



## SHORT-TERM INTERNSHIP



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## Acknowledgements

I would sincerely like to thank APSCH for providing me with this short term internship which helped me to gain practical experience and knowledge about Software testing automation.

I would like to thank our respected principal Sir Dr. G.S.K Chakravarthy for giving this wonderful opportunity.

I would like to thank our Head of the department I. Hymavathi mam and our guide Dr. mamatha for beginning a wonderful mentor throughout our project.

I thank almighty God, my parents and my friends without whose help this project would not have been completed.

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## CHAPTER - 1 :- Executive Summary.

### \* Learning objectives :-

- Learn how to obtain clean / process and transform Automation testing.
- Learn how to approach tests on the Katalon.
- Learned how to perform test Explorers in the Katalon studio as well as Scripts, results and code 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 models.
- Able to create some test Explorers.

### \* Summary of Internship Activities :-

- Attending live training sessions and project sessions.
- Selection of topic "Amazon" and gathering cleansing its related data in Excel.
- Team formation and assignment of tasks to team members.
- I have done some activities during my internship such as gathering & organizing.

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

- \* "Smart Internz" is a platform that offers virtual Internship to the students. The platform goal is to prepare students for job and by establishing relations.
- \* "Smart Internz" is in mission to build technology communities in academic to encourage students towards innovation, they are trained of thousands of students.
- \* "Smart Internz" 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 contributes to the team.
- \* Smart Internz main objective is to bridge existing gaps between prevailing and offers suitable skill development.
- \* In a mission to build technology communities in academic to encourage students towards innovation and entrepreneurship.

## CHAPTER - 3 :- Internship part.

Internships are valuable way to gain newfound knowledge . This Internship is a university provided internship . It is a paid Internship which is structured and with a learning process . Registration /registering in APSCHIE Smart Internz & Enrolling for Smartbridge's Software testing automation i.e live training sessions as per schedule . This is the main intense of the Smart Internz organization

### Skills :-

- \* Automating testing and preparation.
- \* Testing results
- \* Creating visualization reports
- \* Creating visualization demo.
- \* Web Integration on project.
- \* Preparation of the final Report.
- \* Modifying test Explorers
- \* Submission of team project.

