



**INTERNSHIP REPORT**

**SHAZIB KHATTAL**

**1919**

## Internship Report



3rd June 2022

### INTERNSHIP LETTER

This is to certify that **Mr. Shazib Khattal**, student of MCA, 6th Semester from Goa University is working as an Intern with our Organization at Bangalore location since 10-Jan-2022, his six months internship period will get over on 30-June-2022.

During the period of his Internship program with us, he is found punctual, hardworking and inquisitive.

We wish him a successful career ahead.

Yours Sincerely,

For ZapCom Solutions Pvt Ltd.

A handwritten signature in black ink, appearing to read "Srinivas Kothakota".

**SRINIVAS KOTHAKOTA COO**

---

#### INDIA

ZapCom Solutions Pvt Ltd  
9th Floor, Gamma Tower, Sigma Soft Tech Park  
Whitefield, Bangalore - 560066  
Ph: +91-80-67232300

[www.zapcom.com](http://www.zapcom.com)  
CIN: U72200KA2004PTC075530

#### USA

ZapCom Group, Inc.  
7033 Village Parkway, Ste.211  
Dublin, CA 94568  
Ph: +1-925-350-7003

# **REPORT OF INTERNSHIP DONE AT ZAPCOM GOUP INC**

**SUBMITTED BY**  
**SHAZIB KHATTAL**

**1919**

**UNDER THE GUIDANCE OF**

**Mr. Deepak Puranam**  
( Head of Delivery)

**Mr. Rahul Mishra**  
(Tech Lead)

**Mr. Eswaran Pragasam**  
(Lead Software Engineer)

**Mr. Jeff Torcato**  
(Associate Software Engineer)

**Ms. Alisha Lotlekar**  
(Software Engineer)

# GOA UNIVERSITY



## GOA BUSINESS SCHOOL

### CERTIFICATE OF EVALUATION

This is to certify that Mr. Shazib Khattal has been evaluated for the project work titled “Report of internship at ZapCom Group Inc” undertaken at ZapCom Group Inc ,Bangalore in partial fulfilment for the award of degree in Master of Computer Application

---

Examiner 1

---

Examiner 2

Place Goa University

Date: 10<sup>th</sup> July 2022

---

Dean Goa Business School

## Table OF Content

<b>Acknowledgement.....</b>	<b>7</b>
<b>Introduction.....</b>	<b>8</b>
<b>Company Profile.....</b>	<b>9</b>
<b>Live Project.....</b>	<b>10</b>
Zapcom Website .....	10
Viva Voyage.....	17
Real Property Management.....	19
<b>Proof Of Concept Project.....</b>	<b>21</b>
Melody Music App.....	21
Jobify App.....	25
.Net WEB API.....	26
<b>Tools And Technologies used during Internship.....</b>	<b>27</b>
<b>Timeline.....</b>	<b>33</b>
<b>Certification And Training Completed.....</b>	<b>37</b>
<b>Website References.....</b>	<b>37</b>
<b>YouTube Channel References.....</b>	<b>38</b>
<b>Internship Experience.....</b>	<b>39</b>

## Acknowledgement

The internship opportunity I had with ZapCom Pvt Ltd was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

I would like to thank Mr. Kishore Pallamreddy for giving me opportunity to intern at ZapCom.

My sincerest gratitude to Mr. Rahul Mishra (Tech Lead, ZapCom) and Mr. Eswaran Pragasam (Lead Software Engineer, ZapCom) for being my mentor and giving me the necessary guidance and support.

I also would like all the people that worked along with me Jeff Torcato, Harsahd Chari with their patience and openness they created an enjoyable working environment.

My sincere thanks also goes to Ms. Alisha Lotlekar for providing guidance in my work.

It is a great and unique pleasure to me that I have got a chance to thank a large number of individuals for their help and encouragement to make the internship successful.

I thank Goa University, MCA department for giving me opportunity to carry out this internship. Special thanks to Mr. Ramdas Karmali (Prof. and TPO, MCA, Goa Business School, Goa University), Mr. Jarret Stevan Anthony Fernandes (Assistant Prof, MCA, Goa Business School, Goa University) and all the faculty of MCA, Goa University for their constant encouragement and support during the project work.

I would like to thank my family and friends for allowing me to go so far away from them and for those friends in Bangalore who made me feel comfortable in a new location. The love, support and encouragement they provided me during this internship cannot be forgotten.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future.

## Introduction

This report is to delineate my full-time internship at ZapCom Group Inc, Bangalore.

I had the privilege to join ZapCom on 10<sup>th</sup> Jan 2022 and have been here since then. This report contains righteous details about the organization, proof of concepts projects done to demonstrate my learning and understanding towards the technologies, contributions done towards the organization's project and other training that I have attended during the internship period.

In the following pages I will thoroughly describe the company, the work, the environment, etc and follow up by my contribution to the organization's project and the proof-of-concept project done.

This will describe the knowledge that I gained by successfully completing the tasks that were assigned to me.

This report will also highlight the tools and technologies that were used during the internship period.

I would also be describing the non-technical skills I got learn and how did it help me in my internship timeline.

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

## Company Profile

Zapcom is a boutique engineering solutions firm with a product mindset that has the ability to inspire, engage and transform. It's a US based Product and technology Start-up focusing on Travel, Hospitality and Retail domains.

ZapCom is a Venture floated by a couple of KEY global leaders who had led MNC's globally and worked in the US for over 22 years.

ZapCom takes a data-centric approach to creating products, platforms, and teams that drive delightful experiences and measurable business value.

The KEY areas of focus for ZapCom are: Standing-up or realizing start-up ideas in technology space by investing in Innovative ideas - mainly from Silicon Valley and Bangalore. End-to-End Solutions with cutting edge technologies and custom App development focused on onshore-offshore delivery model.



With the experience acquired over delivering 100s of projects successfully and has designed the ways of working that is right for client's outcome.

ZapCom is a self-sufficient and well-funded venture by our own founders and is a debt free organization.

ZapCom is growing Fast. It hires exceptional talent and expose them to diverse, high impact problems. Join us at one of our global locations. Let us build technology and disrupt client business. At Zapcom, the concept is to blur the lines that define the 'work' in workplace. A happiness first approach to complement our cutting edge technology is part of our core philosophy.



ZapCom provides best in class technology solutions at the RIGHT COST at a Global Scale. With extensive experience in understanding the digital economy, ZapCom is strategically placed to help clients deliver better products, services and business processes through

