

INTERNSHIP REPORT

Travel Studio

Atul Niloji
MCA - 2118

Travel Studio

Completed by
Atul Niloji
Mca - 2118

for the partial fulfillment of
MCA Degree for Semester IV
Discipline of Computer Science and Technology,
Goa Business School,
Goa University

At
Open Destinations Infotech Pvt Ltd
Goa Office
6th & 7th Floor,
Kamat Grand,
Behind Caculo Mall,
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Under the guidance of
Swapnil Kamat
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(HR, Open Destinations)

Nagesh Patil
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Alfredo Fernandes
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Rupesh Korgaonkar
(On Job Trainer(OJT), Open Destinations)

Ritu James
(Programme Manager, Development)

Mithila Metri
(Sr. Software Developer, Team Lead, Development)

Date: 10-Jun-23

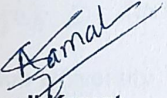
TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Atul Niloji**, a student of the Master of Computer Applications (MCA) course at Goa University, Goa, has completed his final semester project at our company **Open Destinations** from **01-Feb-23** to **10-Jun-23**.

Atul has successfully completed the internship and has met the expectations of his Team Leader and guide.

This certificate is being issued as requested and is to be submitted as the internship project report at Goa University.

For Open Destinations.


Swapnil Kamat
Development Manager




Goretti Pedro
HR Manager

GOA UNIVERSITY



GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that Mr./~~Ms.~~ Atul Bhikaji Niloji has successfully completed his internship at Open Destinations Infotech Pvt Ltd 6th & 7th Floor, Kamat Grand, Behind Caculo Mall, St Inez, Panjim Goa. India, in partial fulfillment of the award of the degree in Master of Computer Application.

Examiner 1

(Jyoti D. Pawar)

Place: Goa University
Date: 15/06/2023

Examiner 2

[Kiran Kulkarni]

Dean, Goa Business School

Acknowledgement

The Internship opportunity that I got with the Open Destinations Pvt. Ltd was a great opportunity to learn the professional level of work to be working in the IT field. Also I am very much grateful to get a very pleasant environment at the office space.

I would like to convey my heartfelt gratitude to the Department of Computer Science & Technology, Goa University for holding this Campus Placement Drive for the internship to get the Industry Level of Experience.

I would also like to thank Mr. Hanumant Harichandra Redkar (Placement Coordinator) for his tremendous support and assistance in the completion of my Internship. I would also like to thank Mr. Ramrao Wagh (Program Director - MCA Department) and all the faculty members of Goa University who had helped us in leading this internship program. The completion of this Internship would not have been possible without their help and insights.

I am very thankful to Ritu James (Project Manager, Rail Team), Mithila Metri (Team Lead) for taking the necessary steps and guiding me throughout this period and taking me to the right path. Their Contribution has been very much helpful for me throughout the internship.

I thank Mr. Swapnil Kamat (Manager), Mr. Nagesh Patil (Technical Trainer), Mr. Alfredo Fernandes (Product Trainer), Mr Rupesh Korgaonkar (Technical Trainer) for providing me with the required training and Guidance.

Also I would like to thank the team members for their precious guidance and support which made me move through this internship.

Special thanks to HR & Admin team members for getting along with the flow of the Company.

I am grateful to the support & encouragement of Mr. Milind Anvekar (VP Projects & Customer Services).



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Under the guidance of
Swapnil Kamat
(Asst. Development Manager ,Open Destinations)

Ritu James
(Programme Manager, Development)

Mithila Metri
(Sr. Software Developer, Team Lead, Development)

<<Place to append certificate from Company>>

<<preferably on Company Letterhead or having company name/logo>>

<<Format Similar to:>>

Date: /05/2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Atul Bhikaji Niloji student of Master of Computer Applications (MCA) of Goa University, Goa, is currently undergoing/has completed his final semester project (Semester IV) at our organization/company, Open Destinations Infotech Pvt Ltd 6th & 7th Floor, Kamat Grand, Behind Caculo Mall, St Inez, Panjim Goa. India, from 01/02/2023 to 01/05/23.

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

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

<<The final internship completion certificate will be provided on completing his/her internship>>

For Open Destinations

<<Signing Authority>>

<<Company Name and Seal>>

GOA UNIVERSITY



GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that Mr./Ms. Atul Bhikaji Niloji has successfully completed his internship at Open Destinations Infotech Pvt Ltd 6th & 7th Floor, Kamat Grand, Behind Caculo Mall, St Inez, Panjim Goa. India, in partial fulfillment of the award of the degree in Master of Computer Application.

