



# Challenge

# Implement Unit

# Testing For Angular

# Components and

# Services

# Challenge

- Enable Testing for Keep Note App



# Points to Remember

- The default settings provided in the configuration files – karma.conf.js, and angular.json, test.ts for execution of test code should not be modified.
- The Angular CLI command "ng test" should be used to execute the test code.
- Write and execute one test case at a time.
  - Proceed with the next case only if the currently written test code succeeds.
- In addition to the specified test requirements, if required, more test cases can be added, but it should be ensured that they pass before the solution is submitted.

# Instructions for the Challenge

- [Click here](#) for the boilerplate.
- Please read the README.md file provided in the boilerplate for further instructions about the practice exercise.
- Fork the boilerplate into your own workspace.
- Clone the boilerplate into your local system.
- Open the folder containing the boilerplate code in VS Code.
- Provide the test specifications in the files specified with the task details.
- Open the command terminal and run the command **ng test** to run the test code.
- Submit the files (excluding the `node-modules` folder) for manual evaluation.

# Context

Keep Note is a web app that lets users maintain notes. The app should be designed as a single-page application.

The Keep Note app reads notes residing externally in the form of an array. For convenience, the app provides search functionality to allow users to search for notes by note title.

The components created in the Box Office App should be tested to ensure a quality product.



## Enable Testing for Keep Note App

Create test cases to enable testing for the solution of Keep Note App.

The test code should ensure:

1. The expected title is available in the Header component.
2. Notes are displayed as expected by the Dashboard component.
3. Searching for notes returns the expected result by the Dashboard component.

Note: Steps to complete the tasks are given in the upcoming slides.

## CHALLENGE



# Tasks

- The following are the steps to complete this exercise:
- Step 1: Copy the solution of the Keep Note app created for the **fe-c4-s2-components-challenge** of Sprint – Develop SPA Using Angular Components into the root folder.
- Step 2: Open the **app.component.spec.ts** and refactor the generated test code to test the component is instantiated successfully.
- Step 3: Open the **header.component.spec.ts** and refactor the generated test code to test whether
  - the component is instantiated successfully
  - title `Keep Note` is displayed as expected.
- Step 4: Refactor **header.component.ts** code to achieve the expected result if the test cases are failing.



# Tasks (Contd.)

- Step 5: Open the **dashboard.component.spec.ts** and refactor the generated test code to test various functionality as given below.

Functionality	Test Condition
Display Notes	Should render 5 note card details
	Should contain a note with name sample-note"
Search Movies	Should contain a search text box
	Should contain a Search button with "search" as its caption
	Should load the note when searched by its full title
	Should load all the notes when no text is entered in the search box
	Should load all the matching notes when searched by partial text
	Should display no note when partial text entered has no matching notes

- Step 6: Refactor **dashboard.component.ts** code to achieve the expected result if the test cases are failing.



# Expected Output