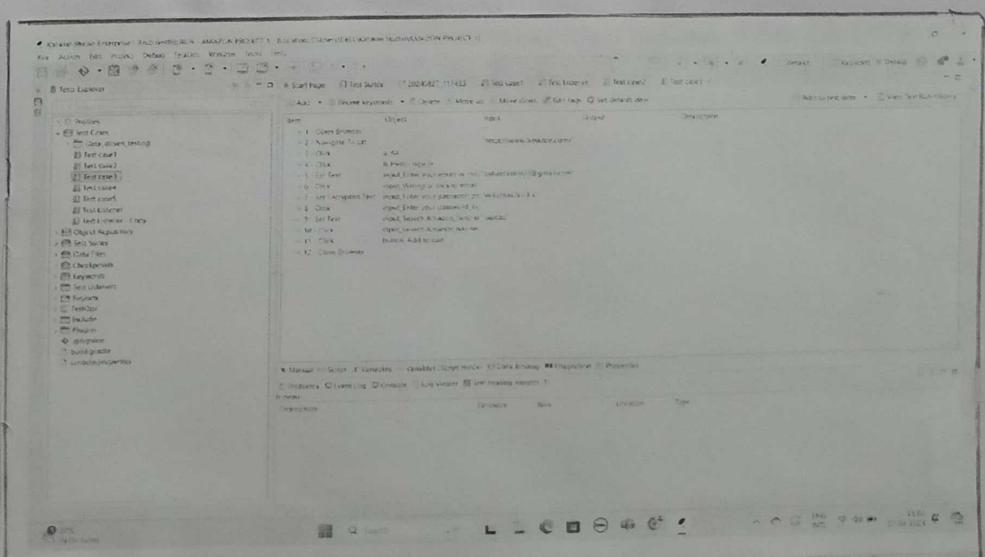
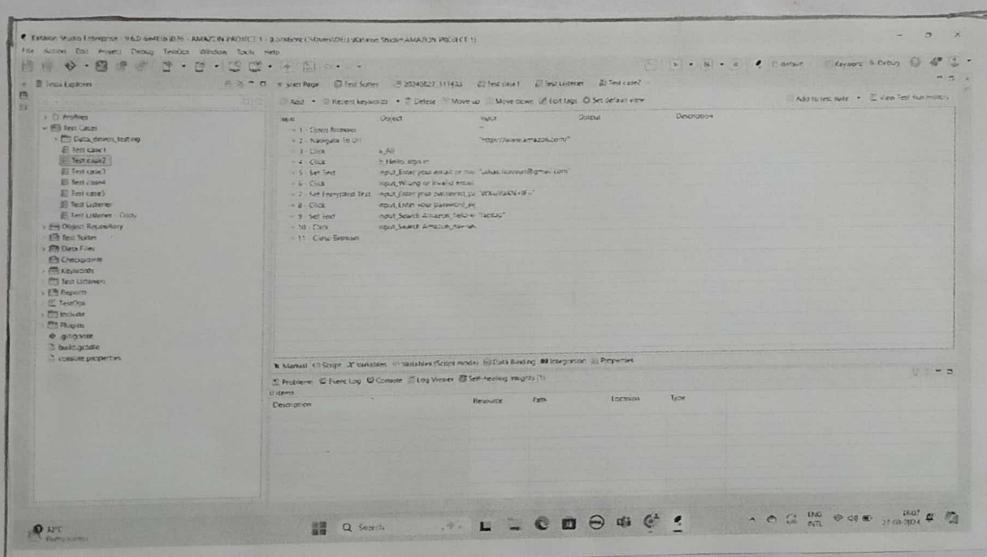
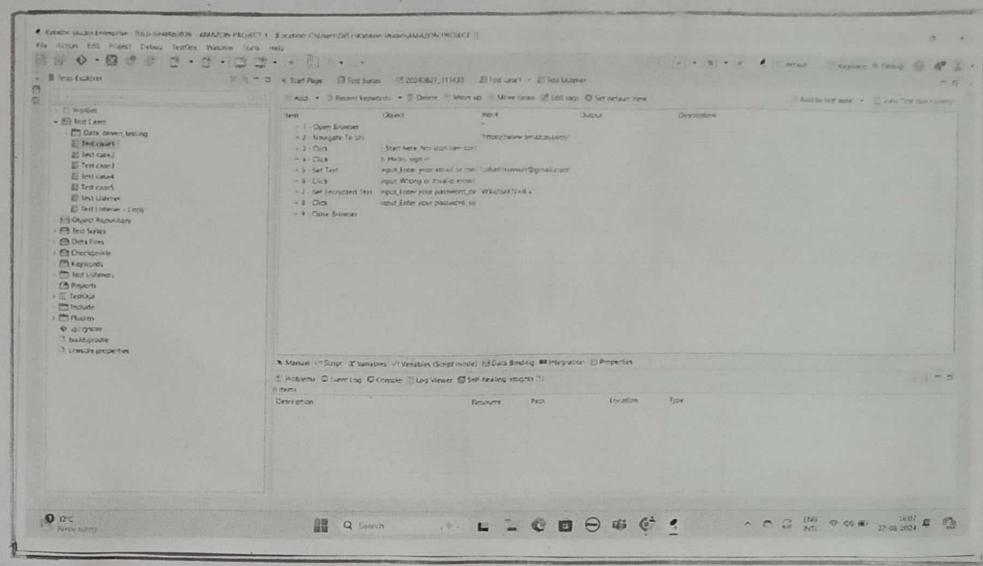
## CHAPTER 6: OUTCOMES DESCRIPTION

