How to automate Test Plan?

**1-Tools**

**To pick an appropriate automation tool let us first ask a question here!**

Does the company already have licenses for a certain tool? **If yes** so let’s try and see if QA team can use it

**If No** So we can Look for open-source (but reliable) tools that meets the defined scope and requirements within the company

**Second question here is**

Do the QA team members know the tool already or do we need to bring in someone new? Or we have to train the existing ones?

**Finally,**

After answering those questions QA team can discuss the possibilities and check it with the management from the financial wise to be sure that using automation will generate better ROI.

**2-Processes**

* Include time for code-walkthroughs and inspection of the Automation scripts
* Maintain the scripts on a timely basis

**3-Stages**

1. **Unit Testing**

* Define how unit testing will be conducted?
* Who will write the test scripts for the unit testing?
* What would be the sequence of events of Unit Testing and how will the testing activity take place?
* Define test set in the test management tool having “unit TCs”
  1. **Smoke Testing**
* Define scope of TC for smoke testing to make sure if build is testable before receiving it from development team to avoid wasting time and resources and to proceed with further testing
  1. **System and Integration Testing**
  + Describe how System & Integration testing will be conducted?
  + Who will write the test scripts for the integration testing?
  + what would be sequence of events of System & Integration Testing, and how will the testing activity take place?
* Define test set in the test management tool having “integration TCs”
  1. **Performance and Stress Testing**
  + Define if this type of testing will be included or excluded
  + Define the tool will be used for this type of testing (jmeter ,load runner,..)
  + check team capabilities for this kind of testing
  + prepare scripts
  1. **User Acceptance Testing**
     + Describe how UAT testing will be conducted?
     + Who will write the test scripts for the UAT testing?
     + what would be sequence of events of UAT Testing, and how will the UAT testing activity take place?
     + Define test set in the test management tool having “UAT TCs”
  2. **Automated Regression Testing**
* Define core scenarios that will be included in regression testing
* Define who will be responsible for regression testing?
* Write test scripts for regression set to be conducted after each release

**4-Reports**

* Automation Scripts execution results are also technical and might not be easily understood by the rest of the teams so it is recommended to Plan on writing detailed results to notepad or excel sheets as an additional measure.
* **Should have detailed**
* framework documents
* review results
* defect reports
* execution status reports