How a framework actually reduced the complexity in developing a web application?

**ANS:**

A web application can be achieved via 3 things :

HTML

CSS

JavaScript – functionality

If you go on increasing the functionality of a website, the **codebase** becomes very large and complex to implement with the raw JavaScript. There comes the frameworks to keep the complexity **under control.**

What is the term **control** **complexity** here describe about a code**?**

**ANS:**

The following are the list of **characteristics** that a code need to have to say it is “**not complex”**:

**Find relevant code easily**

We need to have some way to organise different parts of code such that we could find the code responsible for particular part of functionality.

(In angular we r having separate directories w.r.t purpose it handles. For eg: node modules directory contains all the modules required for the application.

**Updating the application when the “business rule changes” with less code being modified instead of re-writing the whole application.**

For e.g. In the YouTube-service api application if you want to change the api(source from which we obtain the data), we just make modification in **custom created service**.

**Code Reuse**

It eliminates re-writing the same code. This mainly helps in updating the functionality when a business rule changes which requires **modification of code in multiple places**

For e.g. In react, we implement everything in terms of **components**. So when we want a particular component to be loaded, we just include those components instead re-**writing the same HTML code** which reduces the **lines of code in your app,** making ur application **“Understandable, Simple”.**

In angular through “**Dependency injection”   
 we can achieve this.** Dependency injection enables you to load one module in another module.

**Enables testing of modules individually without requirement of entire application**

In general we can test the functionality by **launching** entire application. But if we have a way allowing you to test without having any such like requirements.

For e.g. in angular a view has its own controller, which has the business logic enabling the **modular testing**

**In short we say “It removes the overhead present on the developer through creating a perfect application developing environment “ thus enabling developer to concentrate on the business login not on the outside things …. We just need to know HOW to use framework to complete our product**

**Note : The internship report contains the same thing in the document as comment.**

**Ref. In course era, Angular course.**