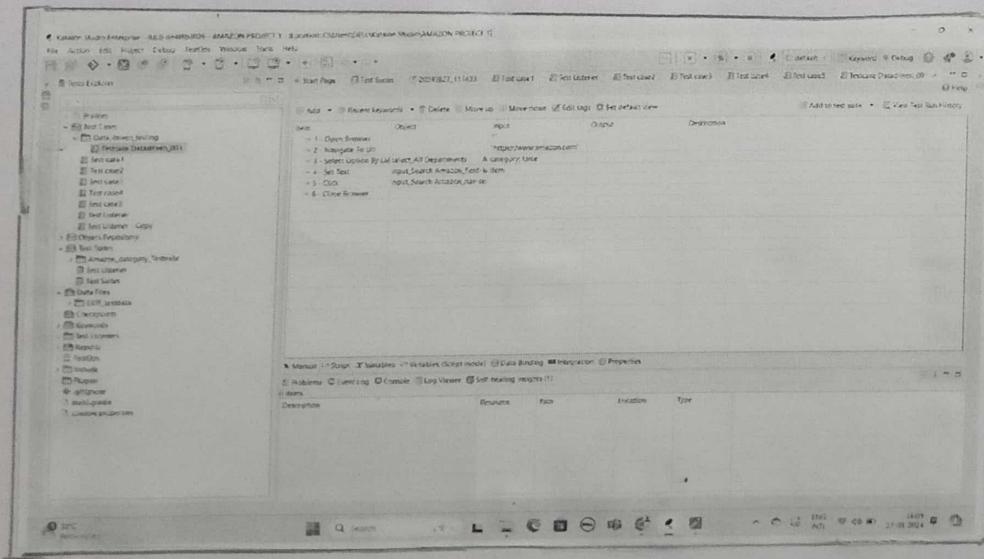
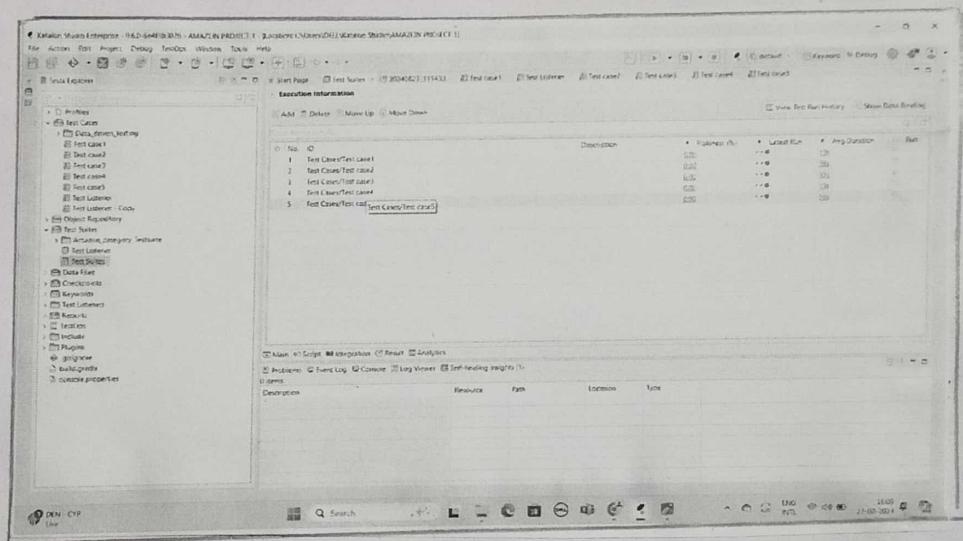
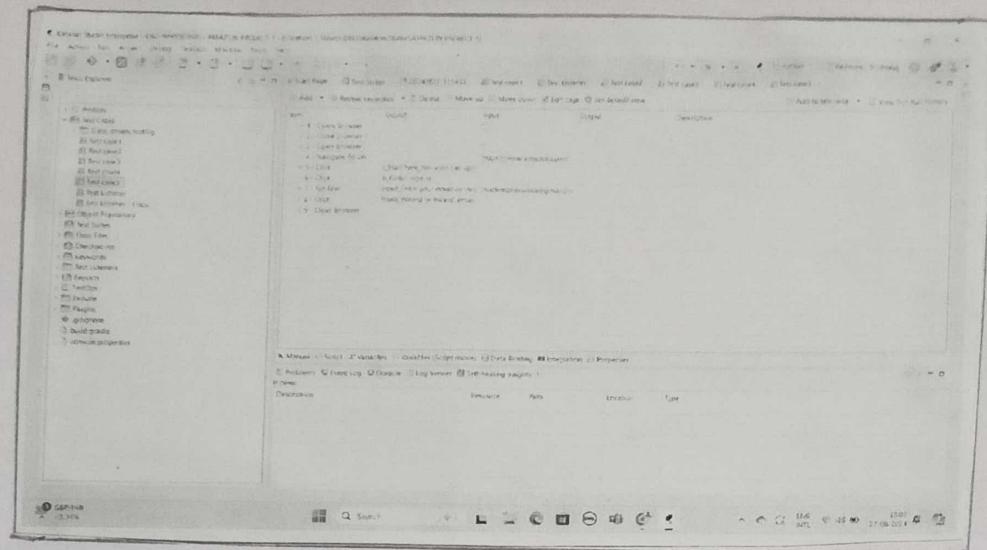
**Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and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