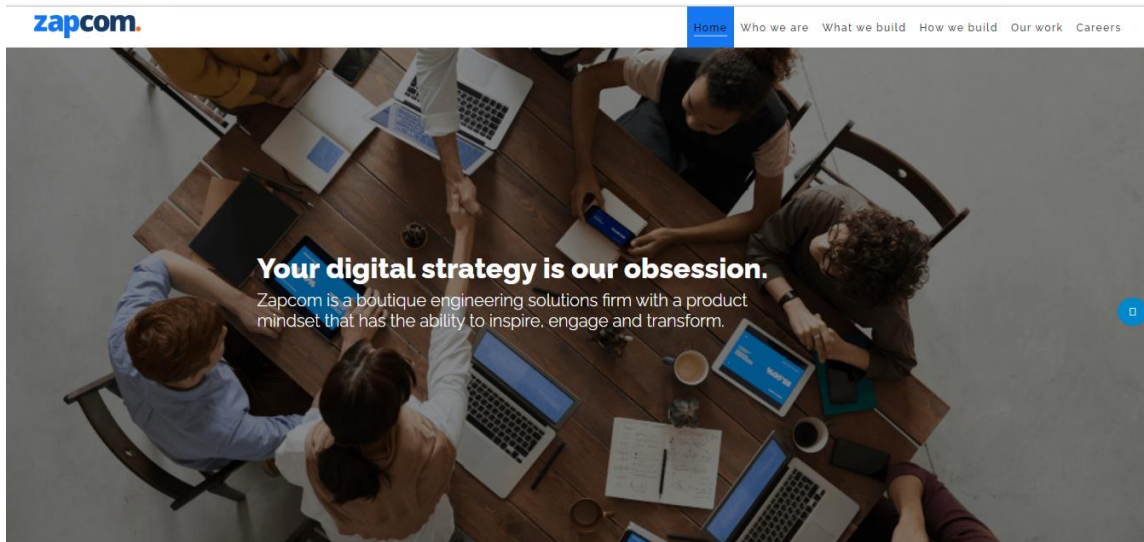
Zapcom has its branches spread throughout the world: Dallas-Texas, Heredia-Costarica, Bangalore-India, Dublin-California, Hyderabad-India



ZapCom provides best in class technology solutions at the RIGHT COST at a Global Scale. With extensive experience in understanding the digital economy, ZapCom is strategically placed to help clients deliver better products, services and business processes through

## LIVE PROJECT

### 1] Project – ZapCom official website



#### Problem Statement:

To create a new official website for ZapCom so that they can replace with the existing one. Implement extra features to the website.

#### My Contributions:

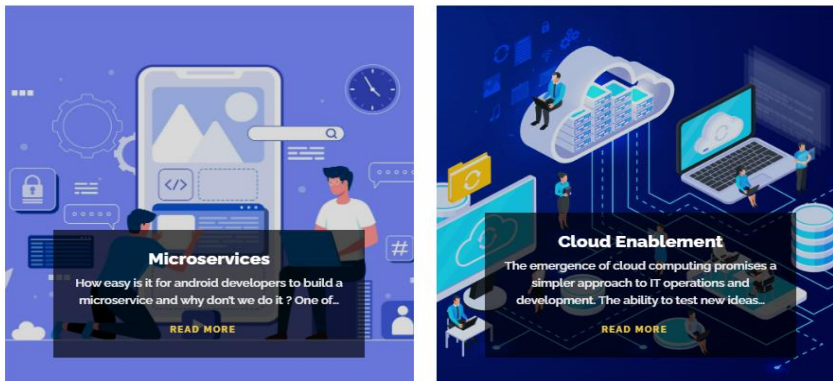
I was assigned to develop ZapCom's official website where in my responsibilities were as follows:

- To rework on the UI/UX design
- Implement new features and modify the existing features for betterment.
- Fix bugs in the website.
- Convert website into a responsive one.
- Add new pages to the website.
- Publish the content for the website.

My detailed contribution is as follows:

- **Creating the entire website responsive**
- **Home Page**
  - a. Add cards on the home page

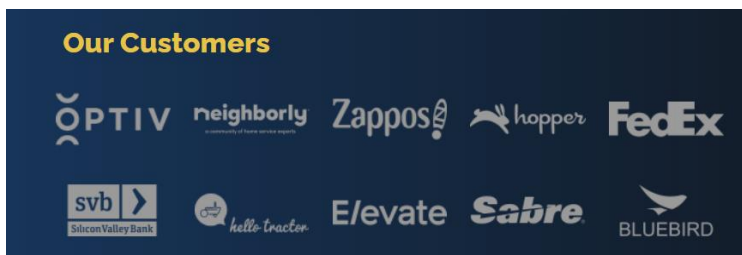
## Ideas and Tech Bytes



### b. Changes in footer UI and providing links to it

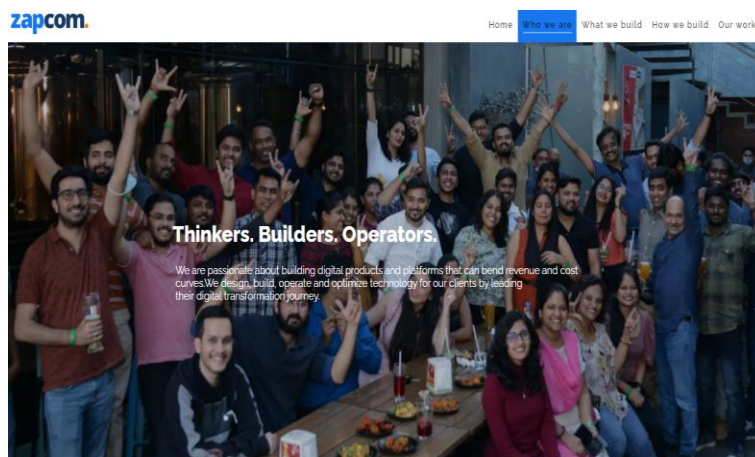
Calling for Builders	Who we are	What we build	How we build
<a href="#">JOIN US</a>	<a href="#">Leadership Team</a> <a href="#">Life at ZapCom</a>	<a href="#">Our approach</a> <a href="#">Customer testimonial</a>	<a href="#">Our Work</a> <a href="#">ZapCom Labs @</a>

### c. Customer section UI and content changes.



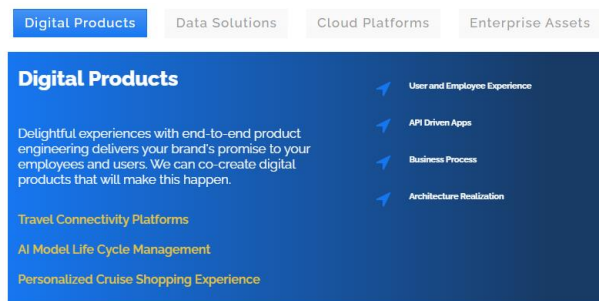
- **Who We Are Page**

- a. Added Hero Image

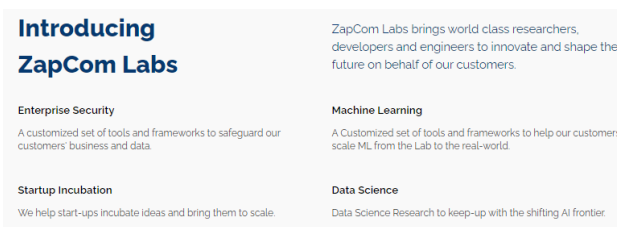


- **What We Build**

- a. Organized the content by creating new tabs and categorized it accordingly.

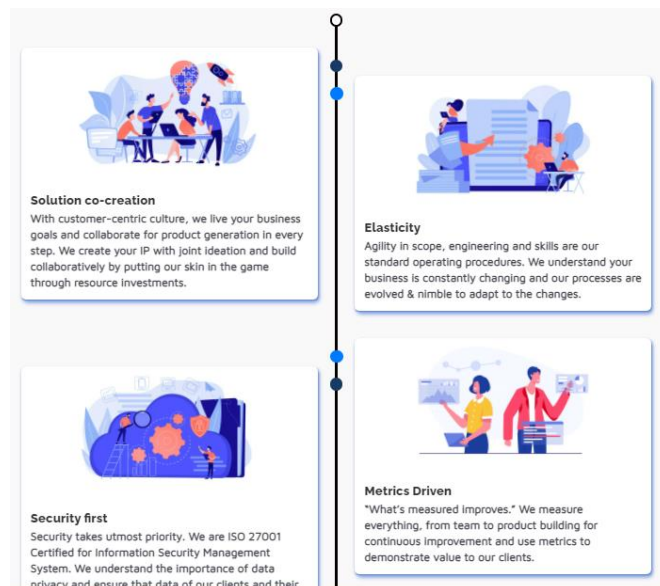


- b. Added new section for static data

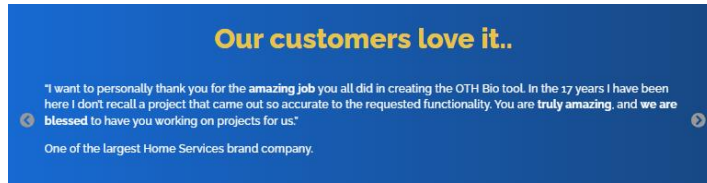


- **How We Build Page**

- a. Implementing timeline library.

