Auto Lead - Customer Relationship Management (CRM) Software

Abstract

Auto Lead is a role-based Customer Relationship Management (CRM) system designed to manage customer interactions, lead tracking, and support workflows within an organization. It supports four primary roles—Admin, Sales Representative, Customer Service, and Customer—each with distinct access and responsibilities.

The system allows customers to register, raise support tickets, and communicate with support agents. Sales representatives can create leads, update their status through various sales stages, and convert them into customers. Admins manage user approvals, lead assignments, and system control, ensuring centralized oversight.

Key features include ticket and enquiry management, lead tracking, user profile editing, keyword-based search, dashboards for each role, and structured messaging. Planned enhancements include basic machine learning for lead conversion prediction and ticket tagging, as well as a chatbot to assist both public users and customers. Auto Lead effectively replicates core CRM functionalities in a simplified, educational format.

Users

- \- Admin
- \- Sales Representative
- \- Customer Service/Support
- \- Customer

User Functions (Already Done)

1) For Admin

- Approve/Reject pending user registration requests (For Customer Service and Sales Representative)
- Control the user's access to their account
- View and if needed delete any user.

2) For Customer Service/Support

- Register and Login
- Edit their profile details (change name, add profile pic etc)
- View public enquiries sent by public non-users received through Contact Us page in homepage
- Accept public enquiries, resolve them, reject them or move them back to public unaccepted enquiries list
- Search through enquiries using keywords
- View support tickets (complaints) sent by customers through their New Tickets page

- Accept support tickets, resolve them, reject them or move them back to public unaccepted tickets list
- Search through tickets using keywords
- Message the customer regarding their ticket, each ticket having a separate messaging session.

3) For Customer

- Register and Login
- Edit their profile details (change name, add profile pic etc)
- Send new support tickets (complaints) to customer service/support
- View already send support tickets, their status, who accepted them (if accepted) and when it was accepted
- Message customer service/support after they have accepted the ticket
- Search through tickets using keywords

4) For Sales Representative

- Register and Login
- Edit their profile details (change name, add profile pic etc)
- Made a frontend form for Lead Creation
- View existing customers and delete them if needed

User Functions (Pending)

1) For Sales Representatives

- View list of all leads created (with status, contact info, assigned rep)
- View only the leads assigned to them
- Change lead status (New → Contacted → In Progress → Converted → Dropped)
- Add notes or follow-up comments per lead (internal only)
- Search/filter through assigned leads (by name, status, etc.)
- Messaging with Admin
- Sales Rep Dashboard: Leads by status (New/In Progress/etc.), recent notes (Add others as needed)

2) For Admin

- View all leads
- Assign or reassign leads to sales representatives
- Delete leads (if needed)
- Messaging with Sales Rep and Customer Support
- Admin Dashboard: Total users, pending approvals, total leads, total tickets (Add others as needed)

3) For Customer service/Support

- Customer Service Dashboard: Total tickets, open/closed/resolved count (Add others as needed)
- Email integration for sending mail to public enquiries from within the application
- Messaging with Admin

Global pending additions

- Need to implement some form of Machine Learning in this project (Possibly for analytics, not sure). (IMPORTANT - HOD specified feature)
- Need to implement a chat-bot for general public as well as customers that they can use to ask questions/enquiries. (IMPORTANT - HOD specified feature)
- Notifications
- Activity log

Notes

- In the current setup, the customers are self-registering. In an actual CRM, it is the leads that are converted into customers. That means the customers must be added by the Sales Representative. This must be implemented
- In the current setup, sale rep and customer support are self-registering. This must be changed such that only the admin can add them with core details, which then the respective users can edit using edit profile.
- The CSS files for dashboard template used by Admin, Sales Rep and Customer Service are in src/AdminComponents.
- The CSS files for homepage template used in homepage and customer login page are in public/assets and linked in index.html in public.
- Dashboard Template link - https://themewagon.com/themes/dashmin-responsive-free-bootstrap-5-html5-admin-dashboard-template/
- Homepage Template link - https://themewagon.com/themes/nova/
- ML and chat-bot are a must and is expected by the HOD.

ML Ideas

- Predict likelihood of lead conversion based on: Number of follow-ups, Lead source, Notes content (basic NLP + keyword scoring)
- Ticket categorization or auto-tagging (based on message content)

Chatbot Ideas

- Public mode: “What is Auto Lead?”, “How can I contact support?”, etc.
- Customer mode (logged in): “Where is my ticket?”, “How do I edit my profile?"