**Topics that will be covered as part of this project:**

This is a full end to end project of creating a Hybrid Framework model. We will be using the same application the we have been using so far which is “Online Car Rental System”. We will automate most of the functionality of this application using Hybrid Framework. We are going to cover the following topics as part of this project.

**What is hybrid framework?** – We will see what is hybrid framework.

**Installation of the XAMPP server, setting up database, updating config. Files for user and admin and overview of the application** – We have already covered some of these things as part of the previous tutorials but we will cover these things again quickly as if some new person wants to look at only this project he will get the idea without going through the previous tutorials.

So, we will look at how to install XAMPP server, how to set up the database and updating the config. Files for user and admin to get the application up and running.

We will also go over the application so that we can get an overview of the different scenarios that we can develop and automate.

**Test Scenarios Overview** – In this section we will take a look at the scenarios that we would like to automate. There are around 50 scenarios I have developed and we will look at them.

**Different Frameworks we are going to use in Hybrid Model and Different Features we would like to have in our automation framework** –

Here we will be looking at different frameworks we are going to use as part of the hybrid model and different features like Page Object Model, TestNG, Listeners for taking screenshots, Selenium Grid for Parallel running, Maven, Jenkins for continuous integration, emailing the reports etc.

Here we will be discussing about selecting TestNG test framework and if we don’t want to use TestNG what we should do.

**Deciding the functionalities which will be frequently used** – Here we will identify the functionalities that will be frequently used and the need for creating special functions for them

**Deciding the functionalities which can be data driven** – Here we will identify the functionalities for which multiple sets of data has to be passed

**Structure of the project in eclipse** – Here we will see the structure of the project in eclipse

**Creating the Master Keywords file, Main Test Cases file and Individual Test cases file** – In this section we will create the master keywords sheet, main test cases excel and the individual test cases with keywords we developed in master keywords sheet.

**Creating .properties file with all the paths** – In this section we will create a .properties file where we store all the paths for different things like master keyword sheet, main test cases sheet etc and also some global constants like admin login details, user login details etc.

**Creating Simple Test:** With the above things, we are done with all the prerequisites. All the topics from this section onwards are about creating the automation scripts for the scenarios we have discussed earlier. We will start with implementing a simple test case initially where we create a script for admin opening the browser, entering the user name, entering the password, clicking on login button and clicking on logout and closing the browser. We will see how to create object repositories and action classes and how to integrate these things to get the automation done.

Once this is done we will improve the functionality with adding the commonly used functionalities and data driven functionality.

We will proceed with automating all the scenarios from here onwards.