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2056

GOA UNIVERSITY MCA 2020-2023

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Zapcom Internship 2023
Report
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REPORT OF INTERNSHIP DONE AT ZAPCOM SOLUTIONS PVT LTD

SUBMITTED BY:

TIVREKAR SHIVAM

2056

UNDER THE GUIDANCE OF:

Mr. Subrainan Arumugam

(Delivery Manager, Zapcom)

Mr. Aseem Sharma

(Lead Developer, Zapcom)

Mr. Shivraj Pai Raiturkar

(Software Engineer, Zapcom)

Mr. Nagaraja HI

(Senior Software Engineer, Zapcom)



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Report**
mca.2056@unigoa.ac.in



1st June 2023

TO WHOMSOEVER IT MAY CONCERN

This is to inform you that **Mr. Shivam Arvind Tivrekar**, student of Master of Computer Applications (MCA) of Goa University, Goa, is currently undergoing his final semester project (Semester VI/V) at our company, **Zapcom Solutions Pvt. Ltd** from 4th January, 2023.

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

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

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

For Zapcom Solutions Pvt. Ltd.



Srinivas Reddy Kothakota
Chief Operating Officer

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GOA UNIVERSITY



GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that Mr. Shivam Arvind Tivrekhar has been evaluated for the project work titled "Report of Internship done at Zapcom Solutions Pvt Ltd" undertaken at Zapcom Solutions Pvt Ltd, Bangalore in partial fulfillment for the award of the degree in Master of Computer Application.

Examiner 1

Examiner 2

Place: Goa University

Date: 16th June 2023

Dean, Goa Business School



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ACKNOWLEDGEMENT

This internship report is an accumulation of many people's endeavors. But at the beginning I would like to convey my sincere appreciation to the almighty God for giving me the strength and the ability to finish the task within the planned time. I am immensely grateful for the invaluable contributions made by numerous individuals who have played a vital role in the preparation and successful completion of this study. Foremost, I would like to express my profound gratitude to the exceptional development team at Zapcom Solutions Pvt Ltd., whose unwavering support and guidance have been instrumental throughout this endeavor.

I would like to extend my sincere thanks to Mr. Kishore Pallamerreddy, the CEO of Zapcom, for granting me the invaluable opportunity to intern at this esteemed organization. My heartfelt appreciation goes out to my internship mentors, Mr. Aseem Sharma (Lead Developer, Zapcom), Mr. Shivraj Pai Raiturkar (Software Engineer, Zapcom), and Mr. Nagaraja HI (Senior Software Engineer, Zapcom), whose exceptional guidance and mentorship have been invaluable throughout my internship journey.

I am deeply grateful to Mr. Hanumant Redkar (Prof. MCA, Goa Business School, Goa University) and Mr. Ramdas Karmali (Prof. MCA, Goa Business School, Goa University), as well as the entire faculty and non-teaching staff at the MCA department, Goa University. Their constant encouragement and unwavering support throughout the course of this project have been instrumental in its successful completion.

I would also like to express my heartfelt thanks to my friends and family members who have provided invaluable suggestions, assistance, and a wealth of information during the preparation of this study. Their unwavering support and guidance have been crucial in my journey towards completing this report.

Finally, I am deeply indebted to the Zapcom family, whose unwavering support and guidance have transcended professional boundaries. Their continuous support and mentorship have not only aided me in this project but have also transformed me into a resilient and determined individual, prepared to confront any challenges that lie ahead.

In conclusion, I extend my sincere gratitude to each and every individual who has contributed in any way to this internship report.



INTRODUCTION

This comprehensive report aims to provide a concise overview of my immersive full-time on-site internship at Zapcom Solutions Pvt. Ltd. in Bangalore. Commencing on January 4th, 2023, this report encompasses essential details about the organization, the diverse projects and mini-projects I actively participated in, as well as the additional responsibilities and specialized training I undertook during the internship tenure.

