

ACCEPETANCE TESTING

(Utilization of testing tools)

Date	11 November 2022
Team ID	PNT2022TMID43253
Project Name	Digital Naturalist –AI Enabled Tool For Biodiversity Researchers
Maximum Marks	4 Mark

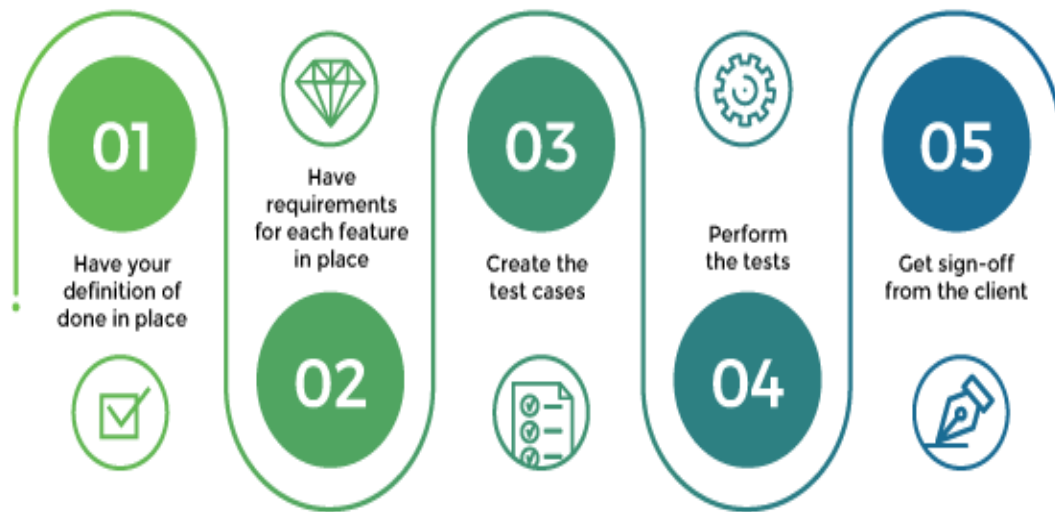
Introduction

Data was collected in three steps aimed to show the issue from different perspectives such that Biases in answers from interviews with testers could be adjusted for. As a first step a tool- assisted literature review was conducted using GPT-3 (Generative Pre-trained transformer 3) to understand the academic consensus. Then, employees that had worked with user acceptance testing were interviewed to gain insights relating to how people think about the problems that arise during user acceptance testing. Finally, log files from test and production systems were data mined to understand how consensus and thoughts translate to actions in the testing environments.

User Acceptance Testing

User acceptance testing (UAT) is necessary when implementing changes to an IT landscape due to the ever increasing complexity of software which can cause bugs to slip through even under the most perfect development conditions . Commonly, acceptance testing is performed as the last step before the release of a software, after all other testing phases have exited . As implied by its name, user acceptance testing is typically performed by the end users in a real setting during the unit-, integration- and system testing phases.

Get Started with User Acceptance Testing



Test planning, monitoring and control

This step entails planning and setting up the base for the execution of the tests. Setting goals and identifying the aim(s) of the test phase based on the requirements supplied.



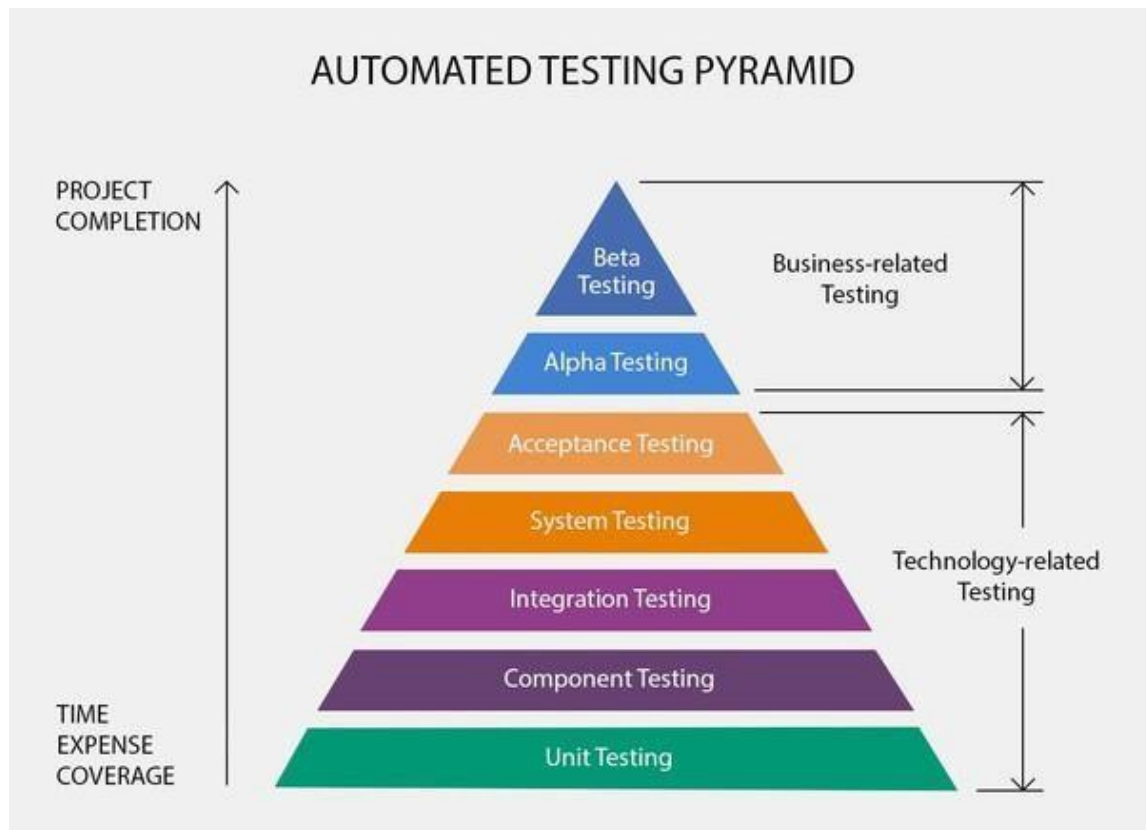
Test cases

In the context of this thesis it is important to note the use of subtle differences in the definition of automated testing. In literature we often find mentions of how automated test cases can require a lot of manual effort coding cases.



Automated Acceptance Testing

Automated acceptance testing (AAT) is the practice of executing business logic test cases automatically and can serve as an addition to user acceptance testing. Some sources also discuss the automation of user acceptance testing, in which case the automated acceptance tests are UAT tests as described above. It mostly revolves around the idea that businesses which procure software define a set of rigorous requirements with clearly defined input and output data. When this is the case, test cases can be automated using a variety of tools making use of UI selectors or visual user interface automation. This means that scripts could be written to automate user acceptance test cases with the intent to reduce the manual effort emerging from the repeated execution of acceptance testing.



Conclusions

It seems evident that large software customers should aim to have their UAT be tightly integrated into the software product development process in order to improve the quality of software which they can procure. For this to work companies must improve their own knowledge management and change management strategies and adapt them specifically to user acceptance testing.