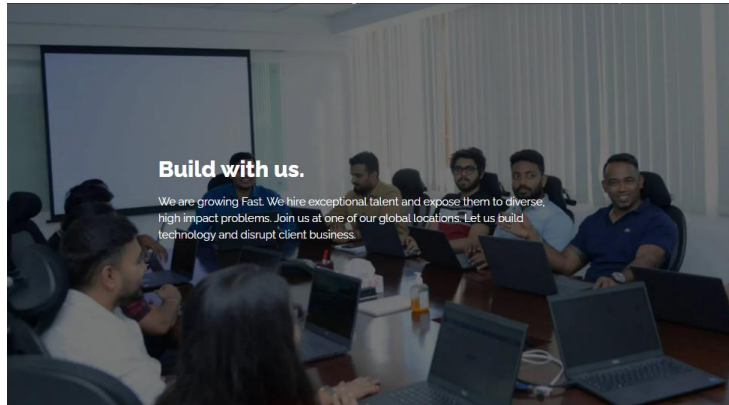


- b. Reimplementing the slider



- **Career Page**

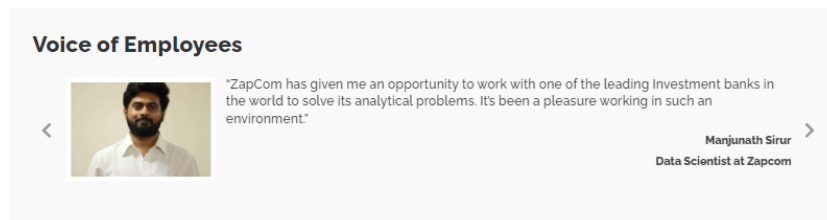
- a. Added Hero Image



- b. UI Redesign



- c. Changing the structure auto slider



- **Created Forms**

- a. Job Application Form.

**Apply for the Job**

Name \*  Phone Number \*

Email Address \*

What you can bring to Zapcom? \*  
 0 / 180

Checkbox \*  
☐ Thank you for your interest in Zapcom Group. We would like to ask for your consent to the storage and processing of your data before you submit your application. You can find our data protection statement at [Privacy Statement](#)

Upload Resume \*  
 No file chosen

b. Contact Form to query zapcom officials.

- **Created Posts**

a. Created jobs post for US and Indian Branch

### Current Openings


**India**

MS Dynamics CRM with Azure	React Native Developer	Java Full Stack Developer	Devops Engineer
UI Developer	Solution Architect	Salesforce developer	Information Security Officer
Platform Architect	SDET Engineer	Data Analyst	Dot Net Developer
Java Microservices Lead	Applian Developer	ServiceNow Developer – HR Module	Data Integration Engineer
NetSuite Developer	Scrum Master		

**USA**

Azure Cloud Solutions Lead	Scrum Master	SDET Engineer	Platform Architect
Data Architect	Solution Architect	QA Engineer	

b. Content post defining ZapCom work, domains, approach, etc.



**How easy is it for android developers to build a microservice and why don't we do it ?**

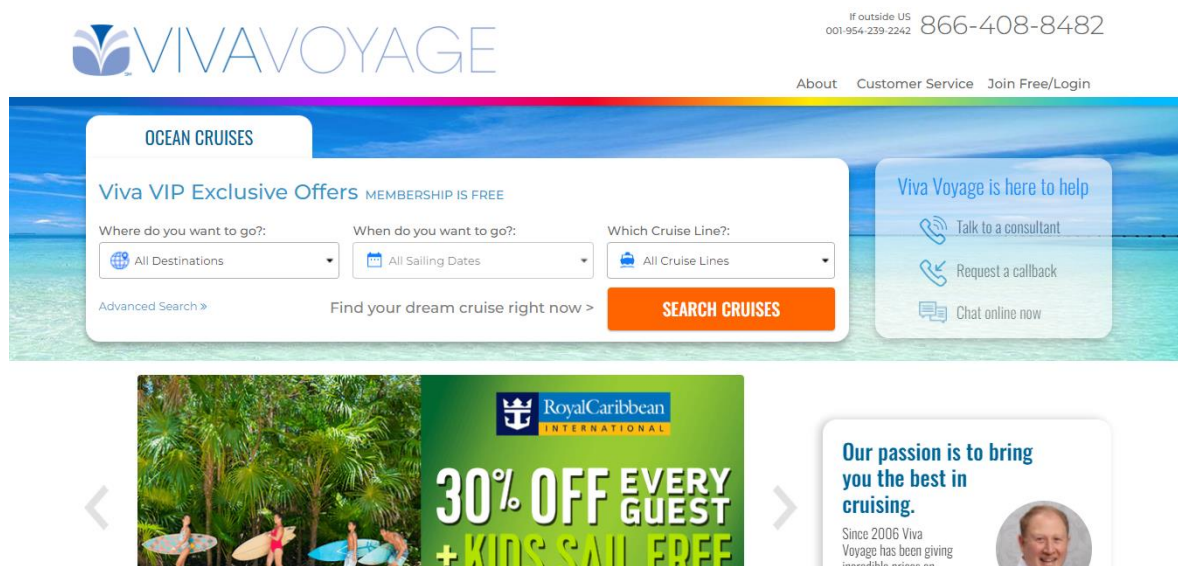
One of our leaders recently delivered a talk at a developer conference in Lisbon, on how they enabled a team of android developers in building Microservices – using Miconaut framework. They also shared their experiences in successfully delivering the product end to end, leveraging their pool of android engineers.

## **Tools And Technologies used**

- WordPress
- PHP
- JavaScript
- AWS
- Bluehost
- Elementor
- Forminator
- WP Bakery
- Essential Grid
- Jetpack
- Yoast SEO
- Cool Timeline



## 2] Project – VivaVoyage



### Problem Statement:

Implement new payment gateway by replacing an existing one. Change the work flow of microservices to adapt new payment gateway as required. Add some extra features to website. Setup pipelines for the entire project.

### Overview:

Viva Voyage is here to help Talk to a consultant Request a callback Chat online now Our passion is to bring you the best in cruising. Since 2006 Viva Voyage has been giving incredible prices on cruises & travel packages worldwide.


### My Contributions:

- Implement payment generation link.
- Change the workflow of microservices.
- Research on the new payment gateway to be implemented.
- Maintaining DevOps activity of the project.

### My Detailed Contribution:

- Research the flow of payment link generation provided by third party by testing it in Postman.
- Implement the payment generation in existing project.
- Create a pipeline for both front-end and back-end to host it on AWS EC2.
- Create a new database and transfer data from existing one to a newly created database.