Within the forthcoming chapters, a comprehensive exploration of the company itself, including its work environment, culture, and ethos, will be presented. Furthermore, I will delve into intricate details about the specific projects I had the privilege to be a part of, offering a brief insight into their nature, and elucidating the modules I meticulously developed and the tasks I proficiently accomplished within each module.

Emphasizing the significance of my internship experience, this report will highlight the invaluable knowledge and skills I acquired throughout the successful execution of assigned tasks. It will serve as a testament to the growth and learning opportunities I embraced while actively contributing to the organization as an intern.

Additionally, this report will touch upon the tools and technologies employed during my internship, demonstrating my proficiency in utilizing them effectively. Furthermore, a comprehensive timeline of my internship journey will be outlined, encapsulating the various stages and milestones encountered along the way.

Ultimately, this report will conclude by encapsulating my personal and professional growth, outlining the profound impact this internship experience has had on shaping my development. It will illuminate how this immersive opportunity has enriched both aspects of my life, fostering growth, and facilitating a transformative experience that will undoubtedly leave an indelible mark.



COMPANY PROFILE

Zapcom Group is an innovative product and technology startup based in the United States. With a strong focus on diverse industries such as Travel, Logistics, Ecommerce, Retail, Banking, and Fintech, Zapcom stands out as a venture established by visionary global leaders who possess extensive experience in leading multinational corporations and have a remarkable track record of over two decades working in the United States.

As a boutique engineering solutions firm, Zapcom embraces a product-oriented mindset that ignites inspiration, fosters engagement, and drives transformative outcomes. By adopting a data-centric approach, the company excels in crafting exceptional products, platforms, and teams that not only deliver delightful experiences but also generate measurable business value



Zapcom distinguishes itself by delivering unparalleled customer service through a unique set of principles. This includes fostering collaborative solution co-creation, ensuring elasticity to adapt to evolving needs, prioritizing security as a foundational element, embracing metrics-driven strategies, automating processes for enhanced efficiency, cultivating a product-oriented mindset, and providing customized DevOps pods from their strategically located global offices in Dublin, California, Dallas, Texas, Heredia, Costa Rica, Hyderabad, India, and Bangalore, India.



In summary, Zapcom Group thrives on its ability to combine cutting-edge technology solutions with an unwavering commitment to customer satisfaction. Through their dynamic approach, they continually deliver innovative solutions that inspire, transform, and drive substantial value for businesses across various industries.



Leveraging our extensive experience in successfully delivering numerous projects, we have honed a tailored approach to work that ensures optimal outcomes for our clients. Our unwavering passion lies in crafting digital products and platforms that have the power to revolutionize revenue and cost dynamics. Through our comprehensive suite of services, we take charge of designing, developing, managing, and optimizing cutting-edge technology solutions, thereby spearheading our clients' digital transformation endeavors.

Website: <https://zapcg.com/>



CERTIFICATIONS ACHIEVED

LinkedIn Learning Courses

- Introduction to ASP.NET Core
- Introduction to Web APIs
- Learning ASP.NET
- Building Web APIs with ASP.NET Core in .NET
- C# and .NET Essential Training
- C# Essential Training
- Learning ASP.NET Core MVC
- C# Design Patterns
- ASP.NET Core: Exception Handling
- ASP.NET Core: Middleware
- Quick Start Guide to SQL
- ASP.NET Core in .NET6: Dependency Injection
- .NET Essentials: LINQ and Databases
- C#: Advanced Practices
- Agile Foundations
- ASP.NET Core Security
- Advanced ASP.NET Core: Unit Testing
- Advanced Web APIs With ASP.NET Core in .NET6
- Git Essential Training
- Building and Securing RESTful APIs in ASP.NET Core
- C# Algorithms



Udemy Courses

- C# Masterclass
- Complete ASP.NET Core and Entity Framework Development
- ASP.NET Core 7 (.NET 7)| True Ultimate Guide
- Build ASP.NET Core Web API - Scratch To Finish (.NET 7 API)
- RESTful Web API - The Complete Guide

Youtube Tutorials

- C# Tutorial For Beginners
- Role of Common Language Runtime(CLR) in .NET Framework
- mvc registration form with database upload profile image asp net c#
- Asp.Net Core MVC Image Upload and Retrieve
- Exception Handling in ASP.NET Core – Middleware
- Unit Testing in C#
- Clean ASP.NET Core API using MediatR and CQRS



TOOLS AND TECHNOLOGIES USES



.NET is a free and open-source, managed computer software framework for Windows, Linux, and macOS operating systems. It is a cross-platform successor to .NET Framework. The project is primarily developed by Microsoft employees by way of the .NET Foundation, and released under the MIT License.



