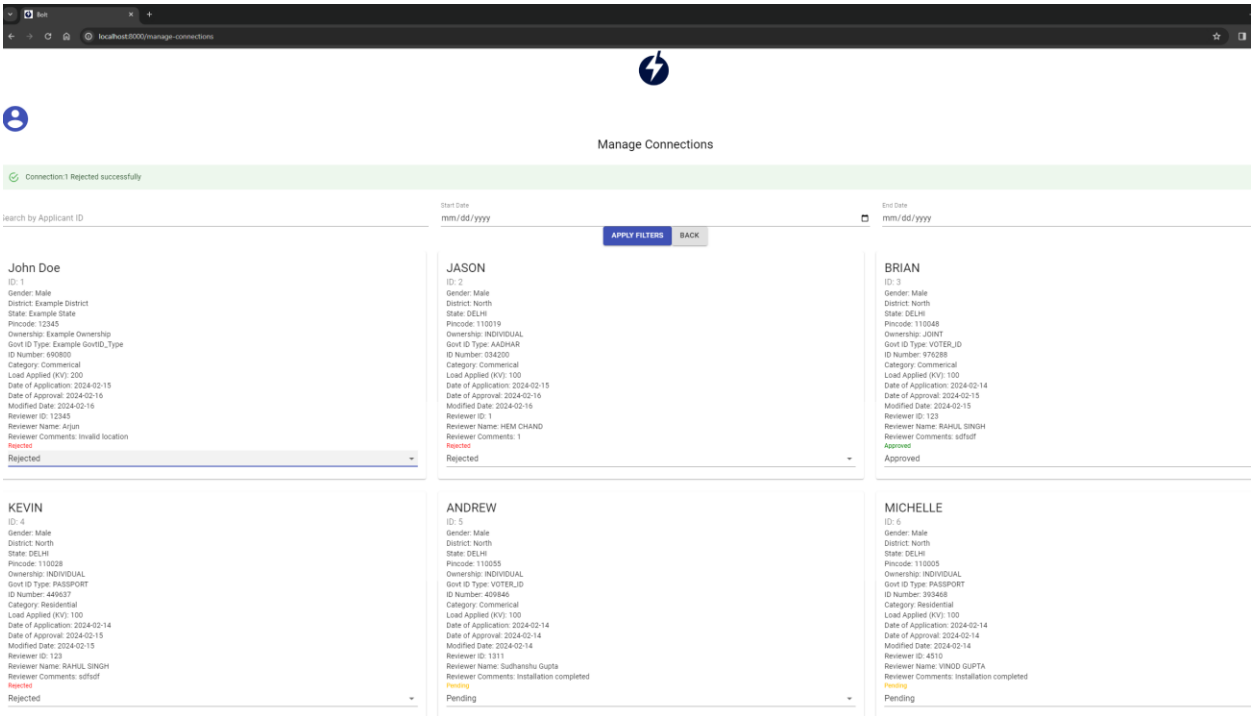
Navigation Bar:
Users can select admin mode button or select the graph button to set admin mode or navigate to the graph page respectively.



Manage connections as admin:
Users can select admin mode button to set admin mode and get the option to set status of a connections(approve, reject, connection released, pending). As default after a connection has been created, the status of the connection will be set as pending.
The authentication of admin user has not been implemented as it was not a part of the requirements. On selecting the admin button again admin mode will be disabled.