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Introduction

Internship is the process of gaining experience & knowledge of Industry level while in the learning phase. It acts as a connecting bridge between the learning of the degree education and then applying the learned knowledge to get the practical experience on the real time working projects of the organizations.

Here in Goa University at the final semester of master degree of technical education students are required to complete an internship while working on the company's projects.

This Internship is very much helpful to the students of technical courses to get on the job training to reflect their expertise & gain the knowledge of the workflow in the professional organizations.

Open Destinations Infotech Pvt Ltd is the company in which I have worked on and completed my internship. The Open Destinations is the Leading company in providing the tech related technologies for the travel domain.

This report has been prepared to reflect the work experience, achievements and the professional growth while working in the company here at open destinations as Junior Software Developer also to reflect the overview of various trainings taken at the company.

Company profile



Open Destinations Infotech Pvt. Ltd is a tech company that provides the tools & technologies for the travel reservation management clients with an experience of over 25 years. As the industry evolves we continue to build the technology with the latest technologies and support the customers.

Over 30 countries rely on our award winning products and services.

Products:

- Travel Studio



- Travel Builder



- Tineri Mobile App

- Fare Studio
- Rail Studio

Travel Studio

A powerful, easy to use browser based end-to-end reservations management platform with rich functionality, all connected smoothly to supplier networks.

- Supplier Extranet
- Agent DNN
- Customer Support
- Channel Manager API
- Integrated Flight Bookings
- Package Bookings
- Contract Loading
- Mainly for tour operator bookings with many combinations like accommodation, flights, transport, entertainment...

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Bootcamp

After the Tests, Interviews & selection I was told that I will have to go through the Bootcamp Training. The Bootcamp started on 1st of Feb 2023. It all started with a warm welcome by the HR & Admin team with the Induction Program and then followed by the working rules & regulations of the company.

Then it was started with the Technical Training of the Bootcamp by the technical trainer Mr. Nagesh Patil with an idea to brushen up the Programming concepts & features and also to get introduced to the asp.net technology..

It started with the Introduction to the ASP.net Framework used in the web development process. Then the HTML,CSS Javascript & Visual Studio IDE.The Page Life Cycles in the asp.net, server/client state management, Nullable Types.

The training in the asp.net technology taught me many things like Viewstate, querystring management then various other asp.net user controls then also taught me how to do a debugging and then to used the ADO.NET and to connect to the sql server database using the connection string used in the web.config file.

Also for everyday anyone from the group has been told to make a revision of the topics that are being taught in the day before.

During these training the C# language has been used as a code behind for working on the project. As to get familiar with the language basics of oops was refreshed with me like the oops principles, like inheritance, polymorphism, abstraction, encapsulation also the features like using collections of the C#.

We have also used some other tools during this process like Microsoft SQL Server Management Studio, various uses of the Web Forms, UI Controls, JQuery, also for css part we have been given some template to be used.

During this I was also told the coding guidelines and the standards that are being followed while working on the company projects.

At the end of this training we had to answer an Online MCQ based Test to clear this training. Also I was given a CSS template and told to make an online shopping application with the database and the working backend.

Once these tests were done I was promoted to the next training that is Product Training.

Product Training

In Open Destinations we have various products that are related to the travel management domain, thus making the management of the travel easier for the travel managing entities like Tour Operators, the Agents, the Suppliers and also for the Passengers.

Mr. Alfredo Fernandes (Product Trainer, Open Destinations Ltd.) has been with me to conduct the product training.

This product training is mainly focused to give the knowledge of the product, to know the way our various entities that are related to the travel industry like tour operator, supplier, and client interaction works on. Our product has various functionalities related to the reservations, booking, transaction management to be used by the clients across the globe.

The product also focuses on the different types of services that may be booked for the customers through the product like accommodation, transportation in various modes like flights, road transports, rail service, cruises.

First I was given training to make a setup of the Travel Studio V1 (Software) which is legacy software of Open destinations and then we also took a tour of the Travel Studio V2 (Web Based Application).

During the training period we were taught about setting up the product, then configuring the setup related to the organization, the features of the contract loading, passenger maintenance, managing the financial transactions and so on.

