ASSIGNMENT 5

AIM:

Implement any 5 converters like currency converter, temperature converter, distance converter, time converter, weight converter, speed converter in angular js

THEORY:

AngularJS is a JavaScript framework maintained by Google and is used for building dynamic web applications. Here's a brief overview of some key concepts and features of AngularJS:

MVC Architecture: AngularJS follows the Model-View-Controller (MVC) architectural pattern. It divides your application into three interconnected components: Model (data), View (UI), and Controller (business logic).

Two-Way Data Binding: One of AngularJS's most powerful features is its two-way data binding. This means that any changes made to the model in the application code are automatically reflected in the view, and vice versa, without the need for manual DOM manipulation.

Directives: Directives are markers on DOM elements that tell AngularJS's HTML compiler (part of the framework) to attach a specified behavior to that DOM element or transform the DOM element and its children. Directives can be used for a variety of tasks, such as creating custom HTML elements, manipulating the DOM, and adding event listeners.

Dependency Injection: AngularJS has a built-in dependency injection system that helps manage the dependencies between different components of an application. This makes it easier to write modular and testable code by allowing components to be loosely coupled.

Templates: AngularJS uses HTML templates with additional markup (such as directives and expressions) to define the UI of an application. Templates are compiled by AngularJS's HTML compiler into JavaScript functions that render the dynamic views.

Controllers: Controllers in AngularJS are JavaScript functions that are used to define the behavior of a particular view. They are responsible for setting up the initial state of the scope object and for adding behavior to it.

Services: Services are reusable components in AngularJS that are used to encapsulate common functionality that can be shared across different parts of an application. Services are often used for tasks such as making HTTP requests, performing data manipulation, and sharing data between controllers.

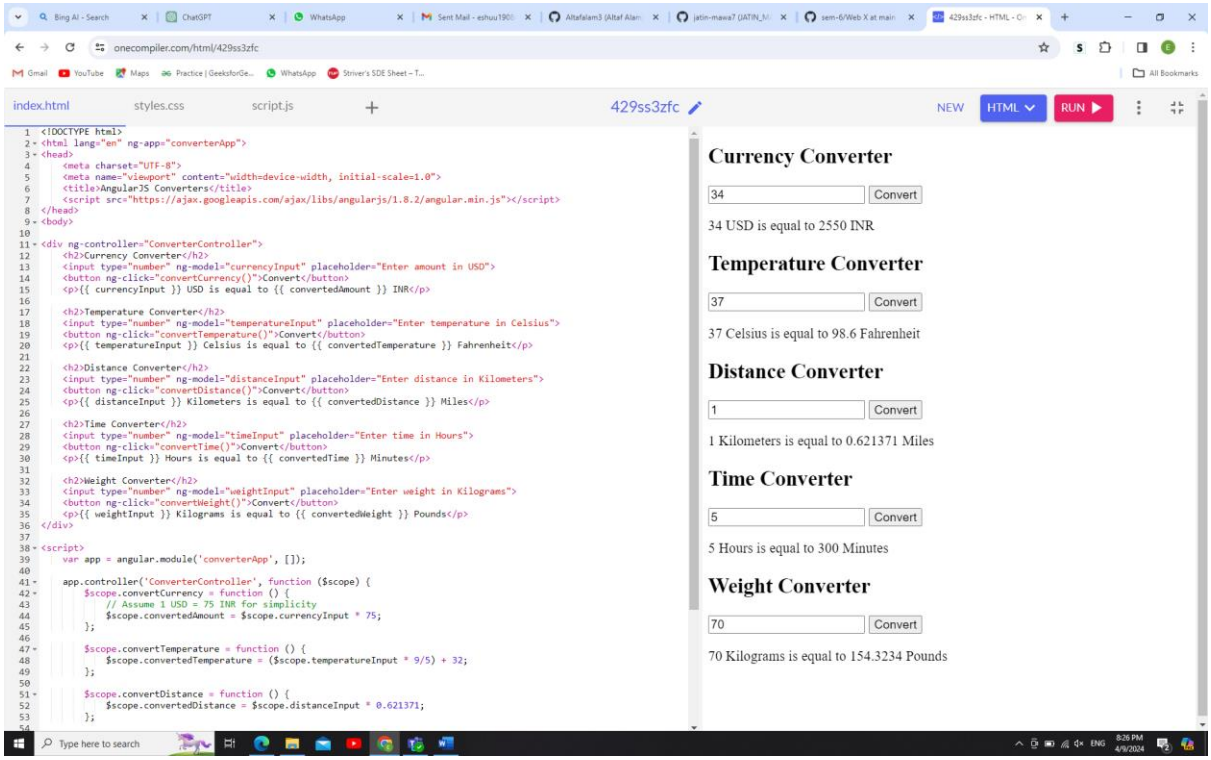
Routing: AngularJS provides a powerful routing system that allows developers to create single-page applications (SPAs) by defining different routes for different views or components of the application. This allows users to navigate between different parts of the application without having to reload the entire page.

