



SHORT-TERMINTERNSHIP



Dr. LANKAPALLI BULLAYYA COLLEGE
VISAKHAPATNAM

*PROGRAM BOOK FOR
SHORT-TERM INTERNSHIP*

Name of the Student : A. Kavitha

Name of the College : Dr Lankapalli Bellayya College, Visakhapatnam

Registration Number : 722128805440

Period of Internship : 2 months

Name & Address of Intern Organization: Smart Interns

Name of the University : Andhra University

Year : 2024

An Internship Report on

Software Automation testing

Submitted in accordance with the requirement for the degree of

B.Sc CMBET

Under the Faculty Guideship of

Sireesha mam

Department of

chemistry

Dr Lankapalli Bullayya College Visakhapatnam

Submitted by

A. Kavitha

Reg. No.

729128805440

*Dr. Lankapalli Bullayya College
Visakhapatnam-13*

Declaration

I A. Kavitha student of Software Automation
Program, Reg. No. 729128805440 of the Department of Biotechnology
College do hereby declare that I have completed mandatory Short-Term
Internship Under the Faculty Guideship of Sivresha mam
Department of chemistry, Dr.L.Bullayya College,
Visakhapatnam.

A.Kavitha
Signature of the student

Official Certification

This is to certify that A. Kavitha

Reg. No. 72212 8805440 has completed Internship in
3rd Year on Software Automation testing

Under my supervision as part of a partial fulfillment of the requirement for
the Degree of B.Sc Biotechnology in Department of

Dr. Lankapalli Bullayya College, Visakhapatnam.

This is accepted for evaluation.

Signature with Date and seal

Endorsements

Faculty Guide : _____

Head of the Department : _____

Principal : _____

Acknowledgements

I would sincerely like to thank APSCHE for providing me with this 3rd term internship which helped me to gain practical experience and the 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 S. Hymavathi mam and our guide Dr. Maratha for beginning a wonderful menti 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 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 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 cleaning 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 Interns" is the 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 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 employer are to assist and contributes to the team.
- Smart Interns 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 Apsche smart interning & enrolling for Smartbridge's software testing automation i.e. live training sessions as per schedule.

This is the main intent of the smart interning organization

Skills :-

- * Automating testing and preparation.
- * Testing results.
- * Creating visualization outputs.
- * Creating visualization demo.
- * web integration on project.
- * Preparation of the final Report.
- * modifying test explorers
- * Submission of team project.

This page content gives an idea only, which topics have to write.

1: EXECUTIVE SUMMARY

The Internship report shall have a brief executive summary. It shall include five or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

2: OVERVIEW OF THE ORGANIZATION

Suggestive contents

- A. Introduction of the Organization
- B. Vision, Mission, and Values of the Organization
- C. Policy of the Organization, in relation to the intern role
- D. Organizational Structure
- E. Roles and responsibilities of the employees in which the intern is placed.
- F. Performance of the Organization in terms of turnover, profits, market reach and market value.
- G. Future Plans of the Organization.

3: INTERNSHIP PART

Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.

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 01.3/7/24 to 01.5/7/24.....)

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 & add new features as required.
levels of testing:	unit testing, Integration testing, system testing, acceptance testing. These levels of testing says about individual components & functions of the software isolation. This phase tests the interactions between integrated modules & 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 even Acceptance testing. It follows systematically and improve the quality reliability and effectiveness.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Explanation on the sanity testing	we have learned about the sanity testings	
Day - 2	Explained about the 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:	<p>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 retesting purpose on software testing life cycle which ensures a structured and systematic approach of testing.</p> <p>→ 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 how the software to be acceptable. This structure ensures that test plan is comprehensive and covers all necessary aspects.</p>
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ACTIVITY LOG FOR THE 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 - 3 (From Dt. 15/7/20 to Dt. 19/7/24...)

