



ASSIGNMENT - ASSOCIATE - BACKEND ENGINEER

INTRODUCTION - JOB DESCRIPTION

As an **Associate - Backend Engineer** at ReachInbox.ai, you'll have the opportunity to work on cutting-edge technologies and contribute to the development of our innovative outbound marketing system. We are seeking a talented individual with strong knowledge of NodeJS, Typescript, Git and MySQL to join our dynamic team.

Key responsibilities

- Designing, developing, and maintaining scalable and efficient server-side architecture.
- Implementing and optimizing database structures to ensure data integrity, security, and performance.
- Collaborating with frontend developers to integrate user-facing elements using server-side logic.
- Implementing robust API endpoints for seamless communication between different components.
- Monitoring and troubleshooting server performance, identifying and resolving bottlenecks and system issues.

Candidate Profile

- **Demonstrable Portfolio:** We require candidates to showcase a portfolio of live and hosted projects, providing the hiring manager with an opportunity to review their backend development work.
- **Internship Experience:** Candidates must have completed at least one internship and possess experience in building backend systems from scratch. They should understand the importance of designing scalable and efficient server-side architecture.
- **Start-up Friendly Attitude:** We seek individuals who thrive in high-paced environments and are eager to take ownership of their tasks to ensure successful outcomes. Adaptability and a proactive approach are essential qualities we value in potential backend engineers.

If you are passionate about Backend development and eager to gain hands-on experience in a fast-paced startup environment, apply now and join us in revolutionizing outbound marketing with ReachInbox.ai!

ABOUT THE ROLE

CORE FUNCTION	Backend Development	STIPEND RANGE	INR 25, 000 - INR 35, 000
TYPE OF ROLE	Internship with PPO	DURATION	6 months
LOCATION	Remote or Bangalore	START DATE	Immediately
MUST HAVE SKILLS	NodeJS, MySQL, Demonstrable Portfolio, Start-up friendly attitude	GOOD TO HAVE	Typescript, Git, API Design and Documentation

As part of our selection process, we would like to invite you to complete a short assignment that will allow us to assess your capabilities and suitability for the role. This assignment will provide you with an opportunity to demonstrate your proficiency in Backend Development, as well as your ability to effectively communicate and develop a project from scratch.

ASSIGNMENT

Introducing ReachInbox - A revolutionary AI-driven platform transforming cold outreach. It's an all-in-one solution for businesses to effortlessly find, enrich, and engage high-intent leads using multi-channel outreach across Twitter, LinkedIn, email, and phone. Just a single prompt sets ReachInbox in motion, prospecting and verifying leads, crafting personalized sequences, and alerting businesses to responsive prospects. Imagine an AI-powered growth team, ceaselessly generating top-tier leads. ReachInbox is not just a tool; it's your growth partner.

One of the most important aspects of ReachInbox is its ability to enhance and manage large scale cold email marketing campaigns. Cold emailing can be a challenging endeavor, but with Reachinbox, it doesn't have to be. Our intuitive platform provides everything you need to launch successful cold email campaigns, from customizable templates and A/B testing to real-time analytics and performance tracking.

Hot Tip - Use the 7 day free trial to fully experience and understand ReachInbox.ai.

The assignment is to build a tool that will parse and check the emails in a Google **and** Outlook email ID, and respond to the e-mails based on the context using AI. Use BullMQ as the tasks scheduler. Earn brownie points by building using typescript

1. Setup oauth access to Gmail
2. Setup oauth access to Outlook
3. Understand context of the emails using OpenAI and assign automatic labels
4. Based of the context email, send automated replies using OpenAI

You must be able to showcase the working of this tool during the assignment review with technical panel, providing a live demo which includes -

1. Connecting new email accounts for both Google and Outlook using OAuth
2. Sending an email to these accounts from another account
3. Showcase the tool reading incoming emails to the connected accounts
4. Categorizing the email based on the content and assign a label as follows -
 - a. Interested
 - b. Not Interested
 - c. More information
5. Your tool must then suggest an appropriate response based on the content of the email and send out a reply. For example -
 - a. If the email mentions they are interested to know more, your reply should ask them if they are willing to hop on to a demo call by suggesting a time.
6. **Please make sure the tool is an automation - you should not be required to push the end points manually.**

ASSIGNMENT SUBMISSION

- Submit a screen recording video explaining the app you have created, showcasing all the functionalities mentioned in the instructions. You may use tools such as Loom for this.
- Create a new Git repository to store your project files. Commit your code regularly with clear and descriptive commit messages. Once you have completed the assignment, push your code to the repository. Provide clear instructions on how to run and view your web page locally, including any setup or installation steps required.
- Additionally, you may include a README.md file with any additional information or explanations about your implementation choices.

OUR TEAM CAN BE REACHED AT CAREERS@OUTBOX.VC FOR ANY QUERIES OR CONCERNS DURING THE RECRUITMENT PROCESS. THANK YOU FOR CONSIDERING REACHINBOX.AI AS YOUR POTENTIAL NEXT CAREER DESTINATION. WE APPRECIATE YOUR INTEREST IN BRINGING YOUR TALENT TO OUR TEAM.
