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# 1.Introduction

A Dynamic UI is a user interface that can adapt according to user input. A framework is the basic structure underlying in a system. This Dynamic UI Framework will focus on creating a hassle-free interface for the user and will store most of the html data in a JSON format in the client machine in order to reduce time and ultimately, improve user experience.

# 2.Component Design

The design of our dynamic framework is fluid and takes the shape of the webpage it is implemented on.

This is the best way to implement a dynamic UI as the UI will not have to be altered much and the dynamic functionality will fit around the design.

# 3.Flow chart

Start

User

Web Application

Navigate Menu

Dynamic Search UI

Apply Search (Basic/Advanced)

No

Search Results

Satisfied with result?

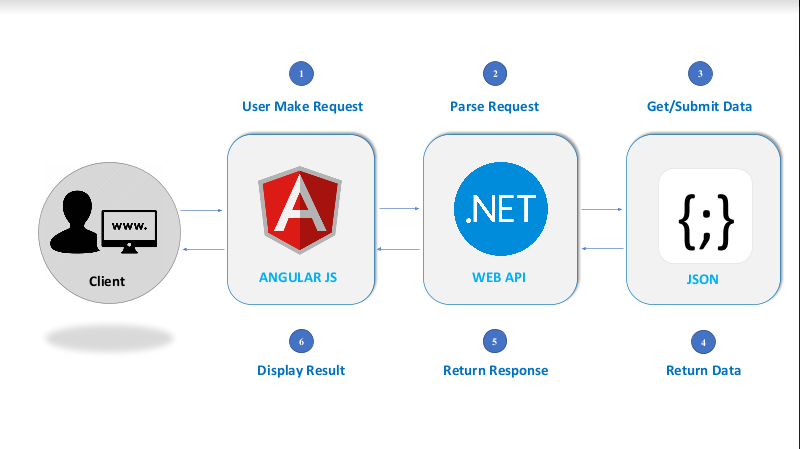
Yes

End

# 4.Technology and framework

# Technology Stack:

1. Angular JS
2. Bootstrap
3. [ASP.NET](http://asp.net/) Web API



# 5.Assumptions

a. Database is not used for storing the HTML/XML tags with respect to dynamic UI configuration  
b. Configuration data is stored in JSON format in the Server and it's referred for dynamic rendering of UI  
c. Application exception logs will be maintained in the Server

# 6.Solution approach

A UI dynamic layout engine needs to be made. All the data will be in JSON format and it will be updated dynamically on the webpage’s form and will need no need to be refreshed. The check boxes /Radio buttons to show/hide developer options will be only available to the developer. The developer being the administrator for both the user login Db and the website, can grant search permission based on hierarchy. Advanced search types are only available to individuals higher up in the hierarchy.

Exceptions and errors are logged in the console and sent to the server, when the form is submitted or the search has been completed by the user. This log will be accessible as a file stored on the server.