If outside UK  
(0044) 203 137 0090

0800 862 0137

[About](#)
[Customer Service](#)
[My Trips](#)
[Hi, Nehal Parsekar ▾](#)

Booking Id \*

Customer Email Id \*

Amount \*

Currency Type \*

GBP ▾

Pay Now

Pay By Link

[TERMS & CONDITIONS](#) | 
 [PRIVACY POLICY](#) | 
 [CONTACT US](#) | 
 [SITE MAP](#)

International Sites: 
 [USA](#)
[UK](#)
[Ireland](#)

\* Viva Voyage guarantees that it can match any cruise line's price that is available directly to the public at the time of booking. Any offers that clients have received must be verified by Viva Voyage in order to match the offer price. This guarantee only applies to new reservations and does not apply to group rates or rates that are not available to the general public direct from the cruise line.

Many of the flights and flight-inclusive holidays on this website are financially protected by the ATOL scheme. But ATOL protection does not apply to all holiday and travel services listed on this website. Please ask us to confirm what protection may apply to your booking. If you do not receive an ATOL Certificate then the booking will not be ATOL protected. If you do receive an ATOL Certificate but all the parts of your trip are not listed on it, those parts will not be ATOL protected. Please see our booking conditions for information, or for more information about financial protection and the ATOL Certificate go to: [www.atol.org.uk/ATOLCertificate](http://www.atol.org.uk/ATOLCertificate)

The Travel Trust Association is the only travel network in the UK to guarantee 100% financial protection to the consumer, ensuring total consumer confidence.

Website operated by Viva Voyage Limited, registered in England with number 6392458 registered office is: Viva Voyage Limited, Carter Backer Winter, 66 Prescott Street, London, E1 8NN



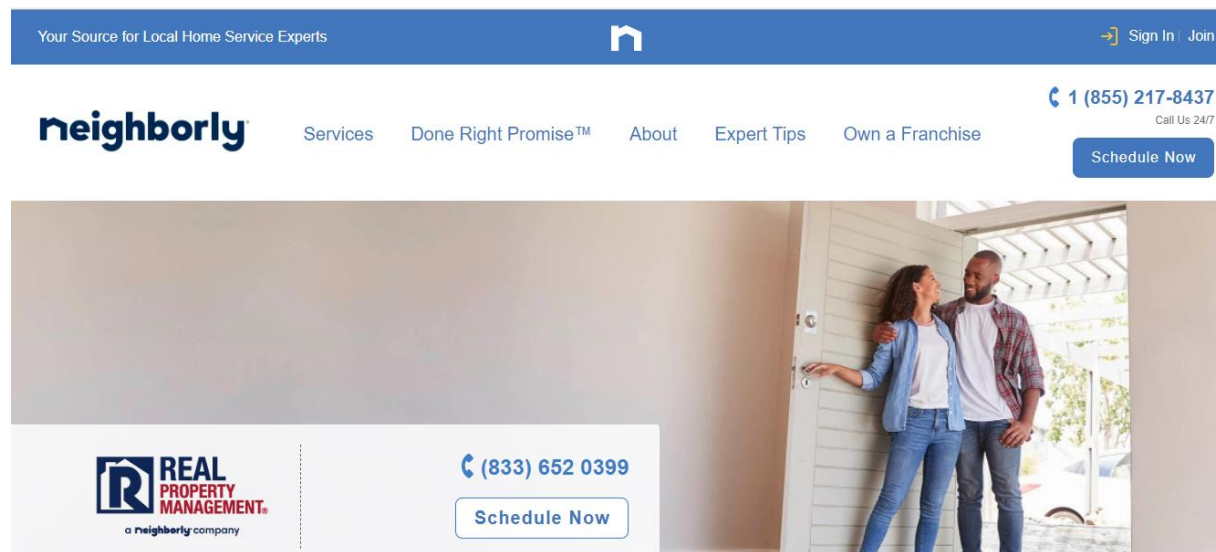

Chat now



## Tools and technologies

- Node.js
- Express.js
- PHP
- WordPress
- Aws
- MySQL
- JWT
- Winston
- Redis
- Axios

### 3] Project – Real Property Management



**Overview:** Real Property Management is the largest single family property management organization in North America, with more than 300 offices in 46 states and Canada. Real Property Management specializes in franchising a system to manage single-family homes, townhomes, condos, multiplexes and small apartment buildings without onsite management.

#### Problem Statement:

Implementing comparison table and comparison graph, then exporting that data as a pdf file.

#### My Contribution:

Implemented comparison table where in one property will be selected by user at first and later customer can add two more properties for comparison. The comparison details will be shown in table view and also graphical view. The comparison data should also be downloadable in pdf format.

#### My Detailed Contribution:

- Search properties feature was added.
- Created a select option to choose properties to compare.
- Created graph to show comparison data in a graphical view.
- Implemented TypeScript in existing React.js Code.

Back to

### Holding strategy:

5 Years 10 Years 15 Years 20 Years

	28730 RALEIGH PL.	28749 RALEIGH PL.
Purchase Price	\$298520	\$211859
Initial Investment	\$13517001	\$9592986
Total Return	\$-13437630	\$-9515236
ROI	-99%	-98%
<b>Additional Metrics:</b>		
Annualized Return	0%	0%
Cap Rate	2.7%	4.7%
Gross Yield	5.6%	9.3%
Cash Flow	\$3012	\$6424
Cash on Cash	\$0	\$0.1
Appreciation	299013%	212209%

+ Add Property

Parameters: [Advance Parameters](#)

Projections: [Send as PDF](#)

Overview **Cash Flow** Equity Advanced Reporting

Table Graph

	Year 5	Year 10	Year 20	Year 30
Expected Rent	\$15,138 \$1,361,5700	\$15,161 \$1,361,417700	\$15,206 \$1,361,187700	\$15,252 \$1,371,700
Total Expenses	\$7,115	\$7,116	\$7,148	\$7,171
Property Taxes	\$3,004	\$3,009	\$3,019	\$3,029
R&M (Reserve)	\$455	\$455	\$457	\$458
Other Expenses (leasing, HOA, insurance fees)	\$1,494	\$1,496	\$1,501	\$1,505
<b>NET OPERATING INCOME</b>	<b>\$8,023</b> \$668,583700	<b>\$8,035</b> \$669,583700	<b>\$8,058</b> \$671,5700	<b>\$8,081</b> \$673,427700
Cap Ex (Reserve)	\$6	\$6	\$6	\$6
<b>TOTAL UNLEVERED CASH FLOW</b>	<b>\$8,017</b>	<b>\$8,029</b>	<b>\$8,052</b>	<b>\$8,075</b>

Holding strategy: [Send as PDF](#)

Add property to comparison chart:

123 Main St. Dallas, TX 75201

35 5th Ave Rd New York City, NY 10001

999 Long Way Multnomah, NY 12345

ROI 3.6%

Holding strategy: [Send as PDF](#)

Saved Properties.

Click a property to review or add properties to compare.