Objective of the Activity Done:	About the Informal testing.
Detailed Report:	<p>Informal testing refers to the testing activities that do not follow a structured formal testing process. It gives quick feedback and quickly identifies the software systems.</p> <p>Performance testing is a critical aspect of software quality assurance that focuses on evaluating how an application performs under various conditions.</p> <p>Load testing which assesses the application performance under expected load conditions.</p> <p>Gradually increase the load until the system fails or performance degrades significantly.</p> <p>Pike testing which tests the application's reaction to sudden, extreme increases in load.</p> <p>Performance testing is essential for ensuring that applications can handle expected and unexpected loads efficiently, maintaining user satisfaction and operational stability and accuracy.</p> <p>Simulation of real-world load conditions can be challenging.</p>

ACTIVITY LOG FOR THE 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 the 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 & performing unpredictable actions. Day 3: about the concept of user Acceptance 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 Qumics

ACTIVITY LOG FOR THE 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 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. 29/3/23 to Dt 2/4/24)

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 to local and detects potential problems.
Day 3: recovery testing which answers how well an application can recover from crashes & 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.

ACTIVITY LOG FOR THE SIXTH 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 traces each requirements 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 don't 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.

ACTIVITY LOG FOR THESEVENWEEK

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 topic 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.12/2/24 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 outline the objectives, scope and specifics of test case. Including what will be tested the test conditions. The way we 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 run the test cases and process of uploading about the project. The description have been curated in the excel sheet and completed that preparing # excel sheets.

ACTIVITY LOG FOR THE EIGHTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Creation of the Ntby Report on Student Performance	Created katalon, stay on orangeHm	
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.	

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. Overall, 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, 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
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 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 intern, five identified key areas for enhancing my abilities in group discussions, team participants and leadership.

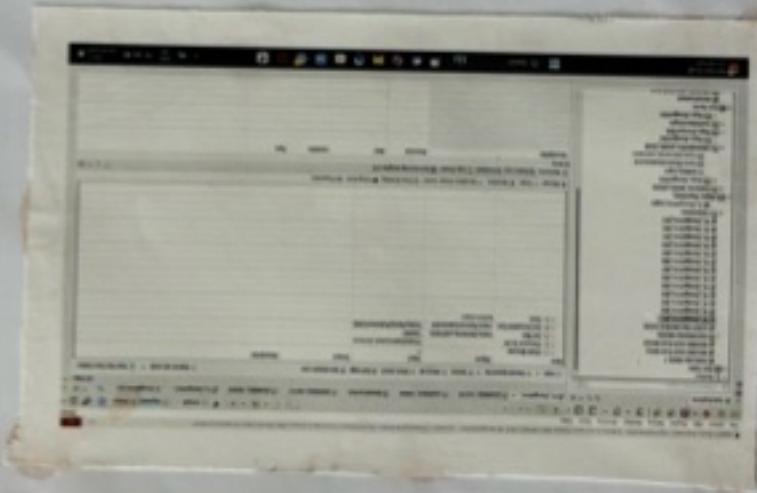
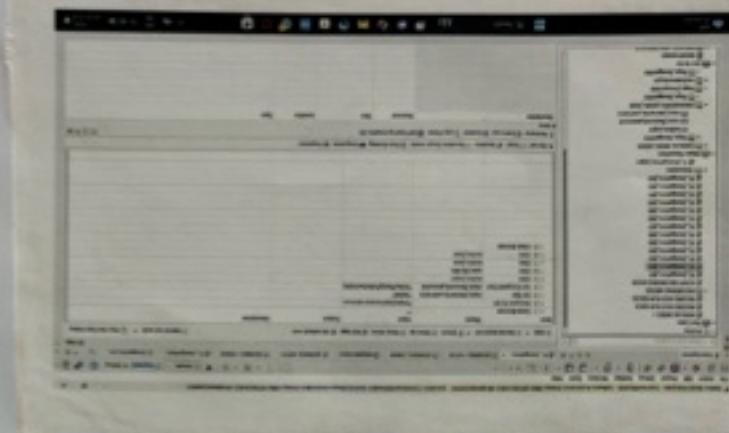
To improve my contributions in group discussions, I'm actively listen to others, ask insightful questions and share my opinions, perspectives clearly and effectively. As a team lead I plan to strengthen collaboration by pro-actively offering support to my technical skills and embracing different viewpoints of team members, clarifying points when to contribute and clear and concise. After discussions are 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 fAP 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, Github 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.

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PHOTOS & VIDEO LINKS