Also I was told to do an everyday report based on the topics that are taught for the day. After completing the product training I was given an online MCQ based test to test the knowledge related to the product.

Product Technical Training

In the Technical Training I had knowledge about the product which was taught during the product training. Then to know development and the working of the code in the backend Technical Training was conducted for me.

This was also conducted by the Mr. Nagesh Patil (Technical Trainer, Open Destinations Ltd).

It was started with the Entities related to the software and then the management of their data with the use of the tools like API, Web Services and various others. The management of the DNN websites, use of the API for the supplier extranet, channel managers, some important sql queries, Development process with the coding guidelines and the golden rules used in that.

Introduction to MVC & Angular

ASP.Net MVC Framework (Model, View, Controller)

The product was also developed in MVC framework hence that has also been touched in the training. The way MVC has been used with the DTO, Service Managers, repository in the product has been explained to us.

The Model-View-Controller (MVC) framework is an architectural pattern that separates an application into three main logical components Model, View, and Controller. Hence the abbreviation MVC. Each architecture component is built to handle specific development aspects of an application. MVC separates the business logic and presentation layer from each other. MVC architecture in web technology has become popular for designing web applications.

Three important MVC components are:

- Model: It includes all the data and its related logic
- View: Present data to the user or handles user interaction
- Controller: An interface between Model and View components

View

A View is that part of the application that represents the presentation of data.

Views are created by the data collected from the model data. A view requests the model to give information so that it presents the output presentation to the user.

Controller

The Controller is that part of the application that handles the user interaction. The controller interprets the mouse and keyboard inputs from the user, informing the model and the view to change as appropriate.

Model

The model component stores data and its related logic. It represents data that is being transferred between controller components or any other related business logic. For example, a Controller object will retrieve the customer info from the database. It manipulates data and sends back to the database or uses it to render the same data.

Angular

Angular is a platform and framework for building single-page client applications using HTML and TypeScript. Angular is written in TypeScript. It implements core and optional functionality as a set of TypeScript libraries that you import into your applications.

The architecture of an Angular application relies on certain fundamental concepts. The basic building blocks of the Angular framework are Angular components that are organized into NgModules. NgModules collect related code into functional sets; an Angular application is defined by a set of NgModules. An application always has at least a root module that enables bootstrapping, and typically has many more feature modules.

- Components define views, which are sets of screen elements that Angular can choose among and modify according to your program logic and data
- Components use services, which provide specific functionality not directly related to views. Service providers can be injected into components as dependencies, making your code modular, reusable, and efficient.

Modules, components and services are classes that use decorators. These decorators mark their type and provide metadata that tells Angular how to use them.

- The metadata for a component class associates it with a template that defines a view. A template combines ordinary HTML with Angular directives and binding markup that allow Angular to modify the HTML before rendering it for display.
- The metadata for a service class provides the information Angular needs to make it available to components through dependency injection (DI)

AngularJS

AngularJS is Discontinued and now made as Angular since it has been updated and using the typescript. Now Angular is used with the Components.

AngularJS 1.5 will be learned since it has components in it.

This helps in running in Single Page Application.(SPA)

Angular is executed on the Client while the MVC C# code gets executed on the server side.

ng-app tells that from where the angular code is starting from.

Applying the AngularJS to a page:

This is the same as JQuery and is applied to the HTML page by dragging and dropping the development file as well as the min file used for the deployment version.

Also the cdn's can be used for the Angular JS to be applied..

ng-app or ng-model are called as directives.

Ng-model can be used for the input elements of the form.

{{}} is called Data Binding Expressions.

ng-init is used to initialize the initial value to any element.

AngularJS directives can be applied to DOM elements in many ways. It is not mandatory to use ng- syntax only.

Directive can start with x- or data-, for example ng-model directive can be written as data-ng-model or x-ng-model.

Also, the - in the directive can be replaced with ':' or '_' or both. For example, ng-model can be written as ng_model or ng:model. It can also be a mix with data- or x-.

Only one ng app can be used in a single HTML page. If we want to add multiple ng app then we will have to manually bootstrap it.

We cannot have a nested ng-app

Can be only used with the select tag, input tag

Module Declaration:

When we are creating a module the 2nd parameter has to be specified in brackets.

We have tried creating a personal module & applying it to the HTML page by adding and applying the data from the controller.

