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GOA UNIVERSITY

Report of Internship Done At Zapcom Solutions Private Limited

Submitted by: JYOTI TIWARI 2057

Under the guidance of Mr. Jeff Mario Torcato

zapcom.

1st June 2023

TO WHOMSOEVER IT MAY CONCERN

This is to inform you that Ms. Jyoti Tiwari, student of Master of Computer Applications (MCA) of Goa University, Goa, is currently undergoing her final semester project (Semester VI/V) at our company, Zapcom Solutions Pvt. Ltd from 4th January, 2023.

During her tenure she has met the expectations of her team lead/mentor/guide and found to be regular and sincere.

This letter is being issued on her request to be submitted with the project report at Goa University.

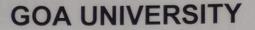
The final internship completion letter will be provided on completing her internship.

For Zapcom Solutions Pyt_Ltd. olution E INDIA 0 Srinivas Reddy Kothakot Chief Operating Officer

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GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that Ms. Jyoti Tiwari has been evaluated for the project work titled "Report of Internship done at Zapcom Solutions Pvt Ltd" undertaken at Zapcom Solutions Private Limited, Bangalore in partial fulfillment for the award of the degree in Master of Computer Application.

Examiner 1

Place: Goa university Date: 16th June 2023

Examiner 2 [Kirom Kulbami]

Dean, Goa Business School

ACKNOWLEDGMENT

This Internship has been a life changing opportunity for me and I would like to express my gratitude to everyone involved without whom I wouldn't have been able to come this far.

I would like to thank Mr. Kishore Pallamreddy (CEO, Zapcom) for giving me the opportunity to intern at Zapcom.

My sincerest gratitude to Mr. Manikanta Garikipati (Solutions Architect, Zapcom) for being a great manager and believing in me and Mr. Jeff Mario Torcato (Sr. Software Engineer, Zapcom) for being an amazing mentor and giving me all the necessary guidance and support.

I would also like to thank Mr. Sangeet Samal (Senior Quality Assurance Engineer, Zapcom) for being patient with me and guiding me whenever I required his help.

My deepest gratitude to my HT team at Zapcom for always being supportive and constantly guiding me and never turning me down whenever I needed their help.

A big thank you to Mr Subramanian Arumugam (Project Delivery Head, Zapcom), Ms Savitha Cariappa (HR Admin manager, Zapcom) and Ms Vanessa Crasto (Associate HR Generalist, Zapcom) and the rest of the HR team who helped us settle in and made us feel at home at Zapcom.

I also thank Mr. Ramdas Karmali (Professor, MCA, Goa Business School, Goa University), Mr. Hanumant Harichandra Redkar (Professor, MCA, Goa Business School, Goa University), and all the faculty of MCA, Goa University for their constant encouragement and support during this internship.

I will forever be indebted to my family and friends for encouraging me to pursue this internship and grow personally and professionally, their constant love and support will be deeply cherished.

Finally, I'd like to thank my Zapcom family for their constant support, guidance and encouragement, which I will always be grateful for.

- Thank You





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Introduction

This report is a short description of my full-time on-site internship at Zapcom, Bangalore.

I joined as an Intern at Zapcom on 4th January 2022. This report contains necessary information about the organization, the projects and mini projects I worked on and the other tasks and special training I completed during the internship period.

In the chapters that will follow, I will talk about the company, the work here, the culture, etc. Then, I shall elaborate on the projects I worked on, a brief information about the projects, the features I built and the tasks I completed for those features.

This report highlights my learning experience and my contributions to the organization as an intern. This will describe the knowledge that I gained by successfully completing the tasks that were assigned to me.

I'll also be talking about the tools and technologies that were used followed by my internship timeline.

I shall conclude by sharing my experience and how it has helped me to grow, both, on the personal and professional front.



COMPANY PROFILE

Zapcom is a global product Engineering and Technology Services company that designs and develops custom software solutions, enabling partners to achieve their business goals.

Globally specialized in building scrabble for Travel, Hospitality, Fin-tech and Retails; Zapcom is made up of a high performing team with competency in disruptive innovative ideas and emerging technologies

Offices:

Headquarters:

• Dublin – California, USA

Support offices:

- Bangalore, Hyderabad India,
- Dallas Texas, USA
- Heredia Costa Rica

With extensive experience in understanding the digital economy, Zapcom is strategically placed to help clients deliver better products, services and business processes through Disruptive technologies, Insights & Processes. By hiring the right people, motivating them to give their best and fostering an environment of continuous learning, innovation, mutual trust and fun, we are able to achieve exceptional productivity and results.



