



LogiNext – Programming Challenge

About: [LogiNext](#)

LogiNext is amongst the fastest growing tech company, providing solutions to simplify and automate the ecosphere of logistics and supply chain management. Our aim is to organize the daunting process of logistics and supply chain planning, with an array of SaaS driven by the most robust enterprise solutions globally.

Our clientele is spread across the globe and we empower them to optimize their supply chain operations by unique data capturing, advanced analytics and visualization. From inception, LogiNext has been an industry leader and recipient of awards like NetApp's Innovative Tech Company of the year, Entrepreneur's Logistics Firm of the Year, Aegis's innovation in Big Data, CIO Choice Award for best supply chain logistics cloud solutions, etc. Backed by influential industry leaders like PayTM and Indian Angel Network and with partners like IBM, Microsoft, Google, AWS and Samsung, LogiNext has achieved exponential success in a very short span of time and is set to exceed 300% growth by the end of 2019.

The true growth hackers, who paved the way for this success are the people working exceptionally hard and adding value to our organisation. Our brand ambassadors - that's how we address our people, bring unique values, discipline and problem-solving skills to nurture the innovative and entrepreneurial work culture at LogiNext. Passion, versatility, expertise and a hunger for success is the Mantra chanted by every Logi-Nexter!

About the Test

LogiNext has a comprehensive and selective interview process to find out the best of the best candidates for this role. This test is quite similar to what an Software developer will be doing during his/her tenure on a daily basis at LogiNext. There is only one problem statement in this interview, which tests technical skills of the candidates, especially in Java/J2EE, MySQL, web services, programming frameworks and basic data visualization.

The candidate is free to use Internet, websites and reference material for additional guidance but use of any copyright information or code may lead to disqualification and prohibitive actions. 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 from committing an act of plagiarism is to be properly informed and be natural in creation of your work.

For further information or any questions regarding or during the test, please contact the recruiter or write to jobs@loginextsolutions.com.

Pre-requisites

1. Install MySQL (or any database of your choice)
2. Have access to Internet
3. Install Apache Tomcat
4. Install Eclipse IDE (Or any other IDE of your choice)
5. Install Java JDK 1.7
6. Basic Knowledge Java Web Service
7. Basic Knowledge of JavaScript Visualization Libraries

Problem Statement:

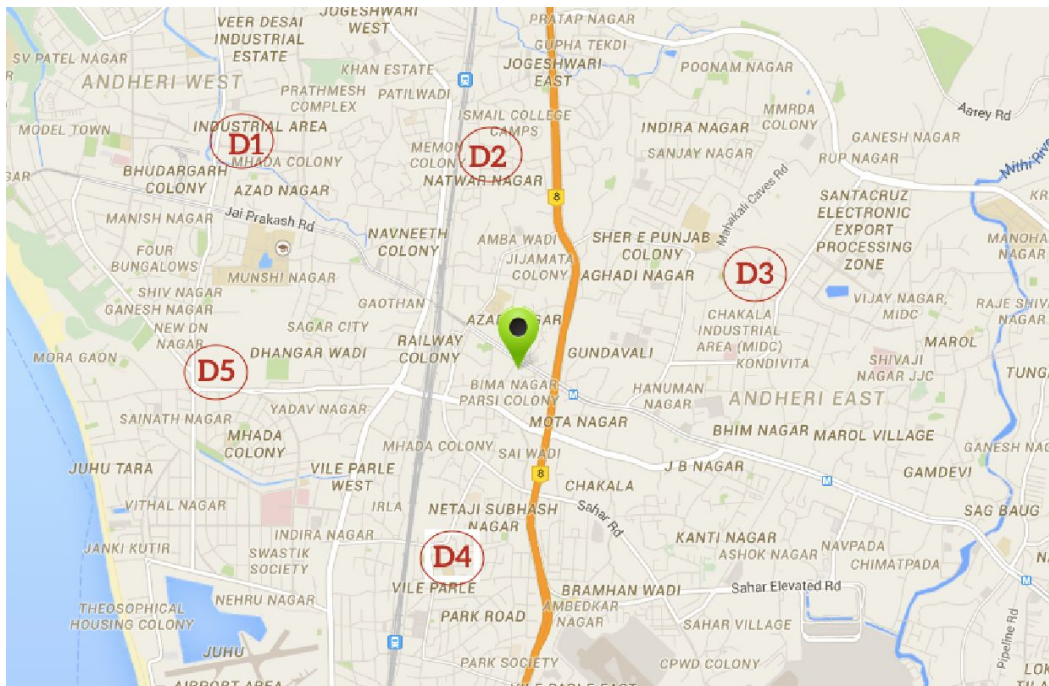
Imagine a scenario when it's past midnight on a Saturday night and you are watching a movie with a bunch of your engineering friends. It's 2 am and your friends plan to leave now and they book a cab that shows an ETA(Estimated Time of Arrival) of 15 minutes. Within 5 minutes you get a call from the cab customer service saying, "Because it's Saturday, we have a large number of bookings and the drivers are busy so it might take more than 30 minutes."

What do you do next? Just wait for your cab and nothing much, right? That's when one of your friends comes up with an idea to solve this traveling salesman problem and you start brainstorming. The drivers on field are busy taking customers from one place to another as the bookings come in without even thinking of optimization. Let's handle this in a better way now:

Say, your home location is represented by the green marker in the below maps and (D1, D2, D3, D4, D5) represent the current location of the 5 available drivers.

In each of the scenarios below, find out which driver should come to pick your friends

Note: The below maps are for representational purposes only. Please assume the location of drivers and customers.



1. Create tables to store driver data (Driver Name, Current Latitude, Current Longitude, Status) and order/booking data (Order Number, Customer Name, Customer Latitude, Customer Longitude)
2. Find the best pick-up driver for the above scenario using Java and MySQL or any other database of your choice
3. Create UI for:
 - a. Screen A - Booking a cab
 - i. Input - Capture latitude and longitude of customer address, Customer Name
 - ii. Submit Button – To get the best driver
 - iii. Table - Displays the current status of the drivers in below grid format

Driver	Customer	Status
D1	C1	BUSY
D2	C2	BUSY
D3	-	AVAILABLE
D4	C4	BUSY
D2	-	AVAILABLE

Test Cases:

1. Add 5 drivers in Driver master table (include INSERT scripts for the same). All the drivers will be available by default along with their current location
2. Make 2 bookings using screen A twice
3. Check if correct driver is assigned
4. Show all the driver details on UI

Scoring Pattern:

- Basic Programming in Java/J2EE – 10 Points
- Database Structure, Connection and Related Tasks – 10 Points
- Use of Web Services – 20 points
- Use of Spring Framework – 50 points
- Business Logic – 50 Points
- Use of jQuery and other JavaScript libraries – 30 points
- Quality of Code – 30 points

Submission and Results:

The primary evaluation criterion is how crisp and clear the design is, how visuals are used, over-used or under-used and how effectively large data is visualized. It should be not too cluttered and should be modular.

At the end of the test, please submit your project files and folder with SQL scripts in zipped file format at jobs@loginextsolutions.com. Also attach a brief instruction sheet (Not more than a short bulleted list) on how to open go through your project, if required. Upon submission, 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:

1. Providing false information concerning his/her identity, postal address, mail address or telephone number;
2. Breaching any of the provisions set forth in these Terms;
3. Threatening, harassing or interfering with the ability of other candidates to effectively participate in the test;
4. Threatening, harassing or interfering with LogiNext administrators or other employees;
5. 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.