



## SHORT-TERMINTERNSHIP



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## CHAPTER-1 :- Executive Summary

### \* Learning objectives :-

- Learned how to obtain clean/process and transform automation testing.
- Learned how to appropriate tests on the katalon.
- Learned how to perform test explores in the katalon studio as well as scripts, results and coded in the testing.
- Learned how to perform well in group.
- Learned how to interpret testing effectively to audience visually and in written format.

### \* Learning Outcomes :-

- Developing relevant programming abilities.
- Abilities to build and perform tests based on module
- Able to create same test explores.
- Summary of internship activities:-
- Attending live training sessions and project sessions
- Selection of topic "~~Amazon~~ "facebook" and gathering cleansing its related data in excel.
- Team formation and assignment of tests to team members.
- I have done some activities during my internship such as gathering & organizing.

## CHAPTER-2 :- Overview of the organisation.

- \* "Smart Intern" is a platform that offers virtual Internship to the students. The platform goal is to prepare students for job and by establishing connections.
- \* "Smart Intern" is in mission to build technology communities in academic to encourage students towards innovation, they are trained of thousands of students.
- \* "Smart Intern" restrict access to interns, who are not restricted in APSCHE. LMS. They want to maintain a respectful environment with everyone.
- \* It employs many people and has a good performance in terms of market value.
- \* Roles of employees are to assist and contribute to the team.
- \* Smart Intern main objective is to bridge existing gaps between prevailing and offers suitable skill development.

## CHAPTER - 3 :- Internship part

Internships are valuable way to gain new found knowledge this internship is a university provided internship it is a learning process. Registration / registering in APSCHE smart interne enrolling for Smartbridges Software testing automation i.e., live learning sessions as per schedule this is the main purpose of the smart Intern organization.

- \* Automating testing and preparation.
- \* Testing results.
- \* Creating visualization reports.
- \* Creating visualization demo.
- \* Web integration on project.
- \* Preparation of the final report.
- \* modifying test cases.
- \* Submission of team project.

## CHAPTER 6: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

In software automation testing, the work environment typically includes:

workplace settings:- Testers may work in traditional office environments, tech startups, or fully remote setups. offices often feature cubicles or open spaces while remote setups require a home office with appropriate tech & communication tools.

collaborative atmosphere:- The role often involves frequent interactions with developers. QA teams, project managers and sometimes clients. collaboration tools like slack, microsoft and zoom.

Technical workspace:- Testers use development tools such as integrated development environments and test management tools. They also work with automation frameworks and CI/CD tools to streamline test processes.

continuous testing environment:-

The work involves integrating automated tests into CI/CD pipelines to ensure that tests are run continuously as part of the development.

Dynamic and iterative tasks:- The environment is often dynamic, with tasks ranging from creating and maintaining test scripts to test results & debugging failures.

**Problem - Solving focus:-** Testers frequently troubleshoot and debug issues in both the test scripts and the application being tested. This involves working with logs, debugging tools.

**Documentation and Reporting:-** A significant part of the job involves documenting test cases, results and defects. Testers use tools like JIRA or TestRail to track progress and report findings.

**Regular Meetings:-** Teams often have regular standups, sprint planning sessions, and retrospectives to discuss blockers, challenges, and future testing needs.

Overall, the work environment in software automation testing is characterised by a blend of technical tasks, collaboration - continuous improvement to ensure the quality and reliability of software products.

### ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to Software testing	understanding of Software development life cycle (SDLC)	
Day - 2	1. Revision of SDLC and 2. Testing techniques	Black Box testing White Box testing	
Day - 3	1. Revision of precision class 2. Testing techniques	Module testing unit testing. Integration testing static dynamic testing	
Day - 4	1. Revision E testing techniques	levels of software testing. Acceptance testing System testing -	
Day - 5	System and Acceptance testing	System testing user Acceptance testing Smoke testing	
Day - 6	System and acceptance testing.	Sanity testing Smoke testing types of system testing -	

## WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt .....

**Objective of the Activity Done:** Software automation testing concept

**Detailed Report:** In this week we had online classes where we learned to apply various concepts of software automation testing. We learnt about software development life cycle, basics of software testing, various techniques like black box, white box testing, module testing, unit testing, static and dynamic testing, acceptance testing, system testing, smoke testing and levels of software testing.