Moq is a mocking framework built to facilitate the testing of components with dependencies. Moq makes the creation of fakes redundant by using dynamically generated types. Its API is built around lambda constructs to ensure tests are strongly typed, easy to read and quick to write. It also provides a string-based API to mock protected methods.



Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications

Entity Framework



Entity Framework (EF) Core is a lightweight, extensible, open source and cross-platform version of the popular Entity Framework data access technology. EF Core can serve as an object-relational mapper (O/RM), which:

Enables .NET developers to work with a database using .NET objects. Eliminates the need for most of the data-access code that typically needs to be written.



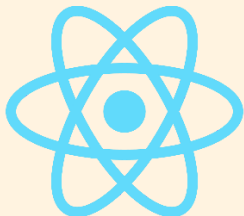
JSON Web Tokens are an open, industry standard RFC 7519 method for representing claims securely between two parties.



OAuth 2.0, which stands for "Open Authorization", is a standard designed to allow a website or application to access resources hosted by other web apps on behalf of a user.



The ASP.NET Identity system is designed to replace the previous ASP.NET Membership and Simple Membership systems. It includes profile support, OAuth integration, works with OWIN, and is included with the ASP.NET templates shipped with Visual Studio 2013.

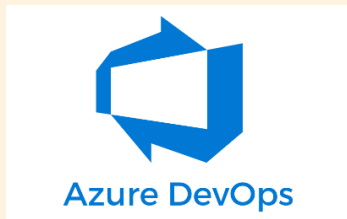


React is a free and open-source front-end JavaScript library for building user interfaces based on UI components. It is maintained by Meta and a community of individual developers and companies.



GitLab

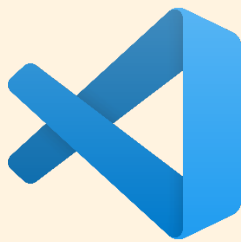
GitLab Inc. is the open-core company that provides GitLab, the DevOps software that combines the ability to develop, secure, and operate software in a single application. The open source software project was created by Ukrainian developer Dmitriy Zaporozhets and Dutch developer Sytse Sijbrandij.



Azure DevOps Server is a Microsoft product that provides version control, reporting, requirements management, project management, automated builds, testing and release management capabilities. It covers the entire application lifecycle, and enables DevOps capabilities.



SQL Server Management Studio is a software application first launched with Microsoft SQL Server 2005 that is used for configuring, managing, and administering all components within Microsoft SQL Server.



Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.



Microsoft Visual Studio is an integrated development environment from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps.



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.



Git is a software for tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed, data integrity, and support for distributed, non-linear workflows.



Quartz is a popular NuGet package for job scheduling and task management in ASP.NET Core applications. It allows developers to schedule and run jobs at specified intervals or times, providing a reliable and flexible solution for task automation.



Autofixture is a popular open-source library for generating test data in ASP.NET Core applications. It simplifies the process of creating test objects by automatically populating properties with realistic values, reducing the need for manual setup.



Serilog is a flexible and efficient logging library for ASP.NET Core applications. It enables developers to easily capture and store log messages in various formats and sinks, such as text files, databases, or cloud storage.



AutoMapper is a powerful mapping library for ASP.NET Core that simplifies the process of transferring data between objects. It automates the mapping process by intelligently matching properties between source and destination objects, reducing manual mapping code.



