**Page Object Model:**

What is Page Object Model?

Page Object Model is about developing an object repository.

Normally, when we do selenium scripts, we do it like

Driver.findElement(By.id(“firstname”)).sendKeys(“Subbu”);

If it is only one script that should be fine. But let’s say you have developed 1000 scripts and all of them contain the above statement. Now if the developers changed the application and they changed the id of the element “firstname” to “fstname” and all of your scripts fail. If you want to make them work, you need to change the id in your script from “firstname” to “fstname” in all of those 1000 scripts which is very time consuming.

But if you have a single place where you can change it just once, that would be very good and it won’t be time consuming for you to make the scripts up and running. This is achieved by page object model. So,

* Page object model is a design pattern to create object repository for web UI elements
* Under this model, for each webpage in an application, there will be a corresponding Objects page.
* We will put each object in a method on the objects page and the method name will be given in a way that it is very easy to under what we are doing.
* The object pages will find the webelements of the page.
* If change is required for any of the webelement, we will just change it in the objects page.

What are the advantages?

* Easy to maintain – Even if the webelement changes we will just change it in the objects page.
* Easy Readability of scripts – Since the method’s names are given in such a way that they represent what operation we are doing, if any new tester comes in he can easily understand the scripts.
* Reduce or Eliminate Duplicacy – Since we are capturing all the elements in an object page, the element will be defined only once so it eliminates the duplicacy.
* Re-Usability of code – We can create object for the objects pages and we can reuse them.