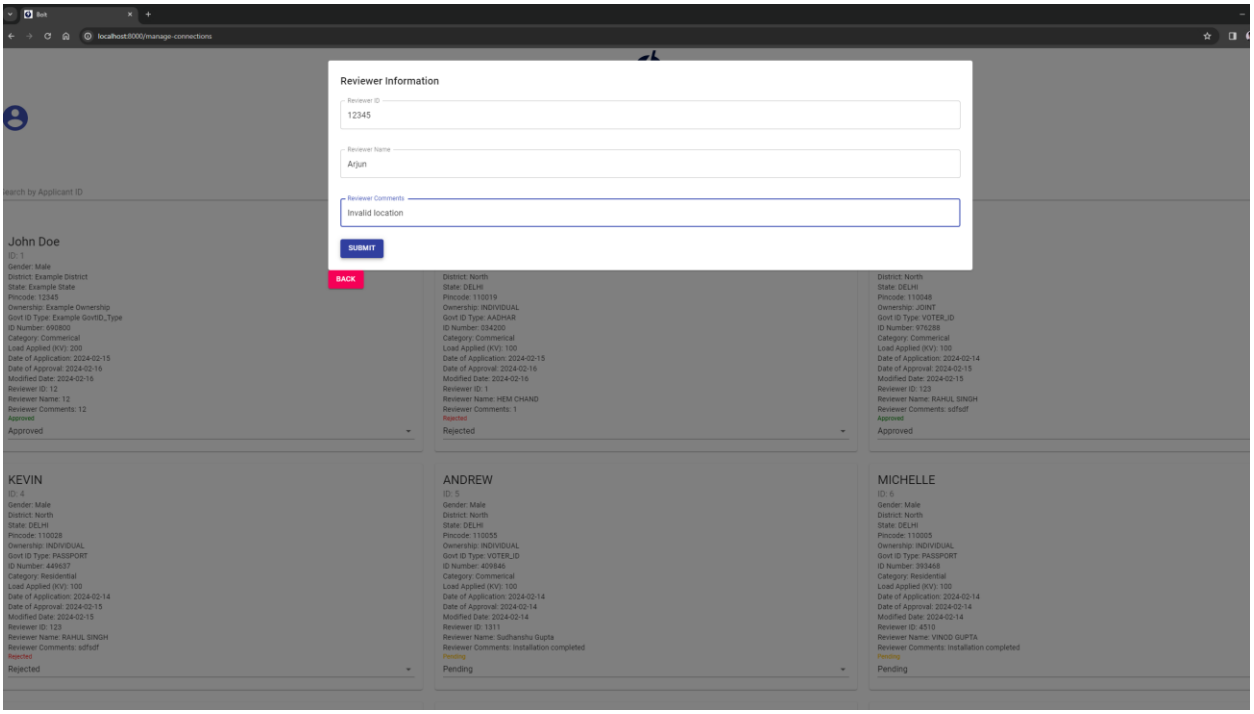


Approve / Reject requests:



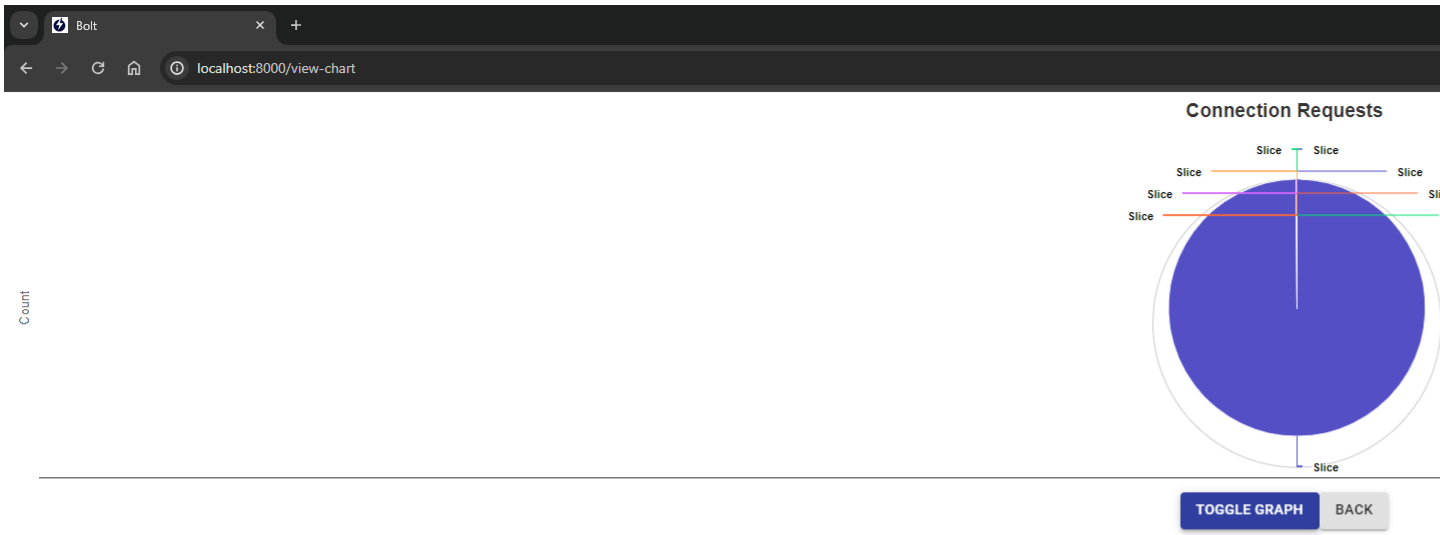
Admin users can select and set the status of a connection by selecting the status from the drop down.