Mediator Is a powerful library for implementing the Mediator pattern in ASP.NET Core applications. It provides a central hub for decoupling communication between components, allowing them to send requests, commands, and notifications without direct dependencies.



PROOF OF CONCEPT-1

To-Do-List Application in ASP.NET Core MVC

- Register and Login functionality.
- User Specific Data.
- A User can Add a specific task with due date, category and priority.
- A user can view the list of their tasks.
- A user can edit or delete tasks
- External login implementation. (Facebook and Google)
- Email service implementation for forgot password and reminder for task deadline.

TOOLS AND TECHNOLOGIES USED

- .NET 7.0 core
- ASP.NET Core MVC
- ASP.NET Identity
- Entity Framework core
- SQL Server Management Studio
- Microsoft Visual Studio
- Quartz



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PROJECT SCREENSHOTS

Home page, User Login and registration.

ToDoList Home Privacy Help Contact Us Register Login

Welcome to the To-Do List Application

Stay organized and keep track of your tasks with ease!

[Register](#) [Log In](#)

How It Works

Manage your tasks in a simple and intuitive way:

- Create Tasks: Add new tasks with titles and descriptions.
- Track Progress: Mark tasks as completed or pending.
- Stay Organized: View and manage all your tasks in one place.

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ToDoList Home Privacy Help Contact Us Register Login

Register

Create a New Account

Email

Name

Password

Confirm password

[Register](#)

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ToDoList Home Privacy Help Contact Us Register Login

Login

Log In to your Account

Email

Password

☐ Remember me?

[Log In](#)

[Register as a new user?](#)

[Forgot your password?](#)

Use another service to log in.

[Google](#) [Facebook](#)

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Add and View task

ToDoList Home Privacy Help Contact Us Hello shivam5@yahoo.in Logout

Add new item

Title

Description

Due Date

Priority

Category

Is Completed? ☐

[Add](#)

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ToDoList Home Privacy Help Contact Us Hello shivam5@yahoo.in Logout

[Add new item](#)

[Sort by Title](#) [Sort by Priority](#) [Sort by Due Date](#) [View Completed Tasks](#) [View Pending Tasks](#)

Search:

[Search](#)

Name	Description	Date Created	Due Date	Category	Priority	Is Done?		
Internship Report	Prepare Internship report	1/1/0001 12:00:00 AM	6/12/2023 12:00:00 PM	Work	High	No	Edit	Delete
some task	some task	6/10/2023 7:38:43 PM	6/14/2023 1:08:00 AM	Travel	Low	No	Edit	Delete
task1	task	6/10/2023 7:38:21 PM	6/14/2023 1:08:00 AM	Shopping	Medium	No	Edit	Delete
task11	task 11	6/10/2023 7:39:10 PM	6/23/2023 1:09:00 AM	Finance	High	No	Edit	Delete
task2	some task	6/10/2023 7:37:59 PM	6/14/2023 1:07:00 AM	Health	Low	No	Edit	Delete

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<https://localhost:44308/tasks/tasksIndex.html>



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Hello shivamt5@yahoo.in

[Logout](#)

Edit Task

Title

Internship Report

Description

Prepare Internship report

Due Date

06/12/2023 12:00 PM

Priority

High

Category

Work

Done

Save

Cancel

Delete Task

Title

Internship Report

Description

Prepare Internship report

Due Date

06/12/2023 12:00 PM

Priority

High

Category

Work

Done

Delete

Cancel

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PROOF OF CONCEPT-2

Building Scalable REST APIs in ASP.NET Core Web APIs

- Learn, Understand and Create ASP.NET Core Web API From Scratch using .NET 7
- Learn and Apply Entity Framework Core to perform CRUD operations on a SQL Server database
- Use Entity Framework Core in a code first approach
- Understand and Apply the Repository Pattern
- Use Domain Driven Design (DDD) approach to create domain first models and project
- Understand RESTful Principles and Apply them in ASP.NET Core Web API
- Understand Best practices and Clean Coding Techniques,
- Add Validations In ASP.NET CORE Web API
- Understand and Use Interfaces, Inheritance, Dependency Injection etc
- Understand and Implement Authentication and Role based Authorization to Authenticate and Authorize the ASPNET Core Database
- Create JWT tokens to Authenticate API
- Test ASP.NET Core Web API using Swagger and Postman
- Use ASP.NET Core Identity in ASP.NET Core Web API to Authenticate and add Role based Authorization
- Learn Filtering, Sorting and Pagination in ASP.NET Core Web API