2422 Horseshoe Bend Rd SW  
Marietta, GA 30064

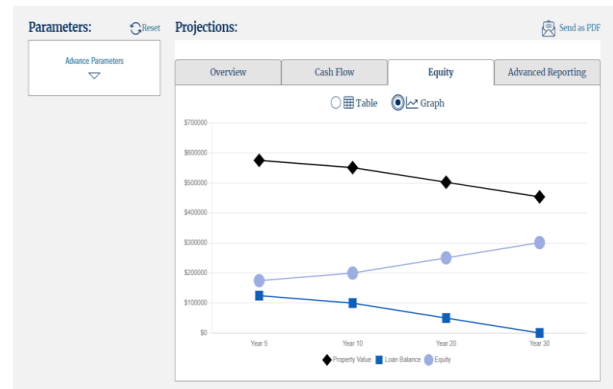
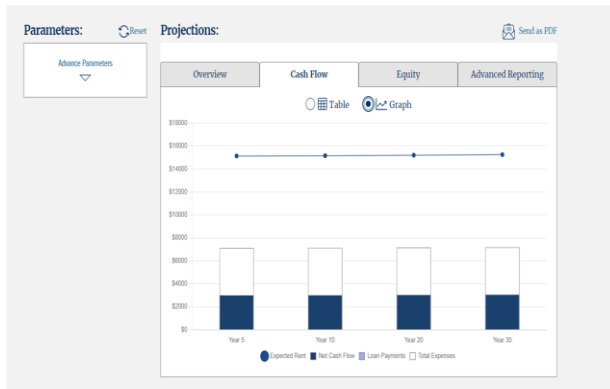
56 5th Ave Rd New York City, NY  
10001

56 5th Ave Rd New York City, NY  
10001

[Remove Property](#) [Remove Property](#)

[Comparison Chart](#)

ROI 3.6%



# Proof Of Concept Project

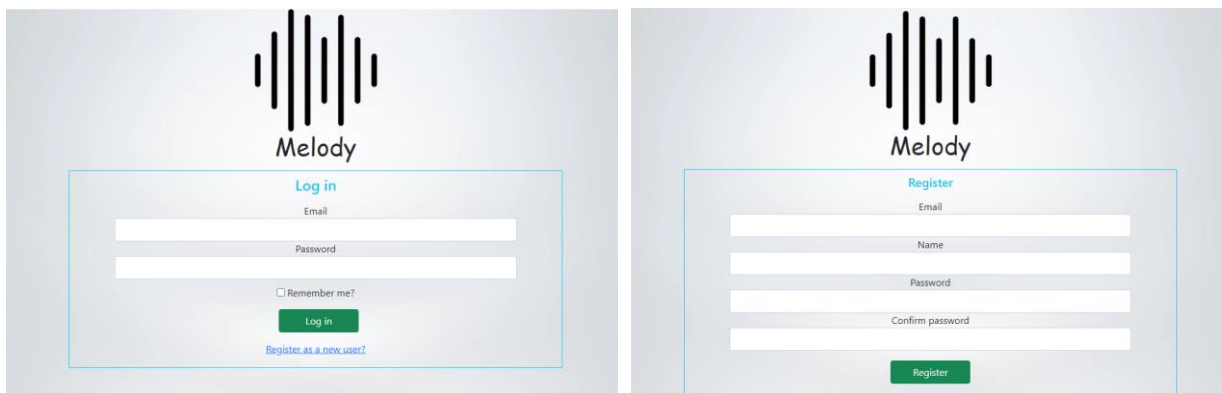
## 1] Melody-Music App[Proof of Concept Project]

### Problem Statement:

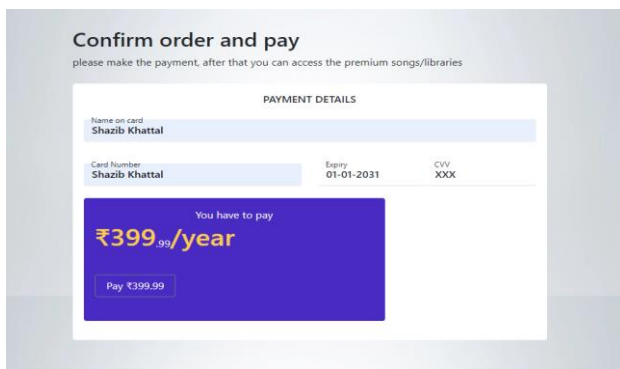
Online music management application, Design the layout and screens as you find fit with following user experience.

- The Admin should be able to create or add new music libraries/songs to the application.
- The user who has membership should be able to browse all the songs(free/paid).
- There should be two factor authentication while signing in.
- Anonymous users should only see free category songs/libraries.
- User who wants to subscribe should pay minimal fee to subscribe online with two factor authentication (create dummy payment screen).
- Apply filter for the table
- User should be able to search songs.
- Should use concept of authentication, authorisation, claims, roles.

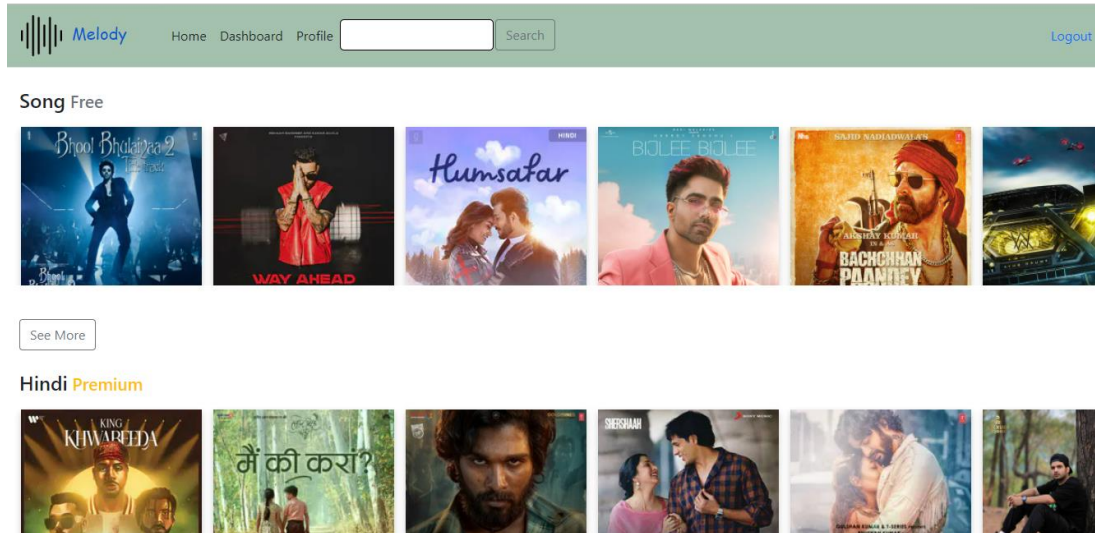
### I] Login & Signup Screen



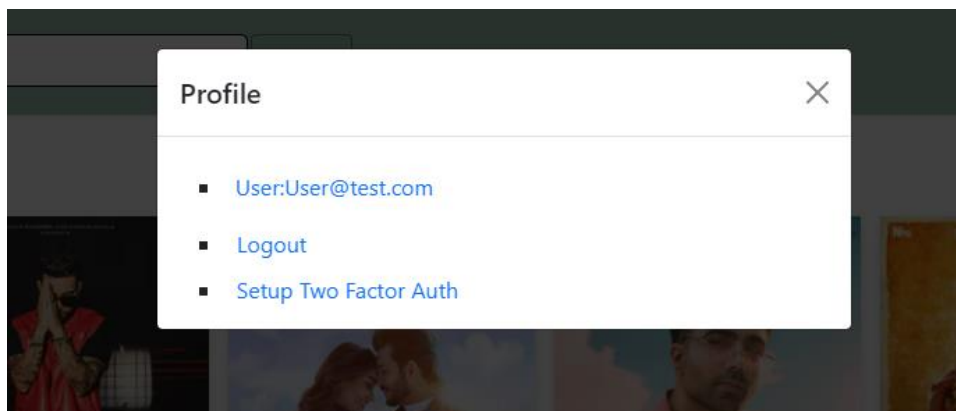
### II] Payment Page: Where users subscribe to app by paying the amount



III] Home Screen: When admin logs in there will be extra feature giving access to dashboard



IV] User Profile Pop-up Screen:



V] Two factor authentication: Via OTP

Please enter the code below in your authenticator App.