### \* Description of work Environment:

The internship at Smart bridge has been a transformative experience, equipping me with practical skills in the Software automation and deep understanding of the project on amazon .The hands-on experience and exposure to real world projects has not only sharpened my technical skills and project management skills .The work environment fostered a collaborative atmosphere with well defined protocols and structured procedures .The facilities were equipped with necessary tools for Software automation testing .Team members exhibited mutual support and teamwork, contributing to a harmonious relationship. Over all the internship provided a comprehensive experience in Software automation testing within a well-organised and supportive work environment .

## PHOTOS & VIDEO LINKS





**ACTIVITY LOG FOR THE FIRST WEEK**

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1	Fundamentals of Software testing	We have learned about the SDLC	
Day - 2	Requirements of the Software development life cycle.	We have learned the requirements	
Day - 3	levels of testing	we learned the levels of testing	
Day - 4	System and Acceptance testing	we have learned about the System testing	
Day - 5	About Smoke testing Sanity testing	we have learned about Smoke & Sanity testing	
Day - 6	Explanation on the Acceptance testing	We have learned about acceptance testing.	

## WEEKLY REPORT

WEEK - 1 (From Dt. 3/7/24. to Dt. 5/7/24.....)

Objective of the Activity Done:	Introduction about SDLC.
Detailed Report:	Software development life cycle describes that the requirements, analysis and design. This is done in the Black box and white box testing. They have described about maintenance which means after deployment the software enters the maintenance phase where it is updating and modifying to fix bugs improves performance or add new features as required.
	levels of testing : unit testing, Integration testing, system testing , acceptance testing.
	These levels of testing says about individual components or functions of the software isolation. This phase tests the interactions between integrated modules or components.
	System testing completes the integrated software system to verify that it meets the specified requirements. Conducted to determine if the software meets the business and about user Acceptance testing.
	It follows systematically and improve the quality reliability and effectiveness.

*Second*  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Explanation on the the Sanity testing	we have learned about the Sanity testings.	
Day - 2	Explained about Formal testing	we have learned the multiple formal testing.	
Day - 3	Steps for Formal testing	we have learned about steps on formal testing.	
Day - 4	Explained on Software Testing Life Cycle	we have learned STLC process.	
Day - 5	Explained the test planning & activities	we learned the test planning and Deliverables.	
Day - 6	Described about the Test plan IEEE format	we have learned the Test plan format.	

WEEKLY REPORT  
WEEK-2 (From Dt....8/7/24.....to Dt....12/7/24.....)

Objective of the Activity Done: Introduction on the formal testing.

Detailed Report: Formal testing have multiple process and different activities. In this Software testing life cycle which is a series of phases that guide the testing process, ensuring the delivery of high quality. This Software testing life cycle have requirement analysis, test planning, test design, test execution, Defect reporting and Metesting.