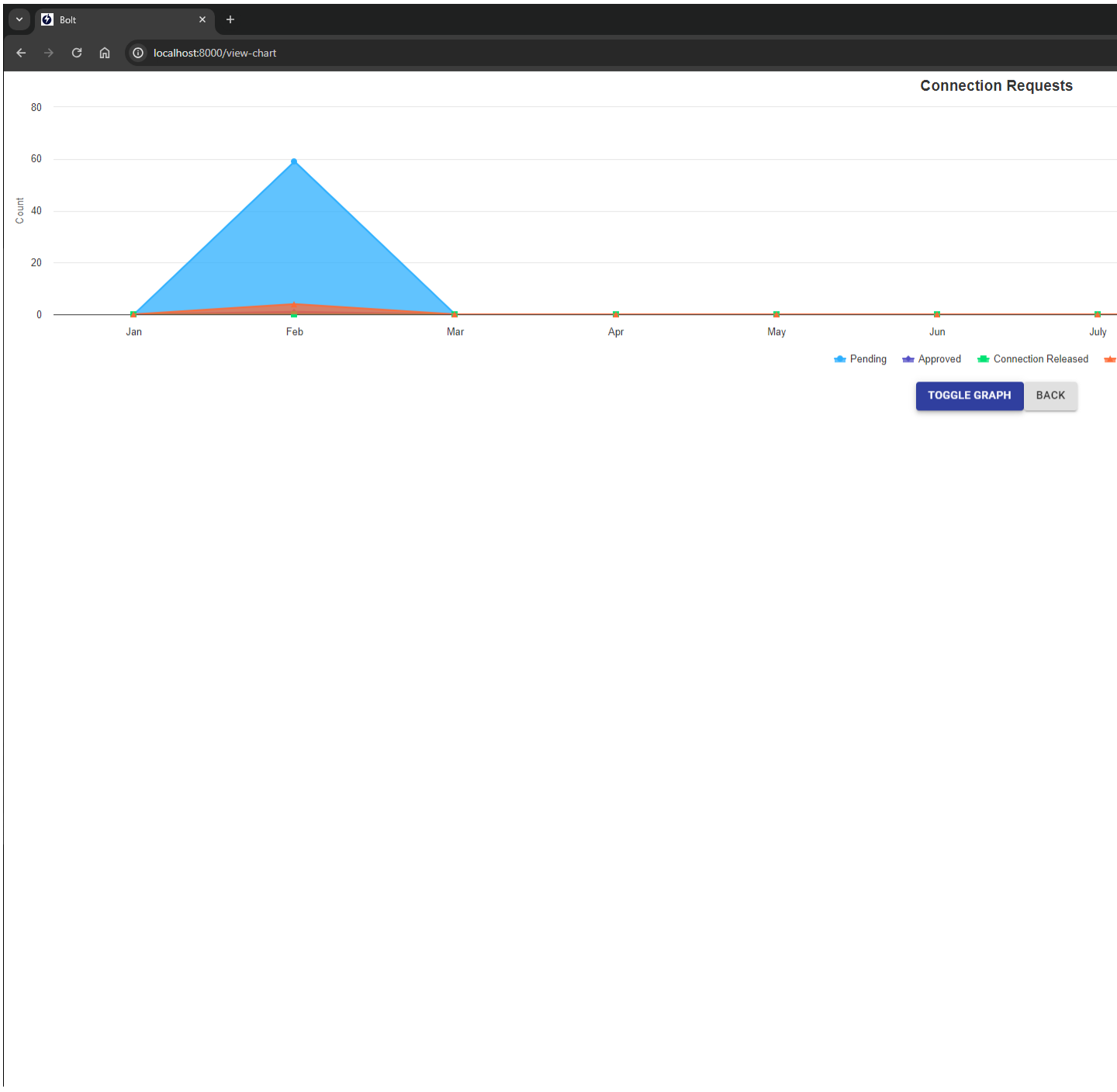
Connection Reviewer :