CXNN035URHQAKZDFT2W4MI45ZMF6ENK

Enter Code :

Submit

Verfiy Authenticator Code

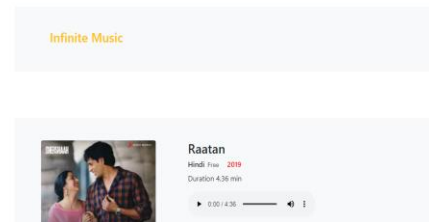
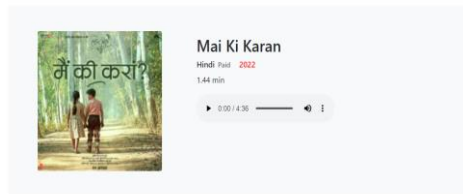
Code

Submit

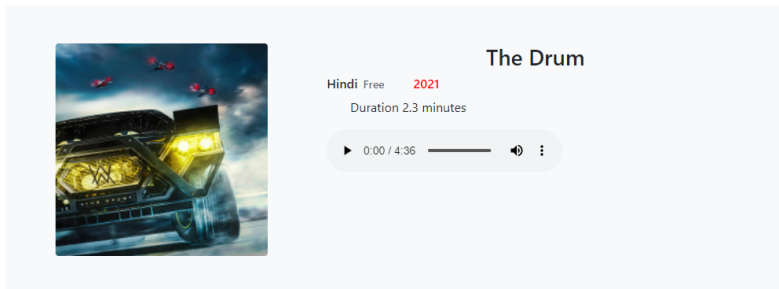
VI] Song

a) Play single song


b) Play the playlist



## VII] Search Songs



## VIII] Admin Dashboard: Here Admin can add song and playlist


[Home](#)
[Dashboard](#)
[Profile](#)


[Logout](#)

Free Songs  
8

Premium Songs  
6

Free Libraries  
6

Premium Libraries  
6

Manange Song

Show  entries

Song Name	Type	Language	Duration	Year	Edit	Delete
Bhool Bhulayiaa	Free	Hindi	1.57 min	2020	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

## IX] Search functionality for table with filter using ajax.

Manange Song							
Show	10	entries		Search:	2019		
Song Name	Type	Language	Duration	Year	Edit	Delete	
Heer Ranjha	Free	Hindi	1.57 min	2019	Edit	Delete	
Raatan	Free	Hindi	4.36 min	2019	Edit	Delete	

Showing 1 to 2 of 2 entries (filtered from 14 total entries)

Previous 1 Next

X) Add Song Form

Song Name:

Language:

Duration:

Release Year:

Type

Free

Library:

NO PlayList Selected

Image

Choose File

No file chosen

Audio

Choose File

No file chosen

Submit

XI) Add Playlist Form

PlayList Name:

Type

Free

Image

Choose File

No file chosen

Submit

XII) Delete playlist/song

Delete Category

PlayListName

Circle Sound

Delete

Back to List

© 2022 Melody

XIII] Edit playlist/song

PlayList Name:

Type:

Image

## Tools And Technology

- .NET 6 MVC
- MsSQL
- EntityFrameworkCore
- Serilog
- XUnit
- ASP.Net Identity
- Bootstrap
- Docker

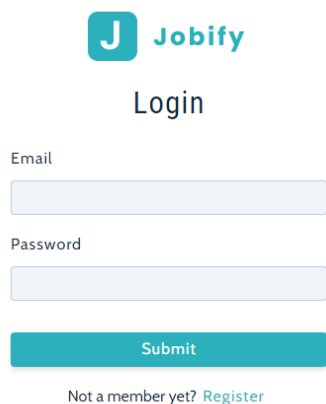


## 2] Jobify App[Proof of Concept Project]

### Problem Statement:

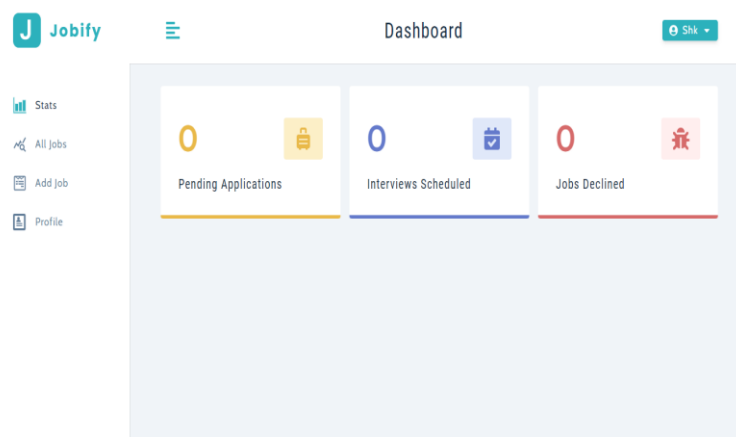
- Admin should be able to add jobs and should be able to describe job location, job type, status of job.
- Dashboard to display the status.
- User should be able to search jobs by adding filters.
- User can change profile data.

I]



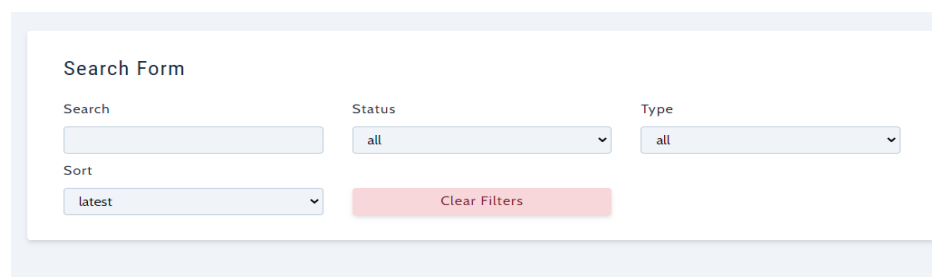
The login form features the Jobify logo at the top. Below it, the word "Login" is centered. There are two input fields: "Email" and "Password". A teal "Submit" button is positioned below the password field. At the bottom, there is a link that says "Not a member yet? Register".

II]



The dashboard shows the Jobify logo and a hamburger menu icon. The title "Dashboard" is on the right, next to a user profile icon labeled "Shk". On the left, there is a sidebar with links: "Stats", "All Jobs", "Add Job", and "Profile". The main content area displays three cards: "Pending Applications" with a yellow icon and a value of 0, "Interviews Scheduled" with a blue icon and a value of 0, and "Jobs Declined" with a red icon and a value of 0.

III]



The search form is titled "Search Form". It contains three input fields: "Search", "Status" (with a dropdown menu showing "all"), and "Type" (with a dropdown menu showing "all"). Below the "Search" field is a "Sort" dropdown menu showing "latest". A red "Clear Filters" button is located at the bottom right of the form.