Purpose on Software testing life cycle which ensures a structured and systematic approach of testing.

→ Helps in identifying defects early in the development cycle. Provides a clear methodology for managing the testing process and improves and software quality.

A test plan is a detailed document that outlines the strategy, scope, resources, schedule and activities for testing a software application.

It has the test objectives that specify the goals of testing such as verifying.

Test Criteria which have the software to be acceptable. This structure ensures that test plan is comprehensive and covers all necessary aspects.

<sup>Third</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Explained about the Informal testing	we have learned about Informal testing	
Day - 2	Described about different types of Informal testing	we have learned different types	
Day - 3	Explained the types of Performance testing	we have learned about performance testing.	
Day - 4	Explained how to use performance testing	we have learned about activity on performance testing.	
Day - 5	Explained about the Spike and Endurance testing	we have learned about the Spike & Endurance testing.	
Day - 6	Discussed the Question and answers on the Informal testing	we have learned about Question & answers.	

WEEKLY REPORT  
WEEK-3 (From Dt.....15/7/24.....to Dt.....19/7/24.....)

**Objective of the Activity Done:** About the Informal testing.

**Detailed Report:** Informal testing refers to the testing activities that do not follow a structured or formal testing process. It gives the quick feedback and quickly identifies the Software Systems.

Performance testing is a critical aspect of software quality assurance that focuses on evaluating how an application performs under various conditions.

Load testing which assesses the application performance under expected load conditions.

Gradually increase the load until the system fails or performance degrades significantly.

Spike testing which tests the applications reaction to sudden, extreme increases in load.

Performance testing is essential for ensuring that applications can handle expected and unexpected loads efficiently, maintaining user satisfaction and operational stability and accuracy. Simulation of real world load conditions can be challenging.

<sup>Fourth</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Explained about user Interface and Non-functional testing	We have learned about Non functional testing	
Day - 2	Explained about monkey testing	We have learned about monkey testing.	
Day - 3	Explained about the user screen testing	We have learned about user screen testing.	
Day - 4	Explained about the usability testing	We have learned about usability testing.	
Day - 5	Explained about non functional testing	We have learnt about functional testing	
Day - 6	Explained about the compatibility testing.	We have learnt the compatibility testing.	

## WEEKLY REPORT

WEEK-4 (From Dt.....22/7/24..... To Dt.....26/7/24.....)

**Objective of the Activity Done:**

**Detailed Report:**

Our fourth week was about the concept of the non-functional testing in software testing automation.

Day 1 overview of non-functional testing, keys and non-functional aspects and their scalability and compatibility. Day 2 on the concept of the monkey testing which means the random approach to software testing by inputting random data or performing unpredictable actions. Day 3 about the concept of user screen testing also known as user interface this intended across various devices and scenarios. Day 4 we have learned the usability testing concepts which evaluate a product by testing it with representative users. Day 5 we have learnt that how functional testing uses in software testing and validates whether the application performs its functions as intended based on requirements.

Day 6 We have learnt that compatibility testing and their uses and explained the queries.

**ACTIVITY LOG FOR THE <sup>Fifth</sup> FIRST WEEK**

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1	Explained the Introduction on the Software Testing and TOOLS.	we have learnt about the Software and tools	
Day - 2	Explained the Globalizing & localization testing	we have learnt about the globalizing testing	
Day - 3	Described about the Recovery testing	we have learnt about recovery testing	
Day - 4	Explained on the topic of test analysis	we have learned on the test analysis.	
Day - 5	Explained about the Graphical User Interface tools.	we have learnt about the GUI tools.	
Day - 6	Explained about the SRS/FRS test design	we have learnt the SRS/FRS.	

## WEEKLY REPORT

WEEK-5 (From Dt...29.7.24.... To Dt....2/8/24.....)

Objective of the Activity Done:

Detailed Report:

Our fifth week has discussed on the Software testing and its tools and their uses.