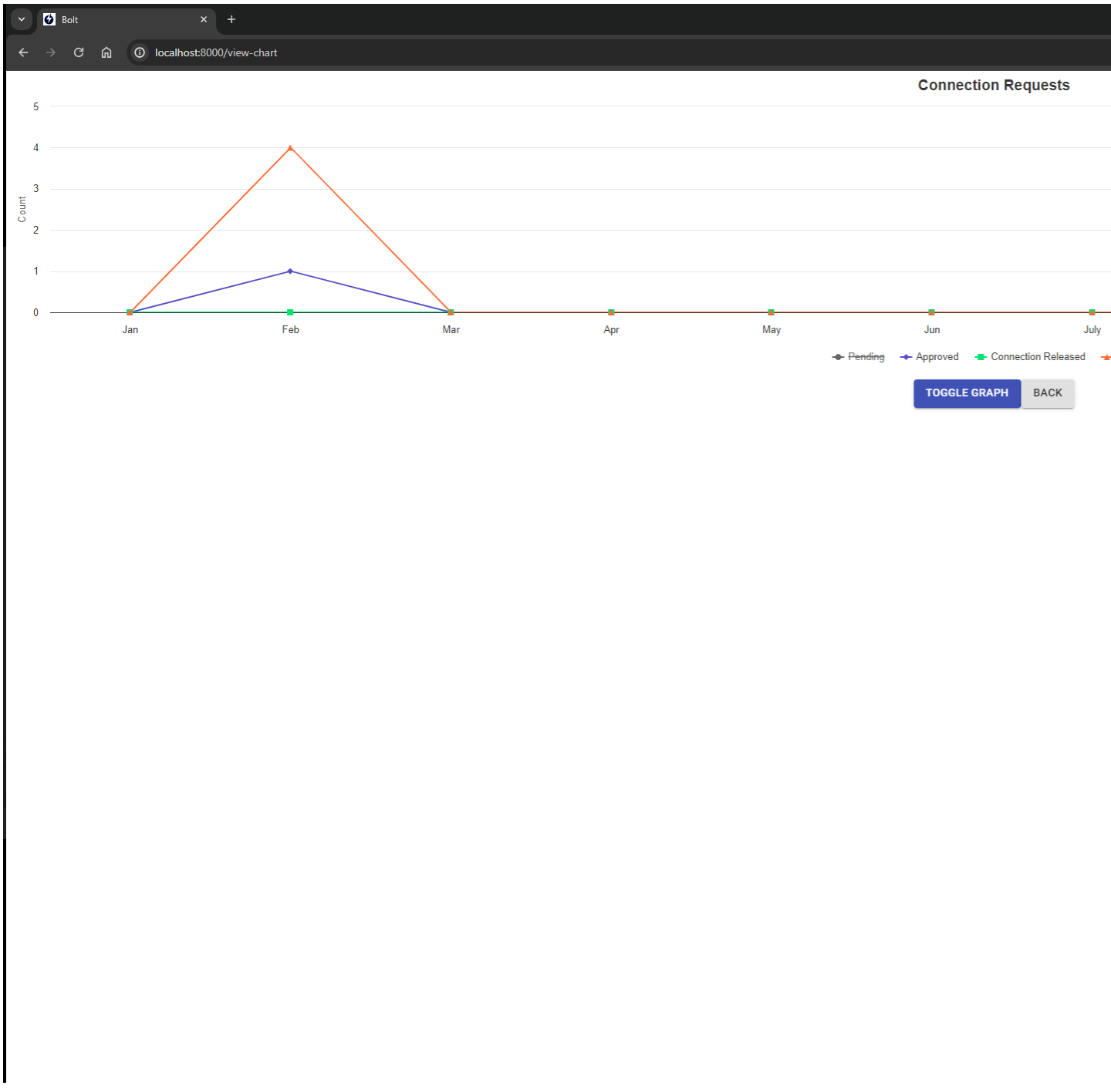


On change of the status the application will require the user to enter his ID, name and comments as Reviewer ID, Reviewer Name and Reviewer Comments respectively.

Visualization Graphs: To provide actionable insights, the application includes dynamic visualization graphs, such as bar or line charts, depicting the number of connection requests received each month. Users can customize the view by selecting their preferred status categories (e.g., pending, approved), enabling informed decision-making.


Bolt
localhost:8000/view-chart
Connection Requests
Slice
Slice
Slice
Slice
Slice
Slice
Slice
Count
TOGGLE GRAPH
BACK


Bolt
localhost:8000/view-chart
Connection Requests
80
60
40
20
0
Count
Jan
Feb
Mar
Apr
May
Jun
July
Pending
Approved
Connection Released
TOGGLE GRAPH
BACK


Bolt
localhost:8000/view-chart
Connection Requests
Count
5
4
3
2
1
0
Jan
Feb
Mar
Apr
May
Jun
July
Pending
Approved
Connection Released
TOGGLE GRAPH
BACK