TOOLS AND TECHNOLOGIES USED

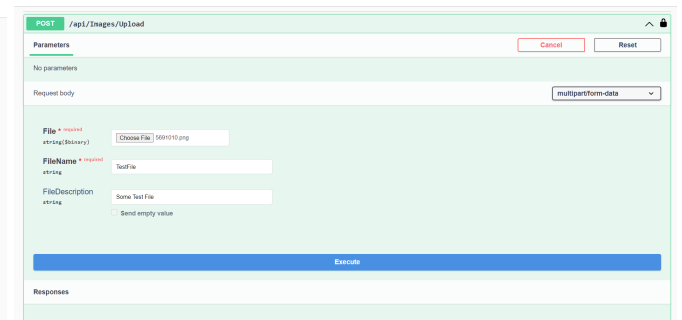
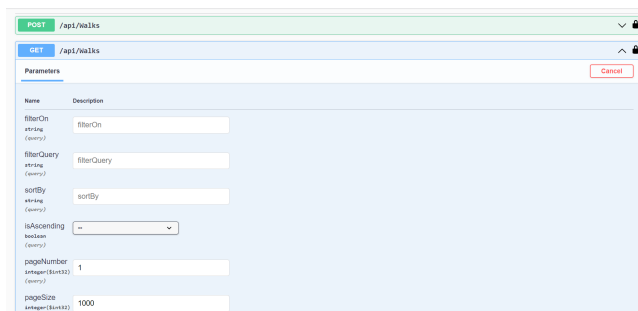
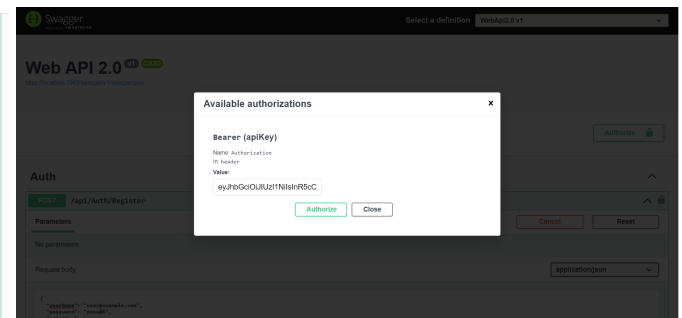
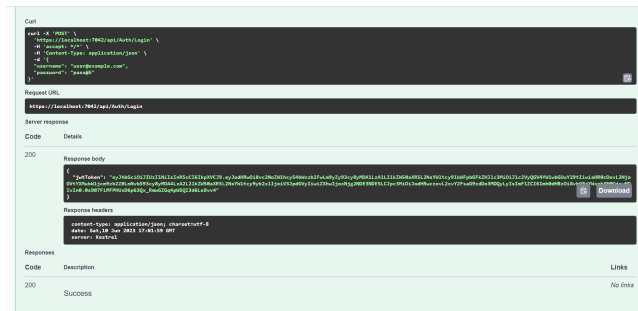
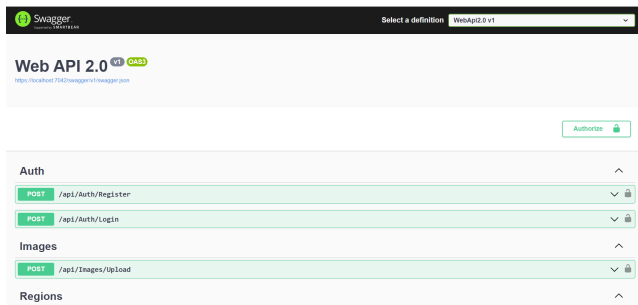
- .NET 7.0 core
- ASP.NET Identity
- Entity Framework core
- SQL Server Management Studio
- Microsoft Visual Studio
- Postman
- JWT