\$scope:

<script>

```
var app = angular.module('ArithmeticModule', []);
app.controller("ArithmeticController", function ($scope) {
    $scope.firstNumber = 10;
    $scope.secondNumber = 20;
});
```

</script>

If we have any HTML element outside the controller then we cannot apply the data from a controller to any elements.

Scopes are controller specific

Nested Controllers:

In case of the nested controllers the child controller will inherit the scope of the parent controller.

\$rootScope

It is parent scope

- It specific to application
 - It is available throughout the application that is The rootScope is available in the entire application.
 - It is not specific to controller
 - All other scope are child of rootscope, that is All other scopes are descendant scopes of the root scope.
 - All applications have a \$rootScope which is the scope created on the HTML element that contains the ng-app directive.
 - If a variable has the same name in both the current scope and in the rootScope, the application uses the one in the current scope
- example

Linq Concept

LINQ (Language Integrated Query) is uniform query syntax in C# and VB.NET to retrieve data from different sources and formats. It is integrated in C# or VB, thereby eliminating the mismatch between programming languages and databases, as well as providing a single querying interface for different types of data sources.

SQL is a Structured Query Language used to save and retrieve data from a database. In the same way, LINQ is a structured query syntax built in C# and VB.NET to retrieve data from different types of data sources such as collections, ADO.Net DataSet, XML Docs, web service and MS SQL Server and other databases.

LINQ queries return results as objects. It enables you to use an object-oriented approach on the result set and not to worry about transforming different formats of results into objects.

Example:

from name in names

where name.Contains('a')

select name;

JQuery and Ajax

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

Some of the key points use jQuery:

- It helps us to manipulate HTML and CSS
- It helps us to manipulate DOM (Document Object Model) elements
- Provides event methods to trigger and respond to an events on a html page such as mouse click, keypress etc.
- Implements AJAX calls.

Using jQuery (JavaScript library) on an HTML page: There are several ways to start using it on your website.

- Use the Google-hosted/Microsoft-hosted content delivery network (CDN) to include a version. Or
- Download it from the official website jQuery.com and host it on your server or local filesystem.

Advantages:

- Wide range of plug-ins that allows developers to create plug-ins on top of the JavaScript library.
- Large development community.
- It is a lot easier to use compared to standard javascript and other javascript libraries.
- It lets users develop Ajax templates with ease. Ajax enables a sleeker interface where actions can be performed on pages without requiring the entire page to be reloaded.
- Being Lightweight and powerful chaining capabilities makes it more strong.

Development process

Development Process

CR: new changes, new features to be added

BRD Preparation: Business requirement document is prepared by BA Team

FSD(Functional specification document) preparation: Is a technical document where functionality of the code is mentioned. BA team prepares it

Development Team: after FSD is prepared it is then given to development team.

QA validations: QA validations are handled

UAT(User Acceptance Test): Product is hosted on dummy server. Client and development team prepares it

Merge in production: Prepared by development team

Production Testing is done and then it goes for next process i.e Cr published

CR Published: Changes to be done

If there are any errors in QA validation it is called as QA defects

If there are any errors in Merge in production it is called as CR defects

If there are any errors in Production Testing it is called as Regression Defect

If there are any errors in UAT it is called as Support Log

Guidelines for development

1. Read the specification/requirement document
2. PM explains the functional details
3. PL/TL explains the technical details
4. Developer obtains all the details related to the development
5. Developer creates initial Technical Document.
6. Developer creates initial Test Case Document
7. Developer starts coding
8. Ensure all points are covered
9. Go through the checklist point
10. Do performance testing with a big DB
11. Developer does Unit Testing using Test case
12. PL/TL does testing + code review, checklist
13. Developer completes documentation (Tech + User doc + Test case results)
14. Make sure to update all the documents for the issue fix/change.
15. Once UAT is complete, do replications, update all relevant production documents

Issues

1. QA issues:

- The issues are encountered during internal testing.
- Logged by QA team or JIRA website
- Fixed by Development Team

2. UAT Issues:

- Clients encounter the issues
- Logged by client on support log(website)
- Fixed by Development Team

3. Support Issues:

- Issues are encountered by clients during usage of the product
- Logged by client in TS log section of support log
- Fixed by Development Team

After this training I was given an online MCQ based test and then after clearing it I was moved on to the OJT training.

OJT Training

OJT Training is an On the Job training which is conducted by Mr Rupesh Koragaonkar(Development, Open destinations). This training was conducted to get on the track of the job and also to practice and know the various functionalities that will be used during the job.