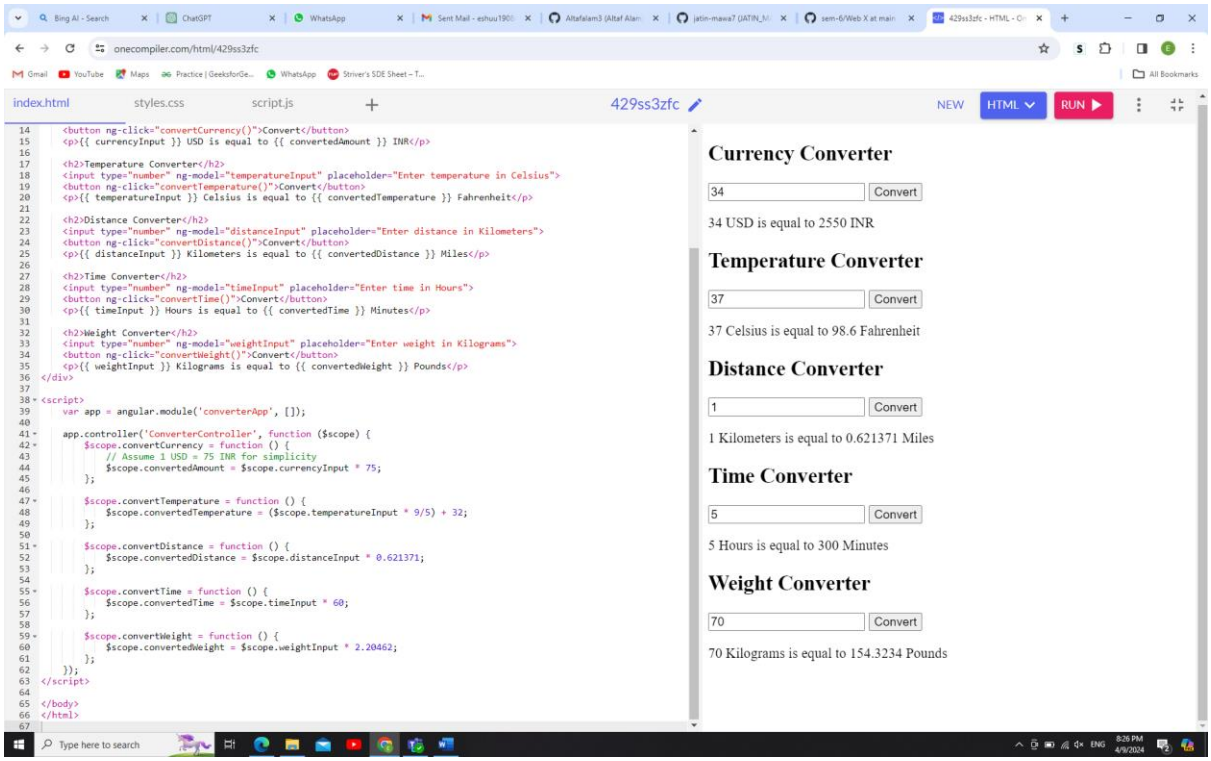
Filters: Filters in AngularJS are used to format data before it is displayed to the user. They can be used to format text, numbers, dates, and other types of data in a variety of ways.

Testing: AngularJS provides built-in support for unit testing and end-to-end testing through tools like Jasmine and Protractor. This makes it easier to write and maintain test suites for AngularJS applications, ensuring their reliability and stability.

These are just some of the key features and concepts of AngularJS. It's a powerful framework for building dynamic and interactive web applications, and its popularity continues to grow due to its flexibility, scalability, and extensive community support.

PROGRAM:




onecompiler.com/html/429ss3zfc
index.html
styles.css
script.js
429ss3zfc
NEW
HTML
RUN
<button ng-click="convertCurrency()">Convert</button>
{{ currencyInput }} USD is equal to {{ convertedAmount }} INR
<h2>Temperature Converter</h2>
<input type="number" ng-model="temperatureInput" placeholder="Enter temperature in Celsius">
<button ng-click="convertTemperature()">Convert</button>
{{ temperatureInput }} Celsius is equal to {{ convertedTemperature }} Fahrenheit
<h2>Distance Converter</h2>
<input type="number" ng-model="distanceInput" placeholder="Enter distance in Kilometers">
<button ng-click="convertDistance()">Convert</button>
{{ distanceInput }} Kilometers is equal to {{ convertedDistance }} Miles
<h2>Time Converter</h2>
<input type="number" ng-model="timeInput" placeholder="Enter time in Hours">
<button ng-click="convertTime()">Convert</button>
{{ timeInput }} Hours is equal to {{ convertedTime }} Minutes
<h2>Weight Converter</h2>
<input type="number" ng-model="weightInput" placeholder="Enter weight in Kilograms">
<button ng-click="convertWeight()">Convert</button>
{{ weightInput }} Kilograms is equal to {{ convertedWeight }} Pounds

<script>
var app = angular.module('converterApp', []);
app.controller('ConverterController', function ($scope) {
$scope.convertCurrency = function () {
// Assume 1 USD = 75 INR for simplicity
$scope.convertedAmount = $scope.currencyInput * 75;
};
$scope.convertTemperature = function () {
$scope.convertedTemperature = ($scope.temperatureInput * 9/5) + 32;
};
$scope.convertDistance = function () {
$scope.convertedDistance = $scope.distanceInput * 0.621371;
};
$scope.convertTime = function () {
$scope.convertedTime = $scope.timeInput * 60;
};
$scope.convertWeight = function () {
$scope.convertedWeight = $scope.weightInput * 2.20462;
};
});
</script>
</body>
</html>
Currency Converter
34
Convert
34 USD is equal to 2550 INR
Temperature Converter
37
Convert
37 Celsius is equal to 98.6 Fahrenheit
Distance Converter
1
Convert
1 Kilometers is equal to 0.621371 Miles
Time Converter
5
Convert
5 Hours is equal to 300 Minutes
Weight Converter
70
Convert
70 Kilograms is equal to 154.3234 Pounds
Type here to search
8:26 PM
4/8/2024