Day 1 Testing tools are designed to automate and facilitate various aspects of Software testing.

They have automation tools like selenium, appium, Etc... Day 2. have discussed the globalizing and localization of testing which describes the users to give culture or local and detect potential problems.

Day 3 Recovery testing which assesses how well an application can recover from changes or unexpected errors. It involves failures & interruptions.

Day 4 Discussed about the test analysis we learnt that identifying test cases and ensuring that align with software specifications.

Day 5 : GUI which is a visual part of an application allows to interact through graphical elements like buttons, icons...

Day 6 - we have learned that the test design involves creating test cases based on documented and functionalities criteria.

<sup>5th</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Explained about the Requirement traceability matrix.	we have learnt the RTM	
Day - 2	Discussed about the Software automation Project.	we have learnt about project	
Day - 3	Explained how to Create the Test Cases	we have tested the test cases	
Day - 4	Explained about the both test cases /Scenarios	we have learnt on the Scenarios	
Day - 5	Explained about the automation testing advantages & disadvantages	we have learnt on the advantages & disadvantages	
Day - 6	Brief explanation on the test execution	we have learned about software test execution.	

## WEEKLY REPORT

WEEK-6 (From Dt.....5/8/24..... to Dt....9/8/24.....)

### Objective of the Activity Done:

#### Detailed Report:

Our sixth week they have discussed the requirement traceability matrix and detail about the project.

Day 1 A requirement traceability matrix tracks each requirement through the testing process, ensuring all requirements are covered in test cases.

Day 2 They have discussed the software automation project Day 3 They have discussed the test cases in the katalon and explained the test scenarios in the Excel sheet. Day 4 The test cases and test scenarios are run in the katalon they have verified the test cases id. Day 5 we have learned the automation testing which increases test efficiency provides results supports extensive and do not have high initial setup cost, requires maintenance of test scripts.

Day 6 They have discussed the test execution of the test cases and test scenarios in the katalon.

<sup>Seventh</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Discussed on the Preparing Test data	we have learnt the test data	
Day - 2	Discussed about the Test Description	we have learnt test description	
Day - 3	Explained the running of the test Cases.	we have run the test Cases	
Day - 4	Explained the process of formation of team members.	selection of team leads and team members	
Day - 5	Explained the different topics in the Project	we understood about the topic of amazon	
Day - 6	Explained the Concept of the total project	we have learnt the project	

## WEEKLY REPORT

WEEK-7 (From Dt.....12/8/24..... to Dt.....16/8/24.....)

### Objective of the Activity Done:

#### Detailed Report:

The Seventh week commenced with the formation and team leads and team members. we have learnt the test description outlines the objectives, scope and specifics of test case, including what will be tested the test conditions. The way we have given the test case and test case id and they have formed a team and selection of topic by the team members and we have learnt total project on the topic which have explained in the katalon. we have done the total process of distributing the responsibilities of the project and assigning roles and tasks to every person in the team based on the individual strength, interest skills in software automation testing on the amazon. we have discussed the project that how to give the test cases and process of uploading about the project. The description have been created in the Excel sheet and completed that preparing of Excel sheets.

<sup>Eighth</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 the Story Report on student performance	Created Katalon, Story on amazon	
Day - 2	Assigned the process about test suites and listeners	test suites & test listeners in the file	
Day - 3	Discussed the video demonstration on the project.	Created video demonstration on the project	
Day - 4	Project report writing	Drafting the final report.	
Day - 5	Discussed the uploading of the project in the github.	Created the git hub links	
Day - 6	Project report finalization and Conclusion	Conclusion and Submission of final Report.	

## WEEKLY REPORT

WEEK-8 (From Dt.....19/8/24..... to Dt.....23/8/24.....)

