

LINK Mobility – Senior Developer Task

The task below was conceived with the aim of assessing the candidate's knowledge as well as the approach to solving certain problems. It is kindly requested that all the points indicated are completed within the established time. What has been achieved will then be discussed and analyzed by the candidate with a representative of LINK Mobility development team.

Task Description

The candidate is request to build a web application with the following functionalities:

- A login form that will ask the user for an email and password. Email and password will be checked againsts a Users collection.
- Only correct email and password combinations should, of course, allow login.
- After login, the users should be redirected to a view displaying a list of customers with the following columns:
 - o Company Name,
 - o Full Address
 - o Subscription State
 - o Number Of Invoices
- The customers collection should contain at least 1000 entities.
- Display the detail of a selected customer where the user can change the following data:
 - o Company Name
 - o Address
 - o State
 - o Country
 - o Subscription State (New, Active, Suspended)

All of the fields above except Subscription State are free form input boxes.

- A SAVE button will allow to save the data above.
- In the customers list page, an ADD NEW button will display an empty detail that will allow the user to insert a new customer.

- For each customer row a DELETE button will allow users to delete specific customers.
- A page level search box will allow for a quick search of customers by their company name
- In the detail, an additional tabular view will display the list of all the customer invoices, with the following columns:
 - o Invoice Number
 - o Date
 - o Total
- No update or changes can be made to the invoices data. It is meant to be view only.
- No detail area needs to be implemented to display invoice details.
- Detail sections can be created using dialogs or different pages. The candidate can choose the preferred approach.
- Every section of the application, except of course the login, should not be reachable without previous user login.
- No special layout or graphic setup is required. The application can just be functional to the task.
- The application is meant to be used on a standard desktop computer. Mobile or adaptive layout support is not required.
- Given the application the candidate has built, we would like to further discuss the following scenarios:
 - o How and what of the application would the candidate change if a million customers would be stored in the MongoDB.
 - o How and what of the application would the candidate change if a few customers but millions of invoices would be stored in MongoDB.

Technical Constraints and Execution Rules

- The application must be developed using the following tools and technologies:
 - o .Net Core 6+ (C#)
 - o Angular 12+

- MongoDB 4.0+
- The task should be completed within 5 working days from the reception of this document. If the task cannot be completed within the given time, what has been created will be discussed as is, while analyzing issues and delays found.
- Given the above technologies and tools, the candidate is free to approach the solution of the task in any way seen as fit. Each approach will be discussed and analyzed as the task is completed.