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PROJECT SCREENSHOTS





PROOF OF CONCEPT 3

BUILDING WEB APIS WITH CLEAN ARCHITECTURE AND WRITING UNIT TEST CASES

- Following Clean Architecture
- Design Patterns and SOLID Principles
- Implementation of CQRS and MediatR
- Writing unit test cases using Xunit
- Using Moq and Autofixture

TECHNOLOGIES AND TOOLS USED

- .NET 7.0 core
- Entity Framework core
- SQL Server Management Studio
- Microsoft Visual Studio
- Postman
- Moq
- Autofixture
- Xunit



PROJECT SCREENSHOTS

Swagger UI for FruitApi v1.0 OAS3. The interface shows the API definition for the FruitApi. The URL is https://localhost:7201/swagger/v1/swagger.json. The API has five endpoints:

- GET /api/Fruits
- POST /api/Fruits
- GET /api/Fruits/{id}
- DELETE /api/Fruits/{id}
- GET /api/Fruits/{name}

The Schemas section shows the CreateFruitCommand schema.

Curl command and response for GET /api/Fruits. The command is curl -X GET https://localhost:7201/api/Fruits. The response is a 200 status code with a JSON body containing an array of fruit objects.

```
curl -X GET https://localhost:7201/api/Fruits
```

```
{
  "id": "a1b2c3d4-e5f6-7890-1234-567890123456",
  "name": "Apple",
  "family": "Rosaceae",
  "dateCreated": "2023-09-17T10:10:10.000Z",
  "dateUpdated": "2023-09-17T10:10:10.000Z",
  "deleted": false
}
```

Swagger UI for DELETE /api/Fruits/{id}. The interface shows the API definition for the DELETE endpoint. The URL is https://localhost:7201/api/Fruits/{id}. The response is a 204 status code.

```
curl -X DELETE https://localhost:7201/api/Fruits/{id}
```

```
204
```



PROJECT - NEIGHBORLY CALL A NEIGHBOUR (CAN) APPLICATION.

DESCRIPTION

Neighborly is a family of home service brands that share a commitment to providing you with an outstanding level of service. Call a neighbor (CAN) is an application used by call centers to handle customer service for the neighborly brands.

PROBLEM DESCRIPTION

Write Unit Test cases for backend API to reach the required code coverage score. Perform unit testing on Call Centre Orchestrations APIs for Neighborly, using Xunit testing framework, moq and autofixture.

TOOLS AND TECHNOLOGIES USED

Microsoft Visual Studio

Xunit

Moq

Autofixture

MY CONTRIBUTION

Writing Xunit tests for the controllers and Query/Command handlers in the APIs.



INTERNSHIP TIMELINE

January

Week 1

- Interaction with HR Team.
- Interaction with CEO.
- Interaction with Global HR.
- Interaction with CCO.
- Interaction with Mentor

Week 2

- OOP Concepts using C#.
- SOLID Principles using C#.
- Memory Management in .NET.

Week 3

- Mentor took a review about my learnings so far.
- Studied about access modifiers, Value type and reference types, interfaces.

Week 4

- Started studying about .net basics- CLR, CTS
- Garbage collection and compilation overview in .net
- .net Core overview, middleware
- launchsettings.json and appsettings.json files.

February

Week 1

- RESTful Web APIs
- Started studying about web api's
- CRUD operations.

Week 2

- Watched courses and tutorials about building Web APIs
- Started Building APIs in ASP.NET Core Web APIs

Week 3

- Completed building the web application
- Provided a Demo to mentor

Week 4

- Learnt more about c# collections- lists and dictionaries
- C# SOLID principles
- C# delegates
- C# design patterns and tried to implement them.



March

Week 1

- Started learning Asp.net Core MVC
- Learnt how to create model, controller and database.

Week 2

- Sending and receiving data through a form and saving on Db
- Adding edit and delete methods, adding views.