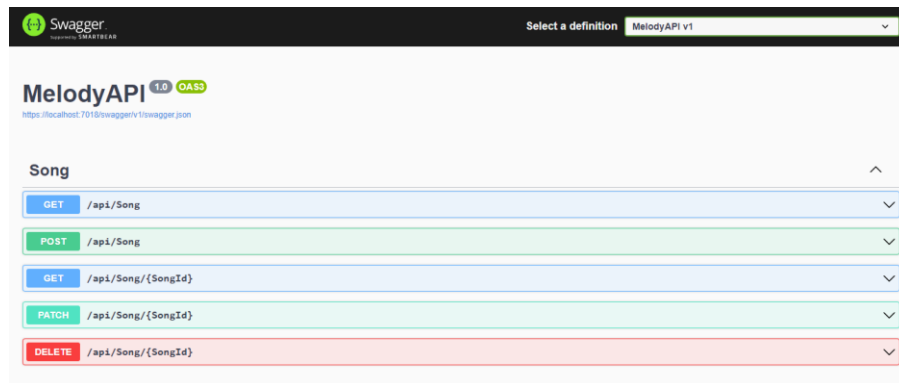
### Tools And Technologies:

- ReactJs
- NodeJs
- ExpressJs
- MongoDB
- Redux
- ChartJs

### 3] .NET Web API [Proof of Concept Project]

#### Problem Statement:







- Create a crud application using LINQ.
- Should use Entity Framework
- Use concept of DTO and Auto Mapper
- Use Middleware and Exception handling
- Use Swagger API














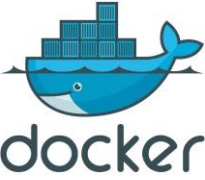
#### Tools and Technologies








- .NET WEB API
- Entity Framework
- Swagger API
- MsSql
- Serilogger
- XUNIT

## Tools And Technologies Used During Internship


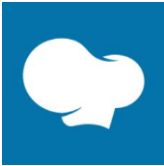

	<p><b>.NET Core</b> is the latest general purpose development platform maintained by Microsoft. It works across different platforms and has been redesigned in a way that makes .NET fast, flexible and modern.</p>
 <p>Entity Framework</p>	<p><b>Entity Framework</b> is an ORM and ORMs are aimed to increase the developer's productivity by reducing the redundant task of persisting the data used in the applications</p>
	<p><b>Razor Pages</b> is designed to make common patterns used with web browsers easy to implement when building an app. Model binding, Tag Helpers, and HTML helpers work with the properties defined in a Razor Page class.</p>
	<p><b>AutoMapper</b> is a simple little library built to solve a deceptively complex problem - getting rid of code that mapped one object to another.</p>
	<p><b>MS SQL Server</b> is a relational database management system (RDBMS) developed by Microsoft. This product is built for the basic function of storing retrieving data as required by other applications.</p>
	<p><b>IdentityServer</b> supports different kinds of protocols and social authentication providers that can be configured as part of each custom installation. This is typically done in the ASP.NET Core application's Startup class in the ConfigureServices method</p>

	<p><b>Serilog</b> is a structural logging library for Microsoft .Net and has become the preferred logging library for .Net applications. Serilog's vast ecosystem consisting of hundreds of integrations that cover Console, File, Message Queue, Seq, Elastic Search, Azure Event Hub etc</p>
	<p><b>xUnit.net</b> is a free, open source, community-focused unit testing tool for the .NET Framework. Written by the original inventor of NUnit v2, xUnit.net is the latest technology for unit testing C#, F#, VB.NET and other .NET languages</p>
	<p><b>NUnit</b> is a unit-testing framework for all .Net languages. <b>NUnit</b> is Open Source software and <b>NUnit</b> 3.0 is released under the MIT license. This framework is very easy to work with and has user friendly attributes for working.</p>
	<p><b>Moq</b> is a mock object framework for .NET that greatly simplifies the creation of mock objects for unit testing.</p>
	<p><b>ReactJS</b> is an open-source, component-based front-end library responsible only for the view layer of the application. It is maintained by Facebook. React uses a declarative paradigm that makes it easier to reason about your application and aims to be both efficient and flexible</p>
	<p><b>Typescript</b> is a free and open-source content management system (CMS) written in and paired with a MySQL or MariaDB database. Features include a plugin architecture and a template system, referred to within WordPress as Themes.</p>

 <p>Chart.js</p>	<p><b>Chart.js</b> is an free JavaScript library for making HTML-based charts. It is one of the simplest visualization libraries for JavaScript</p>
	<p><b>NodeJS</b> is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.</p>
	<p><b>Express</b> is a fast, assertive, essential and moderate web framework of Node.js. You can assume express as a layer built on the top of the Node.js that helps manage a server and routes. It provides a robust set of features to develop web and mobile applications</p>
	<p><b>QRCode.js</b> is a JavaScript library that is available on GitHub. Using this library, you can generate QR code with JavaScript quickly.</p>
	<p>Redux is a predictable state container for JavaScript apps. It helps you write applications that behave consistently, run in different environments (client, server, and native), and are easy to test.</p>
	<p>Docker Is an open platform for developing, shipping, and running applications. Docker enables you to separate your applications from your infrastructure so you can deliver software quickly. With Docker, you can manage your infrastructure in the same ways you manage your applications</p>

 <b>redis</b>	<p><b>Redis</b> is an open source , in-memory data structure store, used as a database, cache and message broker. It supports data structures such as strings, hashes, lists, sets, sorted sets with range queries, bitmaps, hyper loglogs, geospatial indexes with radius queries and streams</p>
 Amazon EC2	<p><b>EC2</b> provides scalable computing capacity in the Amazon Web Services (AWS) Cloud. Using Amazon EC2 eliminates your need to invest in hardware up front, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage.</p>
	<p><b>MySQL</b> is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).</p>
	<p><b>MongoDB</b> is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with optional schemas.</p>
	<p><b>Git</b> 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 (thousands of parallel branches running on different systems).</p>
 GitLab	<p><b>Gitlab</b> is a service that provides remote access to Git repositories. In addition to hosting your code, the services provide additional features designed to help manage the software development lifecycle. These additional features include managing the sharing of code between different people, bug tracking, wiki space and other tools for 'social coding'.</p>
	<p><b>GitHub</b> is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management (SCM) functionality of Git, plus its own features. It provides access control and several collaboration features such as bug tracking, feature requests, task management.</p>

	<p><b>Npm</b> is a package manager for the JavaScript programming language maintained by npm, Inc. npm is the default package manager for the JavaScript runtime environment Node.js. It consists of a command line client, also called npm, and an online database of public and paid-for private packages, called the npm registry.</p>
	<p><b>Swagger</b> is an open-source tooling usage that can be broken up into different use cases: development, interaction with APIs, and documentation</p>
	<p><b>Postman</b> 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. A comprehensive set of tools that help accelerate the API Lifecycle - from design, testing, documentation, and mocking to discovery.</p>
	<p><b>Jira</b> is a project management tool used for issues and bugs tracking system. It is widely used as an issue-tracking tool for all types of testing.</p>
	<p>JSON web token is JSON Object which is used to securely transfer information over the web(between two parties). It can be used for an authentication system and can also be used for information exchange. The token is mainly composed of header, payload, signature.</p>
	<p><b>Visual Studio Code</b> is a code editor redefined and optimized for building and debugging modern web and cloud applications.</p>

	<p><b>Microsoft Visual Studio</b> is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps.</p>
	<p><b>WPBakery</b> Page Builder is a page builder plugin for WordPress which allows you to create stunning website content with simple drag and drop. With WPBakery Page Builder you can create and manage your WordPress content in minutes.</p>
	<p><b>Elementor</b> is the leading website building platform for WordPress, enabling web creators to build professional, pixel-perfect websites with an intuitive visual builder.</p>



## Timeline

- **Week-1:**
  1. Formal Orientation and onboarding process
  2. Interaction with CEO,CCO,Global HR
  3. Interaction with mentor assigned to me
  4. Started learning C#
  5. OOPs Concept in detail
  
- **Week-2**
  1. Learned and coded SOLID principles
  2. Learned and code Design patterns
  3. Memory Management
  
- **Week-3**
  1. Unit Testing
    - a. Xunit
    - b. Nunit
    - c. MOQ
    - d. Rhino MOQ
  2. Mini .NET MVC project.
  3. Presented the dependency inversion concept to mentor
  
- **Week-4**
  1. Parallel and Async Concept
    - a.Task Parallelism
    - b.Data Parallelism
    - c.Thread safety (Race condition,Deadlock)
    - d.Thread.Join() & Thread.Continue()
    - e. Monitor & Mutex to avoid Deadlock
    - e. Blocking Collection [Bounding,BLocking]
  2. HR Session: Invest in 20's presesntation.
  