2.ND  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Revision of system & Acceptance testing types of requirements & test case.	Load, Stress, Spike volume, regression Recovery, organisation functional } software	
Day - 2	Advanced testing Strategies	Formal testing & informal testing test plan Software testing life cycle.	
Day - 3	Advanced testing Strategies	Timed, go/no testing, ad-hoc testing Re-testing & Regression testing.	
Day - 4	User Integration and non-functional testing	User Interface, Usability testing, compatibility Non-functional testing	
Day - 5	Performance testing, security testing, compatibility testing	Compatibility testing, Performance testing & Security testing	
Day - 6	Software testing Life cycle and tools.	Globalization, Localization, Recovery testing SDLC, test plan.	

## WEEKLY REPORT

WEEK -2 (From Dt..... to Dt .....)

Objective of the Activity Done: Software automation testing concept

Detailed Report: In this week we learned about other testing techniques first we had a revision of previous concepts. Then we listened the classes of various testing techniques like load, volume, recovery, migration, functional testing. We also learned other advanced testing techniques like formal and informal testing, monkey, gorilla, ad-hoc testing. Usability, functional, compatibility, and non-functional testing is also explained.

<sup>3rd</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Software testing life cycle and tools (STLC)	Test analysis Analysing of SRS & FR's test design	
Day - 2	Software testing life cycle (STLC) and tools	Preparing test Scenarios preparing test cases preparing test data	
Day - 3	Software testing life cycle (STLC) & Tools	Requirements (RIM) • Test case creation • Defect Reporting	
Day - 4	Software testing life cycle and tools	Defect Severity Defect priority with examples	
Day - 5	Software testing life cycle and tools	Defect management tools - JIRA & BUGJILLA Bug life cycle	
Day - 6	Software testing life cycle and tools	Detailed learning on test cases.	

## WEEKLY REPORT

WEEK -3 (From Dt..... to Dt.....)

**Objective of the Activity Done:** Software automation testing concepts

**Detailed Report:** In this week we learned about test analysis, analyzing SRS and FRs documents preparation of test cases, preparation of test data, RTM, test case execution. Defect reporting and priority is explained. They also taught us about defect management tools and explained about test cases in detail.

4rd  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Testcase preparation test scenario preparation	Preparation of test case in excel-test Scenario preparation	
Day - 2	Revision of earlier classes	Defect severity phibility and reporting, Automation testing.	
Day - 3	Fundamentals of test Automation	Introduction, ddv advantages, disadvantages of automation test.	
Day - 4	Fundamentals of test Automation.	Classification of automation testing automation tools	
Day - 5	Installation & set up n of Katalon	Learn how to set up Katalon & understanding its features	
Day - 6	understanding & learning about the Katalon.	Creation of test cases of Katalon.	

## WEEKLY REPORT

WEEK - 4 (From Dt..... to Dt .....)

**Objective of the Activity Done:** Software automation testing concept

**Detailed Report:** In this week we learned about preparation of test case in excel test scenario preparation, defect severity, priority testing, reporting and automation testing. We learned about fundamental of test automation, introduction like adv, advantages, disadvantages of automation test and classification of automation testing, automation tools. We also learned about creation of test cases in Katalon.

5TH  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	creation of test cases and running of test cases	Record and play back mode & manual mode	
Day - 2	creation and running of test cases	Script mode and manual mode	
Day - 3	Revision of previous classes and class on locators.	Absolute path & Relative path	
Day - 4	Test Suit creation & execution & Test Suit collection level	Test suit creation execution & test suit level	
Day - 5	Data Driven testing	using internal data , excel .	
Day - 6	Test listeners	Test listeners creation & execution.	

## WEEKLY REPORT

WEEK - 5 (From Dt..... to Dt .....) )

**Objective of the Activity Done:** Software automation testing concept

**Detailed Report:** In this week we learned about creation of test cases, running of test cases, record, playback, manual mode, script mode. Revision of previous classes and class on locator, absolute path, relative path, test suite, creation and also execution test suite, collection level. We also learned about test suit creation level, using internal data, excel, test listeners creation, and execution.

