

Frontend Assessment Document



SINCE 2002

To-Do List App



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Front End Developer

Angular/React - Often referred to as the “front end”; a client-side JavaScript framework used to create dynamic web applications to work with interactive user interfaces.

The assessment is to be implemented using Front End technologies.

Best Practices, Tools, and Technologies

While implementing the assessment make sure that the best practices are followed. Best practices ensure quality end-product with enhanced code readability that helps easy code maintenance. When best practices are followed one can ensure timely delivery of services, products, and support.

Declarations

All the declarations at the beginning of program

- Single place to look for declarations
- Reduced possibility of unwanted re-declarations

Naming Conventions

Naming conventions are fundamental as it helps to maintain code consistency that makes the code readable and easy to understand. While developing the application follow the standard conventions as mentioned below.

- camelCase is used for variable & function names (var lastName)
- camelCase is used for filenames
- Modules, variable names always start with a letter (var firstName)
- Give spaces around operator (var sum = no1 + no2)
- Encourage code readability by using appropriate indentation
- Global variables & constants should be written in UPPERCASE
- Use proper comments (//) to enhance code readability
- Choose meaningful names while naming file, folders, variables, methods
- Use conventional (Angular) suffix for files - .component.ts, .directive.ts, .module.ts, .pipe.ts or .service.ts
- For further naming conventions refer
 - <https://angular.io/guide/styleguide>

Use of Version Control

- Version control helps in reverting back to changes in-case of accidental changes. In this assessment make use of version control in order to store, manage the code.
- The platform which would be used for version control would be @GitLab. GitLab is similar to GitHub that offers more features.

- Ensure that you have GitLab account. Further create a GitLab repo that has access to required members.
- While creating a GitLab repo, ensure naming convention as follows,
"ng-training-"(followed by assignment name)
Example: ng-training-assignment -1
- Make sure all the changes are committed to the repo.
- **Once assessment implementation is complete do share the GitLab link on the company's official mail-id (through which you have received the assessment details).**
- Implement the Folder Structure systematically.
- Follow Modular approach.
 - Avoid one single file having more than 600 lines of code.
 - Create Separate Folders/Files.
 - Encourage loosely coupled approach.
- Throughout the whole application follow a Consistent Pattern.
 - File/Folders Naming.
 - Components/Modules/Directives/Services Naming.

Unit Tests

It is an integral and mandatory process during assessment development that essential unit tests are written and verified. Do follow the link below for unit test reference. Use Mocha for writing the unit tests.

<https://mochajs.org/#:~:text=Mocha%20is%20a%20feature%20rich,to%20the%20correct%20test%20cases.>

UI Unit Tests

It is an integral and mandatory process during assessment development that essential user interface unit tests are written and verified. Do follow the link below for UI unit test reference.

<https://docs.angular.lat/guide/testing>

Other Tools And Technologies To Use

- In assessment implementation use **SLDS** and CSS libraries. Refer below for the same.
 - <https://www.npmjs.com/package/@salesforce-ux/design-system>
 - <https://www.lightningdesignsystem.com/>

Note: If you're not familiar with this library, you can use other libraries, but having experience with SLDS is beneficial.

Assessment – To-Do List Application

Problem Statement

Develop a To-Do list application where users can create, read, update, delete the tasks user want to maintain on To-do work list.

Set-up Requirements

- Client-side And UI
 - Framework
Use Angular/React to build the frontend.
 - Components
 - 1. Task List Component - displays the list of tasks.
 - 2. Task Form Component - A form to create and update tasks.
 - Services
 - 1. Task Service - Handle API calls to the backend.

Functionality

- Process and Tasks
 - 1. Add task - allow users to add a new task .
 - 2. View task – Display and navigate the task list.
 - 3. Edit task – allow user to update existing task.
 - 4. Delete task – allow user to delete task.
- UI/UX
 - UI should be user friendly and easy to navigate.
 - Ensure responsive UI design for both desktop and mobile views.

Write the appropriate test cases and test the implementation accordingly.

For client-side use Angular/React default UI unit tests libraries.

Wireframes

Please find below the assessment wireframes. Note and follow the minute UI details as mentioned in the wireframes. Implement the UI accordingly.

Screen 1

Tasks					New Task	Refresh
					Search	
	Assigned To	Status	Due Date	Priority	Comments	
<input type="checkbox"/>	User 1	Completed	12/10/2024	Low	This task is good	 
<input type="checkbox"/>	User 2	In Progress	14/09/2024	High	This	
<input type="checkbox"/>	User 3	Not Started	18/08/2024	Low	This	
<input type="checkbox"/>	User 4	In Progress	12/06/2024	Normal	This task is good	