- **Week-5**
  1. Recursion
  2. .NET Database First Approach (Mini Project)
  3. Stored Procedure
  4. Triggers
  5. EDM
    - a. Core parts of edbm

b. Add EDMX directly in Entity Framework.

- **Week-6**

1. Conceptual Db methodology
2. Authentication And Authorization.
3. POC-1: Melody-Music to my ears project using .Net MVC and Razor pages
  - a. Working on UI of POC1
4. Sequence Diagram for POC1

- **Week-7**

1. ERD Diagram for POC1
2. POC1 UI demonstration
3. Designing models for POC1
4. Login And Sign UP
5. Authentication and Authorization

- **Week-8**

1. Form to upload song
2. Form to create playlist
3. Read, Delete, Update feature for song and playlist
4. Implementing the crud features in admin dashboard

- **Week-9**

1. Two factor authorizaion
2. Scaffold Identity and Role Management
3. Search Bar with filter
4. Table pagination with Ajax
5. Project Demonstartion

- **Week-10**

1. Zapcom Official Website
  - a. Working on How we build page
    - Implemented Timeline to define company approach
    - Made the page responsive
    - Redesigned the slider.
    - Modified UI

- **Week-11**

1. Homepage: Re-Designing our customer section and replacing content
2. Text and UI changes
3. Changes in footer UI and providing links to it
4. Made the page responsive.

- **Week-12**

1. What we build page
  - a. Create new tab section
  - b. Added new section for static data
  - c. Modify and Change UI of Industry section.
  - d. Made the page responsive

- **Week-13**

1. RPM (Neighborly Project)

*[ReactJs & Typescript]*

- a. Create a table and graph to represent data
- b. User should be able to toggle between table and graph
- c. Create search bar
- d. Selected property should be able to add again for comparison

- **Week-14**

1. Create contact us page
2. Created forms for job application
3. Created form for business contact.
4. Who we are Page: Created hero image
5. Career Page: Modified UI and content slider
6. Created jobs post for US and Indian Branch

- **Week-15**

1. Viva Voyage Project
  - a. Research the flow of payment link generation provided by third party by testing it.
  - b. Change the workflow of microservices.

- **Week-16**

1. POC 2 Project (MERN STACK)
2. Content changes for Zapcom website

- **Week-17**

1. Building RESTful Web APIs with ASP.NET Core – Udemy Course
2. Rest APIs in ASP.NET Core and C# 2022 edition – Udemy Course
3. POC 3 Project (.NET WEB API)
4. Introduction To SQL Server
  - a. Create Database and Tables
  - b. Constraints
  - c. Alter Tables and Columns
  - d. Drop Table and Column

- e. Truncate Command
- f. INSERT, UPDATE, SELECT and DELETE
- g. AND, OR, IN, BETWEEN, NOT IN, LIKE, IS NULL

- **Week-18**

1. Stored Procedures
2. Functions
3. clustered index, non-clustered index
4. C# basics for beginners - Udemy Course
5. C# intermediate - Udemy Course

- **Week-19**

1. C# advance topic - Udemy Course
2. Views (sql)
3. CTE- common table expression
4. Table Variable and Temp Table -SQL Server
5. Merge Statements

- **Week-20**

1. Create QA Environment For VivaVoyage (Front-End)
  - Pushed repo on EC2 instance
  - Migrate Database of WordPress content
  - Set Up Pipelines on GitLab
  - Create htaccess file.

- **Week-21**

1. Create QA Environment For VivaVoyage (Back-End)
  - Pushed repo on EC2 instance
  - Migrate Database
  - Set Up Pipeline on GitLab
  - Create Env fille

## Certification And Training Completed Under Internship

- C# basics for beginners
- C# intermediate
- C# advance topic
- Solid Principles
- Building RESTful Web APIs with ASP.NET Core
- Rest APIs in ASP.NET Core and C# 2022 edition
- Querying Microsoft SQL Server with Transact-SQL
- ASP.NET Core Identity - Authentication & Authorization
- The Complete ASP.Net Core Web APIs Course With JWT Security
- The Complete ASP.NET MVC 5 Course
- MERN Stack Course 2022 - MongoDB, Express, React and NodeJS
- MERN eCommerce From Scratch
- GitLab CI: Pipelines, CI/CD and DevOps
- Docker for the Absolute Beginner - Hands On - DevOps
- Using Typescript with React

## Website References

- <https://docs.microsoft.com/en-us/dotnet/csharp>
- <https://www.c-sharpcorner.com>
- <https://dotnettutorials.net/course/solid-design-principles>
- <https://dotnet.microsoft.com>
- <https://node.js.org>
- <https://reactjs.org>
- <https://www.chartjs.org>
- <https://swagger.io>
- <https://www.npmjs.com/package/qrcode>
- <https://www.tutorialspoint.com>
- <https://www.typescriptlang.org>
- <https://www.geeksforgeeks.org>
- <https://medium.com>
- <https://www.javatpoint.com>
- <https://www.w3schools.com>
- <https://www.tutorialspoint.com>

## YouTube Channel References

- [FreeCodeCamp.org](#)
- [Programming With Mosh](#)
- [Kudvenkat](#)
- [I Am TimeCorey](#)
- [DotNet](#)
- [Bhurgan Patel](#)
- [Traversy Media](#)
- [JavaScript Mastery](#)
- [Web Dev Simplified](#)
- [Les Jackson](#)
- [Code Affection](#)
- [Art of Engineer](#)

## My reflections/experiences of internship

Six months internship in Zapcom has brought a great boost to my professional career.

I had a wonderful experience to work with people who had a great hand in industry for many years and were also willing to help me in my learning process and difficulties.

At ZapCom, I was never restricted to just my project team. I was provided freedom to interact, consult seek help and guidance, etc. from any colleague.

I had the opportunity to work in multiple live projects which helped me to learn and work on many technologies and it also gave me confidence to accept any challenges.

I was lucky to give my contribution in building ZapCom's official website and also managing it.

Apart from the live projects I had to do proof of concept projects to show the learning progress and skills acquired and then I had to present the project to "The head of delivery", my mentor and other Tech leads in the company. Getting a positive reviews and feedback from them was the first milestone achieved in my internship.

We also had sessions to sharpen our non technical skills. We were taught how to improve our communication skills ,how to develop presentation skills, how to overcome crowd and stage fear, how to communicate via digital platforms and so on.

ZapCom has the best working environment and this is all possible because of the people working there who are kind and generous and also who does not believe in hierarchy which makes communication very easy. This made by experience in ZapCom more pleasant.

At ZapCom, there were many events like:

- Orphanage visit
- Secret Santa
- All Hands On
- Other celebrations