

# **PROJECT REPORT**

## **TOPIC: AUTOMATION**

### **IDEA:**

We all have had problems with flight tickets sometime in our lives, running from website to website checking for the cheapest flights available and the maximum discounts being offered. Websites like Cleartrip and many other flight booking websites offer various such offers throughout the year which create differences in flight prices from website to website.

We all want the best deal for ourselves, don't we? So here is the solution to all those problems

To solve the above problem, I have created an automated code which takes all of your travel details and shows to you the cheapest flight available across two different flight booking websites namely- [www.cleartrip.com](http://www.cleartrip.com) and [www.goibibo.com](http://www.goibibo.com) respectively.

### **TECHNOLOGY USED AND IMPLEMENTATION DETAILS:**

This automated program has been developed in the python language and uses the pre-defined library of python known as "Selenium". Selenium is an open-source web-based automation tool.

My original plan was to include 3 websites for my project but it didn't workout as I wanted

I started out with the cleartrip website first, automating it was a rather easy task because finding element addresses for it was rather easy as each element had its own distinctive id ,so that was done .

Next,I started out with the goibibo website ,the first problem that I encountered here was that I could not type out the date in the depart and the arrival column as I did in cleartrip ,rather I had to use the drop down calendar that had been provided, so in-order to navigate my way to different months I had to use the arrow key in their website. To encounter this problem I ran a for loop, which ran for (month-1) number of times and continuously clicked on the arrow.After this the

road was relatively easy just selecting appropriate elements and going through with it.

After this I started to work on the makemytrip website ,filling out the origin and destination by automated typing, but then I encountered a similar problem of date as in goibibo . I tried to implement the same algorithm as I did in goibibo but the program failed everytime and kept on showing “element not found”, I tried as many possible selectors that I could but to no avail, so I had to drop the idea.

After this I started out with “[yatra.com](http://yatra.com)” ,I was relieved to see that this had no date issues ,but when I started to work on it I found out that when we typed the name of the origin or destination in the automated chrome browser ,there was no drop down coming for the list of airports ,which was coming in the normal chrome browser and just writing out the name of the airport was not working out, so again I had to drop this idea as well.

Finally,I had to make this project with two websites itself and could not venture ahead.

Note: I know my code is very similar to the already existing website of “[ixigo.com](http://ixigo.com)” but one very stark difference that exists between my code and that of ixigo is that ixigo displays to us the price without applying coupons whereas my code shows us the price after applying coupons.

## **Images/screenshots or links to videos (would highly recommend to add videos too)**

Youtube links for videos of both parts of my project:

1. [https://youtu.be/3xuKRrYd\\_JQ](https://youtu.be/3xuKRrYd_JQ) . (One way flight price )
2. <https://youtu.be/pEULCvxEXZ0> .(Round trip flight price)

## **Future scope of project:**

This project can be extended further onto various other domains such as hotels, hotels+flights(combo) and it can also be extended into various other travel websites as well so that a person need not venture out into a large number of websites finding out the ideal price for their travel. I will try my level best to work out and make this project move ahead in the positive direction.

### **How was your overall experience while doing the project:**

This was a very enjoyable experience for me and also a steep learning curve for me. The last project that I had made was on the pygame which was also quite fun but working and tampering with websites was even more of a fun experience for me. I have learnt a great deal during this project which will help me ahead.