SHORT-TERMINTERNSHIP

Dr. LANKAPALLI BULLAYYA COLLEGE
VISAKHAPATNAM

Acknowledgements

* I would sincerely like to thank APSCHE 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 class teacher Santhosh Sir and our head of the department I. Hymavathi mam 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.

Contents

CHAPTER -1 :- Executive Summary

* Learning objectives :-

-> Learn how to obtain clean/ process and transform Automation testing.

-> Learn how to appropriate 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 interpet testing effectively to audience visually and in written formal

* 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 " facebook" and gathering cleansing it's 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 - 02 :- Overview of the Organization

* " Smart Interns" is a platform that offers virtual internship to the students . The platform goal is to prepare students for job and by establishing relations
* " Smart Interns" is in mission to build technology communities in academic to encourage students towards Innovation , they are trained of thousands of students
* " Smart Interns" restrict acces to interns , who are not restricted in APSCHE . LMS . They want to maintain a respectful environment with everyone
* It employes many people and has a good performance in terms of market value
* Roles of employees are to assist and Contributes to the team
* Smart Interns main objective is to bridge existing apps between prevailing and offers suitable skill development
* On a mission to build technology communities in academic to encourage students towards Innovation and enterprenerurship.

CHAPTER - 03 - 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 APSCHE smart interns & enrolling for Smartbridge's Software testing automation i.e live training sessions as per schedule. This is the main intense of the smart interns 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

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
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 maintanence phase where it is updating and modifying to fix bugs improves performance or add new features as requires.

Levels of testing:- Unit testing, Integration testing, System testing, Acceptance testing.

These levels of testing says about individual components of 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 realiabity and effectiveness

ACTIVITY LOG FOR THE ~~FIRST~~ Second 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 – 1 (From Dt. 8/7/24 **to Dt** 12/7/24 **)**

Objective of the Activity Done: Introduction on the formal 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 assess 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 accurate stimulation of real world load conditions can be challenging.

ACTIVITY LOG FOR THE ~~FIRST~~ third 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 – 1 (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 accurate stimulation of real world load conditions can be challenging

ACTIVITY LOG FOR THE ~~FIRST~~ fourth 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 – 1 (From Dt. 29/7/24 to Dt. 3/8/24)

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 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 that how functional testing uses in Software testing and validates whether the application performs it's functions as intended based on requirements.

Day 5 : We have learnt that Compatibility testing and their uses and explained the Queries

ACTIVITY LOG FOR THE ~~FIRST~~ fifth WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1	Explained the introduction on the Software Testing and tools	We have learnt about the software and tools	
Day - 2	Explained the Globalizating & 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 – 1 (From Dt. 22/2/24 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 automatic and facilitate various aspects of Software testing. They how automation tools like selenium, appium, etc. Day 2:- have discussed the globalizating and localization of testing which describes the users to give culture or local and deletes Potential Problems Day 3:- Recovery testing which asseses how well an application can recover from Crashes 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 applications allows to interact thorough graphical elements like buttons, icons...

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

ACTIVITY LOG FOR THE ~~FIRST~~ Sixth WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1	Explained about the Requirement trace ability 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 – 1 (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 & 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 donot have high inital setup cost, requires maintanance of test scripts

Day 6: They have discussed the test execution of the test Cases and test scenarios in the Katalon.

ACTIVITY LOG FOR THE ~~FIRST~~ Seventh WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1	Discussed on the Repairing test data	We have learnt the test data	
Day - 2	Discovered 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 at facebook	
Day – 6	Explained the concept of the total project	We have learnt the project	

WEEKLY REPORT

WEEK – 1 (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 specifies of test case. including what will be tested the test conditions. The way we have run the test case and test case id and they have formed a team and selection of topic by the team members and we learnt total project on the topic which have explained in the Katalon. we have done the total process of distributing the responsibilities of 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 Facebook. We have discussed the project that how to run 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.

Eighth

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 facebook	
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 github links	
Day – 6	Project report finalization and conclusion	Conclusion and Submission of final report	

WEEKLY REPORT

WEEK – 1 (From Dt. 19/8/24 to Dt. 23/8/24)

Objective of the Activity Done:
Detailed Report: On the final week of our short term Internship Program use began working on Project on topic student. Each team members Contributed and completed their assigned tasks - Ensuring the video that Power point Presentation and voice over we have created github and Created there our team Collaborated In the github respository along with the google links for the video demo in the both github and ARSCHE Smart Interns - video demonstration with voice giving insight into the project tasks / deliverables accomplished and completed successfully. Therefore ensuring the successful Completion in the Katalon and have to upload In the github repository which illustrates the Corelation between students academic Performance. Finally we have Concluded that the Project and prepared the final report with our mentor for verification and Submission.

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 of Smart bridge has been a transformative experience, equipping me with practical skills in the software Automation and deep understanding of the project on Facebook. The hands on experience and exposure to real world Projects has not only sharpened my technical skills and project management skills. The work environment Rotered a collaborative atmosphere with well defined protocols and structural procedures. The facilitatives 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-organized and supportive work environment

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, java script.

→ 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. Familarity 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 & organization :- Leading the planning and organization 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 one 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 the Communications
  - → Focus on message
  - → Cognitive behavioural 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, perpectives clearly and effectively. As a team lead I plan to strengthen Colloboration by pro-actively 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 need it whether it's through sharing knowledge, assisting with tasks, or simply offering encouragements 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.
- Continous 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, Browser stack and Cross platform testing directly in the Cloud.

PHOTOS & VIDEO LINKS