### Objective of the Activity Done:

#### Detailed Report:

In the final week of our short term internship program we began working on the project on topic student. Each team member contributed and completed their assigned tasks. Ensuring the video that powerpoint presentation and voiceover we have created github and created there own team collaborated in the github repository along with the google links for the video demo in the both github and Apscile Smart Internz .video demonstration with voice giving insight into the project tasks / deliverables accomplished and completed successfully. Therefore ensuring the successful completion of the Repository and created the the clone project in the katalon and have to upload in the github repository which illustrates the correlation between students academic performance. Finally we have concluded that the project and prepared the final report with our mentor for verification and submission.

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

### \* Description of the technical skills Acquired .

- Automation framework :- proficient in designing , developing and maintaining Scalable and robust test automation frameworks using selenium  
→ Skills acquired : strong understanding of object-oriented programming , reusable components .
- Scripting and programming :- Extensive hands-on Experience in writing test Scripts in programming languages such as java , javascript.  
→ Skills acquired : Deepened knowledge of debugging , code optimization and proficiency in using version control systems like Git.
- Continuous integration :- Integrating automated test into CI / CD pipelines , ensuring that tests are automatically run with each code commit . Familiarity with Jenkins and github.  
→ Skills acquired :- Enhanced understanding of devops practices and seamless integration .

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.

### \* Description of the managerial skills Acquired

- Strategic planning & Organisation :- leading the planning and organisation of the automation projects.  
→ Skills :- allocate resources efficiently, improved managing complex projects.
- Leadership and Team management :- Managing a team of automation Engineers, providing direction, support and mentorship.  
→ Skills :- Developed strong leadership qualities, inspire the team, resolve conflicts.
- Effective communication :- communicating project goals, updates and challenges to stakeholders, product managers.  
→ Skills :- Refined communication skills, improved active listening.
- Decision making and problem Solving :- Making critical decisions related to test strategies tool selection and resource allocation. Solving complex problems during project.  
→ Skills :- Strengthened decision making skills, particularly in high pressure situations.

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.,)

#### \* Description of communication skills acquired

- Oral communication :- Focus on truly understanding the speaker before responding.
  - Practice Active listening
  - Join public speaking.
- Conversational abilities :- Practice small talk with colleagues to build better relationships and ease into more formal conversations.
  - Engage in Small Talk
  - Ask open-ended questions.
- Confidence levels :- The better you understand the subject the more confident you'll be when discussing it.
  - Positive visualization.
  - Prepare thoroughly.
- Extempore Speech ability :- Engage in impromptu speaking where we must discuss a random topic for a few minutes
  - Stay informed
  - Pause before speaking.
- Anxiety management :- Use CBT methods to challenge negative thoughts and reduce anxiety related to the communication
  - Focus on message
  - Cognitive behavioral Techniques.

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

Reflecting on my experience in data of Software testing automation at Smartbridge Interns, I've identified key areas for enhancing my abilities in group discussions, team participants and leadership.

To improve my contributions in group discussions, I'm actively listen to others, ask insightful questions and share my opinions, perspectives clearly and effectively. As a team lead I plan to strengthen collaboration by proactively offering support to my technical skills and embracing different view points of team members, clarifying points when to contribute and clear and concise. After discussions ask for feedback from the team to identify the improvement. Offer help to teammates when they need it whether it's through sharing knowledge, assisting with tasks, or simply offering encouragement. proactive in communicating your ideas, progress and any challenges you face it.

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

## \* Description of Digital technologies

- AI and machine learning in automation:- The integration of AI and machine learning into test automation has been a significant development. These technologies reduce time spent on maintaining test scripts.
- Security testing:- With the increasing importance of security new tools and techniques have emerged for automating security testing such as ZAP and static analysis.
- Test automation frameworks & tools:- The development of more sophisticated test automation tools improved the efficiency and reliability of automated testing. For example tools like Cypress, playwright and Selenium.
- Continuous Deployment:- The adoption of CD pipelines has streamlined the development and testing process. Tools like jenkins, gitlab CI and Aws code pipeline.
- Cloud-based testing:- Cloud computing has transformed how testing environments are managed. Platforms like Aws, Device farms, Browserstack and cross platform testing directly in the cloud.