3

**ACTIVITY LOG FOR THE FIRST WEEK**

6th

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Revision of previous classes on global & local variables.	classes on global and local variables	
Day - 2	Key words, check points	creation and execution of key words & check points	
Day - 3	Installation & login of Github	Installation & logic of Github	
Day - 4	Git-hub uploading and creation of repositories.	Repository creation & cloning commits on Git hub	
Day - 5	Installation and set up of JENKINS Integration in Jenkins	Installation & Set up of Jenkins	
Day - 6	Revision	Revision.	

## WEEKLY REPORT

WEEK - 6 (From Dt..... to Dt.....)

**Objective of the Activity Done:** Software automation testing concept

**Detailed Report:** In this week we learned about classes on global, local variable, keywords check points, creation, execution of key words, check points of creation, installation and logic of github and we also learned about report creation committing on github.

7th  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Assign of project work and creation of team members.	Assignment of project work.	
Day - 2	understanding on how to do project	gathering of information & understanding of req.	
Day - 3	Assigning tasks between team members.	Assigning tasks between team members	
Day - 4	preparation of test cases and test scenario - iO	Preparation of test cases in excel	
Day - 5	preparation of test plan in word	Preparation of test plan in word	
Day - 6	creation of test cases in katalon	creation of test cases in katalon.	

## WEEKLY REPORT

WEEK -7 (From Dt..... to Dt.....)

**Objective of the Activity Done:** Software automation testing concepts

**Detailed Report:** In this week we learned about assignment of project work, gathering of information understanding of requirements, assigning tasks between team members, preparation of test cases in excel and also preparation of test plan in word. we also learned about creation of test cases in katalon.

<sup>8th</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Creation of test cases in Katalon & test suits	creation of test cases in Katalon & test suits	
Day - 2	Data driven test and test listeners	Data driven test and test listeners	
Day - 3	verification of project & uploading in Git-hub.	verification of Project	
Day - 4	verification of project & uploading in Git-hub	verification of Project	
Day - 5	verification of project & uploading in Git-hub	verification of Project	
Day - 6	verification of project & uploading in Git-hub.	verification of Project	

## WEEKLY REPORT

WEEK - 8 (From Dt..... to Dt.....)

Objective of the Activity Done: Software automation testing concept

Detailed Report: In this week we learned about regression testing is a type of software testing that ensures that new code enhances the changes have not adversely effected the existing functionality of the software. It involves re-running previously conducted tests to verify that the software still performs as expected after updates, such as bug fixes, enhancements or other modifications. The goal is to detect unintended side effects or issues introduced by the recent changes.

It is crucial to have a comprehensive set of tests to cover different aspects of the software application remains stable and functional.

3

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

In real-time software automation testing, professionals acquire several key technical skills:

1. Programming and Scripting:- Proficiency in programming languages (e.g. Java, Python, C++) to develop and maintain automated test scripts.
2. Test Automation Tools:- Expertise in tools like Selenium, QTP/UFT, or Test Complete for creating & executing automated tests.
3. Continuous Integration/ Continuous Deployment (CI/CD):- Familiarity with CI/CD tools like Jenkins, GitLab CI, & Travis CI to integrate automated tests into the development pipeline and ensure continuous quality.
4. Version control systems:- Skills in using Git or SVN for managing test scripts, tracking changes and collaboration with other team members.
5. Test frameworks:- Knowledge of frameworks such as JUnit, TestNG or Cucumber for structuring and running tests in an organized manner.
6. API Testing:- Experience with tools like Postman, REST Assured, or SoapUI for testing and validating APIs.

## Performance Testing :-

understanding of performance testing tools like Jmeter or loadrunner to assess and optimize application performance under various conditions.

## Debugging and troubleshooting:-

Ability to identify analyse , and resolve issues with in test script and the application being tested.

## Database Testing:-

Skills in SQL to verify data integrity and interactions between the application and the data base.

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

In software automation testing, managerial skills involve overseeing various aspects of the testing process and team dynamics.

Project Management:- Ability to plan, execute, and monitor testing projects, including setting timelines, managing resources, and ensuring that testing milestones align with project goals.

Team Leadership:- Leading and motivating a team of testers, managing their workloads, providing guidance and fostering a collaborative and supportive environment.

Resource Allocation:- Efficiently allocating tasks and resources, including assigning test cases, managing testing environments and ensuring the availability of necessary tools and infrastructure.

