



**Welcome to the Case Study Round for Analytics
Problem Statement at LogiNext**

About: [LogiNext](#)

LogiNext is a global technology firm that offers a SaaS based Delivery Automation Platform. The software helps brands across Food & Beverage, Courier, Express and Parcel, eCommerce & Retail and Transportation (3PLs, 4PLs, etc.) to digitize, optimize and automate deliveries across the supply chain.

Growing at an average rate of 120% YoY, LogiNext has 200+ enterprise clients in 50+ countries with headquarters in New Jersey, USA and regional offices in Mumbai, Jakarta, Delhi and Dubai. We're backed with \$49.5 million across three rounds of private equity investments by Tiger Global Management, Steadview Capital and Alibaba Group of companies.

The majority of our workforce is in Mumbai and we're a bunch of people interested in technology and working at the forefront of innovation in the logistics automation industry. With smaller teams distributed across the globe, the entire team gets together during our annual workation. The vision of building a global enterprise company and going IPO is what drives us to achieve more, every day!

About the Case Study

We have an extensive interview process which means that we don't hurry while hiring and it ensures the right fit for both- the candidate and the employer.

This case study is the part of an interview process and it pretty much represents the kind of tasks you'd be doing on a daily basis at LogiNext. The problem statement in this interview aims to test your Technical skills and how you approach a problem.

You're free to use the Internet and reference materials. This is obvious but still no plagiarism, give the case study your best creative shot! At LogiNext, we have a zero tolerance policy for plagiarism and other violations of our ethics policy. Ethics violations of any kind are taken seriously and may result in dismissal from our program as well legal proceedings including claim to damages. The best way you can keep yourself.

Prerequisites

1. Working with algorithms and understanding of databases should be necessary.
2. You are free to use any programming language for this task.

Problem Statement

In correct addresses is one of the critical challenges for the delivery of the orders by eCommerce and Courier companies. In this case study we are exploring how do we convert from unreliable address information into a reliable base.

Some ecommerce portals allow addresses to be input in one single line while some portals have multiple address lines for different address components. The system may receive input address in various formats as listed below.

Example1:

Address: "A 406, Siddhivinayak Apartment, S. V. Road, Opp. Police station, Malad (west), Mumbai 400064"

Example2:

Address Line1: "C-302, Oberoi Splendour apartment"

Address Line2: "Jogeshwari Vikhroli Link Road, Andheri (E), Mumbai 400072"

Example3:

House: "1023, Rajesh Tower",

Address: "Mahavir Nagar, Borivali West",

Landmark: "near J B Kot School",

City: "Mumbai",

State: "Maharashtra"

Pincode: 400092

All inputs are in the JSON format as key-value pairs.

The goal of the system is to translate given inputs in fields including

- House
- Locality
- Landmark
- Area
- City
- State
- Country
- Pincode/Zipcode

Provide the following:

1. Design the input processing system that will translate the input (similar to examples above), into the fields listed above. **Write an algorithm to cleanse and segment the address fields into desired format.**
2. The algorithm should also be able to include missing piece of information e.g. if city is Mumbai, the state will be Maharashtra and Country will be India, even if not explicitly mentioned in the input.
3. **Customers usually make spelling mistakes. Identify how will you be able to eliminate errors in the area and city names etc.**

4. Bonus: What other errors or exceptions can possibly be there that makes the address invalid? What can be the approach to solve this? (Not required full algorithm but just the approach).

What are we looking for

In the above problem statement, we need to see the clear approach to solve the problem and specify any assumptions you are making.

The candidate pseudo code or algorithm. You need not provide a fully working implementation. You may or may not decide to use any Machine Learning/Data science algorithm. If you are referring to standard ML model, please add the explanation about the same.

The task may assume there is some reference data. You, may reference any known 3rd party reference data then provide the reference in your submission. Alternatively, you can assume to have created a custom database. In that case, you don't need to show full real data, just explain the fields with typical values and how you will generate such a database.

Submission Procedure

You are expected to finish the case study within a period of 72 hours from the receipt. While we understand you would be occupied with your day to day tasks but the case study won't require more than 3 hours of your time. You are at liberty to spend these 3 hours at a stretch in a day or in phases of 1 hour each day. Please remember this timeline is non-negotiable, if you do not revert back with the case study response within the time frame we'll assume that you're considering other opportunities and not serious about this role at LogiNext. Submission of case study post 72 hours would automatically result in cancellation of your candidature. Candidates are not expected to buy any paid subscriptions for any tools or materials to work on this assignment. All the guidelines are mentioned in the case study. Please make necessary assumptions wherever needed.

At the end of the test, please submit your project files and folder in zipped file format to recruiter (please ensure that you zip the entire folder containing your project)

You can also provide any notes that you make along the way that may help us understand your thought process, any assumptions that you may have made, or any useful insights that may have come to your attention.

Result: Upon submission, the LogiNext recruitment team will review and share the results and next steps within 48 to 72 hours.

Terms and Conditions

NOT AN OFFER OR CONTRACT OF EMPLOYMENT

Under no circumstances shall the submission of an entry into the test or anything in these Terms be construed as an offer or contract of employment with LogiNext. You acknowledge that you have submitted your entry voluntarily and not in confidence or in trust. You acknowledge that no confidential, fiduciary, agency or other relationship or implied-in-fact contract now exists between you and LogiNext and that no such relationship is established by your submission of an entry under these Terms.

NO RECOURSE TO JUDICIAL OR OTHER PROCEDURES

To the extent permitted by law, the rights to litigate, to seek injunctive relief or to make any other recourse to judicial or any other procedure in case of disputes or claims resulting from or in connection with this test are hereby excluded, and any contestant expressly waives any and all such rights. If such exclusion or waiver is not permitted by law, the contestant agrees to submit to the exclusive jurisdiction of the courts located within the city of Mumbai, Maharashtra to resolve any legal matter arising from the dispute or claims. Candidates further agree that LogiNext will not be liable for any errors, ambiguities or other inaccuracies caused by LogiNext in the design, execution, judging or other aspects of the test.

ELIMINATION

A candidate may be prohibited from participating in this test if, in LogiNext's sole discretion, LogiNext reasonably believes that the candidate has attempted to undermine the legitimate operation of the test by:

- Providing false information concerning his/her identity, postal address, mail address or telephone number;
- Breaching any of the provisions set forth in these Terms;
- Threatening, harassing or interfering with the ability of other candidates to effectively participate in the test;
- Threatening, harassing or interfering with LogiNext administrators or other employees;
- Communicating or publishing information concerning the content of the problems, or solutions to the problems, with other candidates or non-candidates, either directly or indirectly, before or after the end of the Round, other than as permitted.
- Refusing to comply with these Terms.