OUR CLIENTS:



Project – Hello Tractor [LIVE]



Overview:

Hello Tractor is an award-winning diversified ag-tech company focused on improving food and income security throughout sub-Saharan Africa. Resource-poor farmers often face labor constraints that result in under cultivation, late planting, and lost income. Hello Tractor facilitates convenient and affordable tractor services to these farmers while providing additional income by turning tractors into Smart Tractors. For tractor owners, our platform provides remote tracking of assets, preventing fraud and machine misuse, through virtual tractor monitoring.

HT-API is Hello Tractor's Rest API built using the Django Rest Framework, This API is used by both the Android app as well as Rest Web App and is the main backbone for their backend logic.

Tools and technologies:

- Django Rest Framework
- Jira
- Swagger
- Bitbucket
- Postman
- Vysor
- Appium
- Appium Inspector
- Android studio
- IntelliJ

- Excel sheet
- Karate

My Contributions:

Staging App

- 1. Wrote the Test Cases for Mobile App Validation.
- 2. Wrote the Bug report for Hello Tractor v3.4 of Booking Agent in excel sheet.
- 3. Wrote the Manual test cases for Tractor Owner.
- 4. Tested the Review Environment from CircleCl in Postman.
- 5. Disabled the tractor fuel from tractor Owner account automation code.
- 6. Tested the Creation on tractor Owner.6.1: Updating the profile.
- 7. Tested the end Points in Postman and in Swagger.
- 8. Found the bug on "Reporting Manager" in tractor Owner.
- 9. Listed all the Bugs in the excel sheet with the attachment.
- 10. Tested the Daily tractor activity.
- 11. Tested the service Booking in Booking Agent account.
- 12. Tested the Auto pairing and manual pairing on Tractor Owner.
- 13. Found the bug in the Tractor Owner Setting Pricing amount.

Web App Testing:

- 1. Tested the Web App Listed and created the Bug report.
- 2. Tested the Tractor Activity on web App.
- 3. Tested the Web App and there is no validation in adding negative value to a new tractor.

Other Task: Zapcom Lunch App

Overview

Zapcom Lunch Project is all about booking a lunch online. The Idea behind building this project is to showcase the Menu to the employees based on the current day and week. The Employees can also give Feedback based on the previous day meal. The Admin is responsible for Managing the food like Updating, Adding and Deleting whenever the Menu gets changed based on the Availability of Food Items in the Restaurant and also to get the count of people who have booked and to share the count restaurant. The Admin Also shares the Feedback of Employees to the restaurant based on their perspective.

Tools and Technologies

- Asp.net MVC core (.net 7)
- Entity Framework
- SOLID Principles
- Design Pattern
- Sweet Alert For Alert Boxes
- Jquery and Ajax API for CRUD Operations
- Postman
- VS Code
- Visual Studio 2022
- Excel Sheet

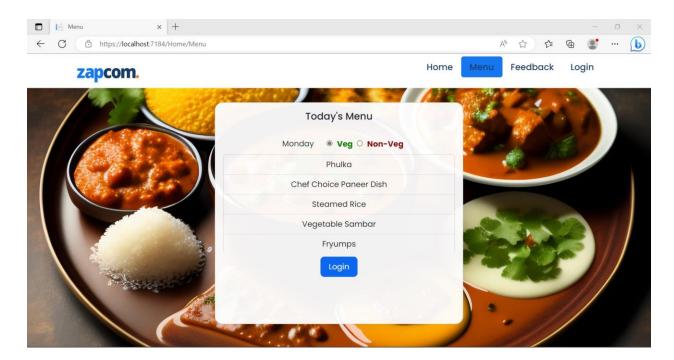
Project Contributors:

- Tested the Login Page
- Tested the Admin Page
- Tested the feedback page

Description and Snapshots:

Check Menu:

This page shows the Menu for the day where employees can decide whether to book or not based on today's Menu.



Managing Food:

This page is Handled by Admin and the purpose of this page is to Add/Delete/Remove Food Items based on the Availability in the Restaurant.