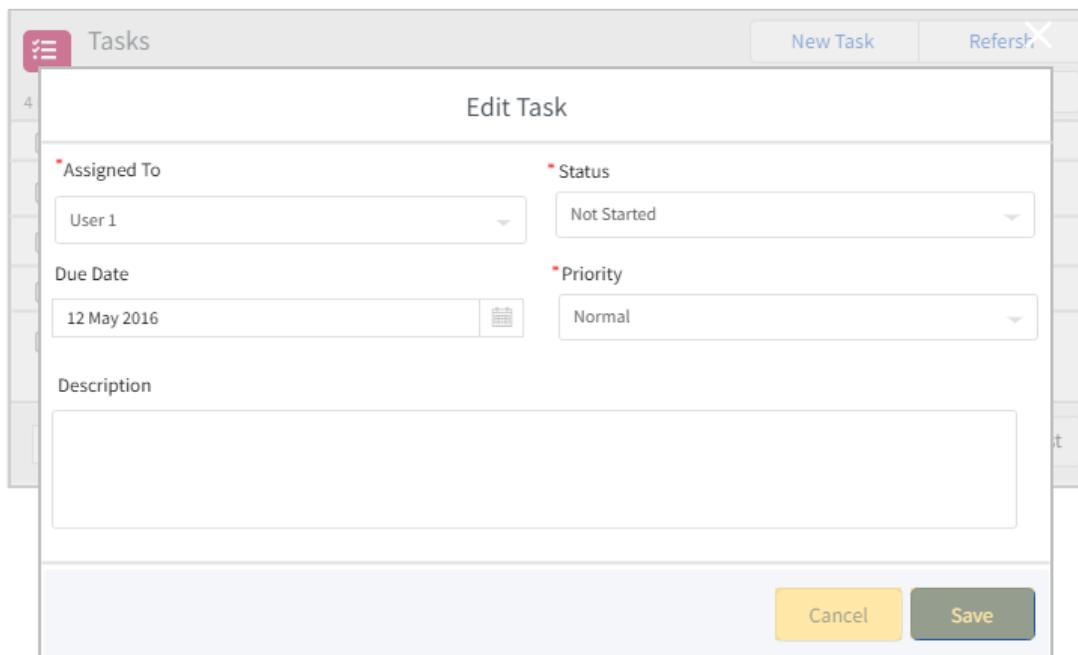
20  

First < Prev 1 > Next Last

Screen 2

Tasks		New Task	Refesh
4			X
<h3>New Task</h3>			
Assigned To <input type="text" value="User 1"/>		Status <input type="text" value="Not Started"/>	
Due Date <input type="text" value="12 May 2016"/>		Priority <input type="text" value="Normal"/>	
Description <input type="text"/>			
<input type="button" value="Cancel"/> <input type="button" value="Save"/>			

Screen 3

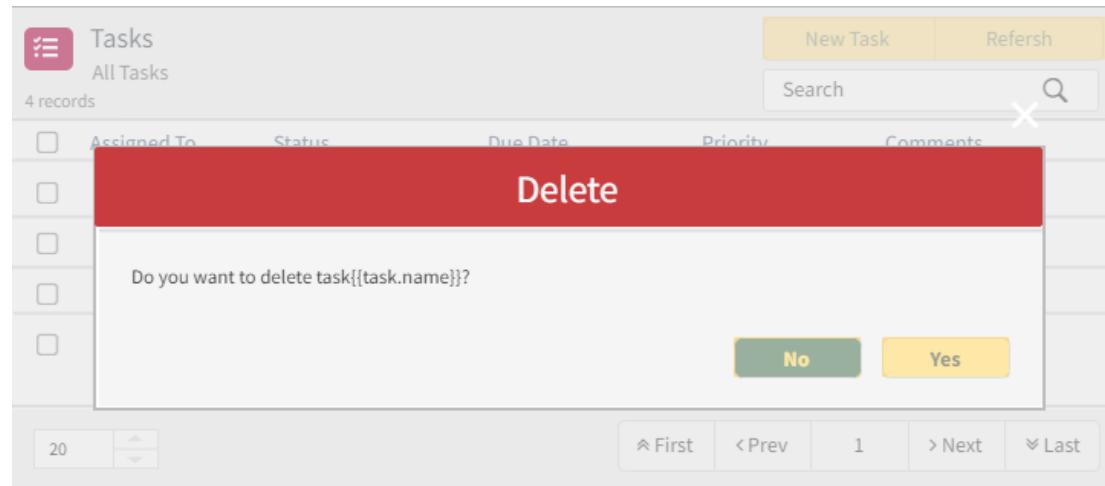


The screenshot shows a modal dialog titled "Edit Task". The form contains the following fields:

- Assigned To:** User 1 (dropdown menu)
- Status:** Not Started (dropdown menu)
- Due Date:** 12 May 2016 (text input with calendar icon)
- Priority:** Normal (dropdown menu)
- Description:** (Large text area)

At the bottom right of the dialog are two buttons: "Cancel" (yellow) and "Save" (green).

Screen 4



The screenshot shows a modal dialog titled "Delete" over a list of tasks. The list header includes columns: Assigned To, Status, Due Date, Priority, and Comments. The main body of the dialog contains the message: "Do you want to delete task[{task.name}]?". At the bottom are two buttons: "No" (green) and "Yes" (yellow).

At the top of the list, there are buttons for "New Task" and "Refresh". Below the list, there are navigation buttons: First, Prev, Next, Last, and a page size selector (20).