Problem faced in selenium and how to mitigate the challenges:

1. Image or text overlapping issue.
2. Captcha or Barcode to deal.
3. Non web-based application or desktop application not supported.
4. Maintaining huge number of test cases is a challenge in selenium but in QTP and RFT they provide good mechanism to maintain the test cases.
5. If you face anything new (which you are not overcome yet) then there is no support from selenium as it is a open source tool but for QTP as it’s a license based tool they provide support for it.
6. No Direct way to compare 2 images in selenium. We have to relies on some other api .
7. Any reporting capabilities you need to relies on third party tool.
8. Need to write the dynamic xpath. Need to be expert in xpath creation.
9. Handling multiple frames sometime create difficulty sometime. Required smart solution for that.
10. Sometime automating third part calendar is difficult to handle in selenium.
11. Dealing with pop up windows. There are solution we have Alert API,Window handler API,We have Autoit to handle upload feature if we have in application.
12. Synchronization problem in Java is a very important problem in selenium. We have to use Implicitwait,explicitwait,FluentWait.. thread.sleep(Never use)…After that also we can face stealelementexception. To overcome this sometimes we have to use javaexecutor to handle the non-synchronize element.
13. Un expected error launching internet explorer: Browser zoom level should be set to 100% by default for the IE browser to Overcome this error.
14. Cross browser testing issues…it should be totally compatible with all the browser. we need to change xpath , timeout timing issues are there.
15. Latest web driver and chrome compatibility.
16. Ajax Component ..Suppose we have a dropdown for country and after selecting the country there is a drop down which will show the State info available on a particular courty.

i.e Country : US

State : CA

Now if I select India and search for state from india in dropdown it takes dome time to reflect the option as ajax component send the new details to server and get the info ..we need to synchronize our test cases to handle this situation.

1. Focus element exception. To handle this situation, we need to select our xpath in such a way that it should traverse to the end of the element.

Like I have an input field text ..if I select xpath before the <input> tag than also in firebug we can see that it is highlighted but if we apply that xpath to our code and run the selenium script then it will give focus element exception.we have to modify the xpath and select xpath till <Input tag>.