C C https://localhost:7184/Home	:/ManageFood		P	^ ☆ ☆		×
zapcom.	Export Feedback	Export Bookings M	lanage Feedbac	ks Profile	Logout	
	Date: 06/06/2023 © Week:2	Veg O Non-Veg Dey: Tuesday				
Contraction of the second		e Vegetable Sabzi Phulka				
	Chef Ch	noice Egg Curry			2	
	st	eam Rice	🗆 🕯 🏹		~)//	
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Test Case for the Lunch App

Zapcom Lunch WebApp							
		Project Name	Zapcom Lunch WebApp				
		Client	Zapcom				
		Created By	Jyoti Tiwari				
		Creation Date	24th May 2023				
		Approval Date		<u> </u>			
Name	Test Case No	Summary	Environment	Steps	Steps to Reproduce	Expected Output	Actual Output
Register User	1	Register as a Employee	Local	1	1. User should be able to access the link 2. Click on the legin button 3. Click on the "register Now" 4. Entert the "Email" 5. Enter the email with "@Zapcg.com" 6. Enter the OTP generated on the email id and click "Verify OTP"	User got Successfully registered	Sucessfully Registered
				2	1. Enter the details: 1.1: Name: Test 1.2: Password: test@123 1.3: Confirm Password: test@123 2. Click on the "Register Button"		

POC Project

As my POC project I have developed API calls using Karate and cucumber.

Tools and technologies used:

- → Postman
- → Karate DSL
- → Cucumber
- → Eclipse

POSTMAN CALL

GET Call

New Collection / Call &		🖺 Save	• / E
GET · https://gorest.co.in/public/v2/users			Send ~
Params Authorization • Headers (7) Body Pre-reques	st Script Tests Settings		Cookies
Query Params			
Кеу	Value	Description	••• Bulk Edit
Body Cookies Headers (32) Test Results Pretty Raw Preview Visualize JSON ∨ = 1 [] </th <th></th> <th>atus: 200 OK Time: 306 ms Size: 2.39 KB</th> <th>Save Response 🗸</th>		atus: 200 OK Time: 306 ms Size: 2.39 KB	Save Response 🗸

POST Call

POST v https://gorest.co.in/public/v2/users	Send V
Params Authorization Headers (9) Body • Pre-request Script Tests Settings	Cookies
🜑 none 🔍 form-data 🔍 x-www-form-urlencoded 🔎 raw 🔍 binary 🔍 GraphQL JSON 🗸	Beautify
<pre>1 1 2 ····*name"·: "Tommyuhjs", 3 ····*gender" : 'Male", 5 ····*status" : 'Active" 6 }</pre>	
Body Cookies Headers (25) Test Results Cookies Headers (25) Test Results	Save Response \vee
Pretty Raw Preview Visualize JSON V	🖻 Q
1 2 "id": 2741033, "name": "Tommyuhjs", 4 "email": "tomm19090@example.com", 5 "gender": "male", 6 "status": "active" 7 2	

KARATE API CALLS

GET Call

> 1● Feature: GET API
2
3● Scenario: Get User details
4 Given url 'https://gorest.co.in/public/v2/users'
5 And path '2565265'
6 When method GET
7 Then status 200
8 * print response
9 * def jsonResponse = response
10 * print jsonResponse
11 * print jsonResponse.id
12
13
14● Scenario: Get User details - user not found
15 Given url 'https://gorest.co.in/public/v2/users'
16 And path '25652'
17 When method GET
18 Then status 404

Result

2	Summary Tags Feature: <i>src/test/java/get.feature</i> GET API	
0	Scenario: [1:3] Get User details	ms: 808
Karate Labs	4 Given url 'https://gorest.co.in/public/v2/users'	1
Scenarios	5 And path '2731906'	1
2023-06-10 07:08:34 PM	6 When method GET	789
2023-00-10 07.06.54 PW	7 Then status 200	0
[1:3] Get User details	8 * print response	11
	19:08:34.741 [print] {	
[2:14] Get User details -	"id": 2731906, "name": "Deenabandhu Menon",	
user not found	"email: "denabandu_menon@halvorson.test",	
	"gender": "male",	
	"status": "active"	
	9 * def jsonResponse = response	3
	10 * print jsonResponse	1
	11 * print jsonResponse.id	1
	Scenario: [2:14] Get User details - user not found	ms: 194
	15 Given url 'https://gorest.co.in/public/v2/users'	1
	16 And path '25652'	0
	17 When method GET	193
	18 Then status 404	0

Creating a random email id using POST Method

Report



Certifications and Trainings Completed under Internship and Self Study:

Udemy Courses:

- 1. Basic Manual Software Testing + Agile
- 2. Appium Mobile Testing (Android+IOS)

LinkedIn Courses:

- 1. Software Testing Fundamentals: Transitioning from Manual to Automation.
- 2. Agile Foundations
- 3. Understanding the Manual Testing.
- 4. Programming Foundations: Software Testing/ QA.
- 5. Mobile Testing with Appium.