Stakeholder Communication:- Effectively communicating with stakeholders, including developers, product managers and executives, to report on test progress, raise issues.

Risk Management:-

Identifying potential risks in the testing process, such as resource constraints or technical challenges and developing strategies to mitigate them.

process improvements:- continuously evaluating and improving testing processes and methodologies to enhance efficiency and coverage

Budget management:- Managing the budget allocated for testing activities, including tools licenses, training and personal costs, ensuring cost-effectiveness.

Training and Development:-

Providing training and development opportunities for the testing team to keep them updated with the latest tools, techniques, and best-practices.

Conflict Resolution:-

Handling conflicts and challenges within the team or with other departments, ensuring that issues are resolved in constructive and timely manner.

7

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.)

- To improve communication skills in software automation testing, focus on the following strategies:
  - Clarify Objectives:- clearly define the goals and scope of your communication. Whether it's a test plan, a status update, or a bug report, ensure that the purpose is well-articulated and understood by all parties involved.
  - Enhance Documentation:- write clear, concise and organized test cases plans and reports. Use a standardized format to make documentation easy to follow and reference.
  - Use visuals:- incorporate diagrams, charts and screen-shots in reports and presentation. Visual aids can help convey complex information more clearly and are especially useful for illustrating issues or results.
  - Provide regular updates:-
  - Keep stakeholders informed with regular progress reports.
  - Simplify Technical jargon:- When communicating with non-technical stakeholders, avoid using technical jargon or complex terminology.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

To enhance abilities in group discussions, team participation and leadership within the context of software automation testing consider implementing the following strategies.

#### Group Discussion:-

- preparation :- Review relevant material, such as test plans, results, and issues, before discussions. Be ready to contribute informed insights.
- Effective communication:- practice clear and concise communication. Tailor your message to the audience, avoiding unnecessary technical jargon when speaking with non-technical team members.
- Active listening:- Listen carefully to others points of view. acknowledge their contributions and ask clarifying questions to ensure mutual understanding.

#### Team participation:-

- collaboration:- Actively engage in team activities, offering support and feedback. Share knowledge and resources to help achieve common goals.
- Responsiveness:- Be prompt in responding to communications and requests. Keep your team update on your progress and any issues that may arise.

## Leadership:-

- Vision and Goals:- clearly define the vision and goals for the automation testing efforts. Ensure the team understands how their work contributes to the overall objectives.
- Mentorship:- Guide and support team members in their professional development. Share your expertise in automation tools and best practices.
- Decision - Making:- make informed decisions based on data and team input. Be transparent about the reasoning behind your decisions and involves the team when appropriate.
- Motivation and Recognition:- Recognition and reward the achievements and contributions of team members. Encourage a culture of appreciation and motivation.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

In recent years, several technological developments have significantly impacted the field of software automation testing. Here are some key advancements relevant to this area.

Advanced Automation Tools:- Tools like testng and appli-tools leverage AI and machine learning to enhance test automation by automatically identifying and adapting to changes in the user interface and improving test script reliability.

- Low-code / No-code platforms: platforms such as Kentico studio and usertrace allow users to create automation tests within minimal coding, making it easier for non-developers to participate in test automation.

Integration with CI/CD pipelines:-

- Continuous Integration / Continuous Development (CI/CD):- Tools like Jenkins, Github CI, and Circle CI have become integral to the testing process, enabling automated tests to be triggered automatically with every code change and integrated into the deployment pipeline.

Cloud-Based Testing:-

Test Environment:- Services like Browserstack and Sauce labs offer cloud-based testing environments, allowing testers to run tests across various browsers.

and devices without needing to maintain extensive in-house infrastructure.

#### Enhanced Test Management:-

- **Unified Test management tools:-** solutions such as test Rail & Zephyr provide comprehensive test management capabilities , integrating test case management .

#### Performance Testing Innovations:-

- **Real-Time performance Monitoring:-** Tools like grafana and New Relic , provide real-time monitoring and analytics allowing testers to assess performance and detect issues during testing & production .

#### API Testing Improvements:-

- **Enhanced API Testing tools:-** Tools such as postman and soapUI have evolved to support comprehensive API testing , including automated tests , performance benchmarks ; and detailed reporting .