Week 3

- View Models
- Partial Views

April

Week 1

- Started with a To-Do-List web application using asp.net core mvc
- Implemented Register and Login functionality

Week 2

- Implemented Email notifications
- Search and forgot password features

Week 3

- Learnt and Implemented Serilog: console, files and database
- Learnt about Global exception handling

Week 4

- Studied about DTOs, Repositories, AutoMapper, Filtering, sorting and pagination.
- Authentication and role-based authorization.
- Image upload and serving static files through asp.net core web api

May

Week 1

- Started with Reactjs basics
- MSSQL- Stored proc, Table. Queries
- LINQ in C#

Week 2

- Started Building APIs following Clean Architecture
- Implementation of various design patterns.

Week 3

- Xunit testing
- Cqrs and MediaTr
- Dependency Injection



Week 4

- Implemented CQRS and MediatR in web APIs
- Xunit Tests on API controllers and Handlers

June

Week 1

- Completed Xunits tests for repositories
- Xunit Test cases for APIs (project work)



MY EXPERIENCE OF INTERNSHIP

My internship journey at Zapcom has been an incredible adventure filled with both triumphs and challenges. What initially captivated me was the captivating work culture at Zapcom, as conveyed by my senior colleagues who had previously interned there through university placements. Recognizing Zapcom's global reach in providing technological solutions, I saw this internship as an exceptional opportunity to delve deeper into the IT industry and expand my understanding.

One aspect I truly appreciate about my internship experience is the level of respect and responsibility given to interns. Rather than being treated as mere observers, we were entrusted with meaningful tasks that directly impacted the company's clients. Being an integral part of the development team working on real-world projects was immensely gratifying. Even within the relatively short span of five months, I felt a profound sense of accomplishment upon completing these assignments.

The insights gained during my internship have greatly enriched my understanding of the IT industry and will undoubtedly shape my career trajectory. Witnessing the career path of a web developer firsthand has provided me with invaluable knowledge, aiding me in making informed decisions regarding my own professional journey. Beyond the educational aspect, one of the most rewarding aspects of my internship has been the lasting relationships and connections I have formed with my colleagues and fellow interns at Zapcom.

Overall, my internship at Zapcom has been an enriching and transformative experience, equipping me with practical skills, industry insights, and invaluable connections that will undoubtedly contribute to my future endeavors.



REFERENCES

<https://dotnet.microsoft.com/en-us/>

<https://github.com/moq/moq>

<https://www.microsoft.com/en-in/sql-server>

<https://docs.microsoft.com/en-us/ef/core/>

<https://jwt.io/>

<https://oauth.net/2/>

<https://docs.microsoft.com/en-us/aspnet/identity/overview/getting-started/introduction-to-aspnet-identity>

<https://www.sonarqube.org/>

<https://docs.microsoft.com/en-us/aspnet/core/razor-pages/?view=aspnetcore-6.0&tabs=visual-studio>

<https://reactjs.org/>

<https://www.chartjs.org/>

<https://github.com/parallax/jsPDF>

<https://github.com/axios/axios>

<https://about.gitlab.com/>

<https://azure.microsoft.com/en-us/services/devops/>

<https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver16>

<https://code.visualstudio.com/>

<https://visualstudio.microsoft.com/>

[https://docs.microsoft.com/en-us/previous-versions/office/developer/exchange-server-2010/dd877045\(v=exchg.140\)](https://docs.microsoft.com/en-us/previous-versions/office/developer/exchange-server-2010/dd877045(v=exchg.140))



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<https://dotnet.microsoft.com/en-us/apps/aspnet/signa>

<https://docs.microsoft.com/en-us/windows/wsl/about>

<https://github.com/nvm-sh/nvm>

<https://www.postman.com/>

<https://swagger.io/>

<https://www.mysql.com/>

<https://azure.microsoft.com/en-in/services/devops/artifacts/>

<https://xunit.net/>

<https://www.youtube.com/>

<https://www.google.co.in/>