YouTube Courses:

- 1. Manual Testing End-to-End
- 2. Karate Framework

Tools and technologies Used

	GitLab GitLab Inc. is an open-core company that provides GitLab, a DevOps software package that combines the ability to develop, secure, and operate software in a single application.
	Postman Postman is an API platform for building and using APIs. Postman simplifies each step of the API lifecycle and streamlines collaboration so you can create better APIs—faster.
django	Django Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.
*	Confluence Confluence is a team workspace where knowledge and collaboration meet. Trusted for documentation, decisions, project collaboration & Jira integrations.
\mathbf{O}	CircleCl CircleCl is a continuous integration and continuous delivery platform that can be used to implement DevOps practices.
	Vysor Enables users to share iOS and Android screens on desktops.

	Android Studio It provides a complete IDE, including an advanced code editor and app templates. It also contains tools for development, debugging, testing and performance that make it faster.
	Karate Is an open-source Behavior Driven Development (BDD) testing framework for API test automation, performance testing.
{···}	Swagger Swagger is an open-source software framework backed by a large ecosystem of tools that helps developers design, build, document, and consume RESTful web services.
Cucumber	Cucumber is a testing tool that supports Behavior Driven Development (BDD).
	Appium It is an open-source project and ecosystem of related software, designed to facilitate UI automation of many app platforms, including mobile (iOS, Android)
Se	Selenium Selenium is an open-source framework that is used to automate the testing process over web applications.

Project timeline/ Project diary

Date of Joining: 04th January 2023

January 2023

- ★ Week 1:
 - 1. Onboarding
- ★ Week 2 and week 3:
 - 1. KT session on HT
- ★ Week 4:
 - 1. KT session on Test Case

February 2023

- ★ Week 1:
 - 1. KT on how to create Bug report in Jira
 - 2. Started with Learning "Selenium with java Tutorials"
- ★ Week 2:
 - 1. Created the bug report of Hello Tractor v3.4 of Booking account
 - 2. Gone through the basics of Java.
 - 3. Tested the review environment.
- ★ Week 3:
 - 1. Brush Up on java concept.
 - 2. Learned the GitLab, and created the SSH key
 - 3. Tested the Web App of Hello Tractor.
- \star Week 4:
 - 1. Created the automation test Case for Hello Tractor.
 - 2. Learned how to create Extend report and TestNG XML file

March 2023

★ Week 1:

- 1. Created test cases for adding operator
- 2. Course on TestNG

★ Week 2:

- 1. Wrote the test case for Tractor Owner and Booking Agent.
- 2. Tested the Review Environment.

★ Week 3:

- 1. Understanding the Hello tractor code
- 2. Course on how to create a test plan before coding.

★ Week 4:

1. Wrote the manual test cases for Tractor Owner.

April 2023

- ★ Week 1:
 - 1. Tested the staging app.
 - 2. Ruined the mobile automation code found the bugs.

★ Week 2:

- 1. Course from LinkedIn on Appium and was working on own code
- 2. Listed down the Test Cases in Hello Tractor.

★ Week 3:

- 1. Disabled the tractor the fuel from Hello Tractor automation code.
- 2. Assertion Course.
- 3. POC on Project

★ Week 4:

- 1. Identifying the missing test cases in Manual test cases.
- 2. Tested the Creation on Tractor and uploading the profile.
- 3. Tested the Tractor Owner end points in Postman.

Manual Test Cases Course

May 2023

★ Week 1:

- 1. Software testing Terminology
- 2. Wrote the test cases for adding Manager to the Child found the **bug.**
- 3. Tested the Staging App for Daily Tractor Activity.
- 4. Created the Bug report in excel sheet

★ Week 2:

- 1. Made the changes for the Bug report.
- 2. Tested the Auto pairing and Manual pairing
- ★ Week 3:
 - 1. Learning on how to write the test entry and exit criteria.
 - 2. Went through the Web App
- ★ Week 4:
 - 1. Learned Agile Principles
 - 2. Improvement on the Lunch App
 - 3. Learned the Jira tool
 - 4. Integration testing on Zapcom Lunch App.

Karate Course

June 2023

★ Week 1:

- 1. Performed the GET call in the Postman
- 2. Performed the POST call in the Postman
- 3. Creating the Token in Postman
- 4. JSON Schema

My reflections/ experiences of internship.

Working at Zapcom has been a wonderful and fulfilling experience. Every day, we are encouraged to learn and pursue new challenges.

With a warm and friendly work environment, the work culture here encourages us to seek out our seniors and those with more experience and to never be afraid to ask anything we may be looking for.

Zapcom has provided me with the support and motivation to learn as much as possible and has also made sure we have fun while we work.

As the pandemic restrictions receded, we were able to meet more and more of our senior colleagues and interact with them thanks to fun events such as Fun Fridays, Happy Hour, Birthday Celebrations, Festive celebrations such as Holi, Women's Day and more.

I am very excited to continue working and growing here professionally, and I wish everyone here the best of my wishes.

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