This is the time when I took a practice of how to go about resolving the issues, the use of the tools for managing these issues like the jira & svn tool and also the debugging the process and knowing the process of the database structure of the product.

Assigned to Team

On the 12th may 2023 I was assigned to the Rail Dev Team with Ritu James as mine PM and Mithila Metri as mine TL

Work Experience

Working at the open destinations is a great opportunity for me to explore how the development process goes with the big projects like this one which I have got as Travel Studio. It was a very good experience for me to work in the company with such a supportive, helping, friendly team & other staff. Also the environment of the open destination is very pleasant for working on such a big project.

It was my great experience to learn the various other new technologies & tools that are being used in the industry today. During the internship I was first given some of the various trainings require for the to get the knowledge of the project and the technologies that are being used in the Project to work on with it like Bootcamp Training, Product Training, Product Technical Training, On The Job Training and then I was assigned to the Team.

After the product technical training I have been given some simple tasks to be done and also some simple issues to be worked on and then in the team also I have been solving various issues.

In the beginning, I worked on the issue to fix the UI. The 2nd issue was related to the fixing of some error due to the null check wherein I have worked on fixing a few code behind files.then worked on with various other issues.

Timeline

1 Feb 2023	Introduction
	Induction Program
17 Feb 2023	Bootcamp
22 Feb 2023 - 07 March 2023	Product Training
15 March 2023 - 5 April 2023	Product Technical Training
6 April 2023 - 11 May 2023	On The Job Training
12 May 2023	Assigned into Team

Tools Used

Visual Studio IDE



The Visual Studio IDE is a creative launching pad that you can use to edit, debug, and build code, and then publish an app. Over and above the standard editor and debugger that most IDEs provide, Visual Studio includes compilers, code completion tools, graphic designers, and many more features to enhance the software development process.

Visual Studio Code



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

Microsoft SQL Server Management Studio



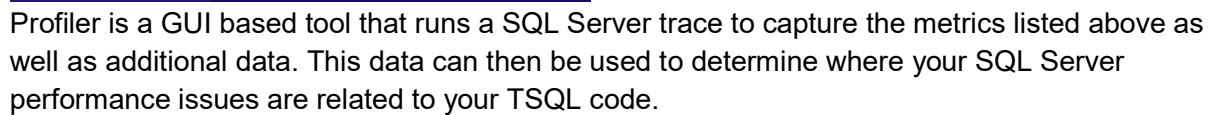
Microsoft SQL Server Management Studio is a software application developed by Microsoft that is used for configuring, managing, and administering all components within Microsoft SQL Server. First launched with Microsoft SQL Server 2005, it is the successor to the Enterprise Manager in SQL 2000 or before.

Microsoft SQL Server



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

MS SQL Server Profiler



Internet Information Services

Welcome

Bienvenue

Tervetuloa

Bem-vindo

Kakao

Valkommen

Witkomme

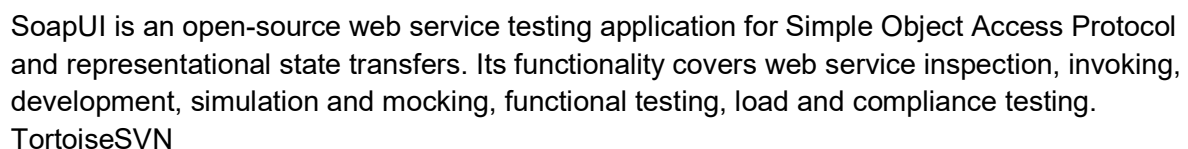
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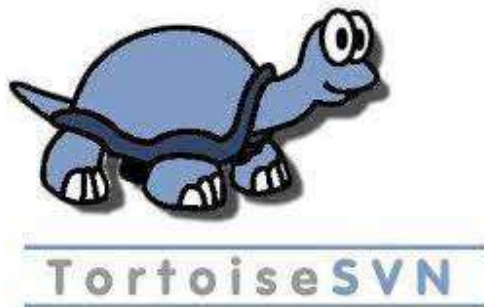
Willkommen

Uchabachika

Microsoft

SoapUI





TortoiseSVN is a Subversion client, implemented as a Microsoft Windows shell extension, that helps programmers manage different versions of the source code for their programs. It is free software released under the GNU General Public License.

Jira



Jira is a proprietary issue tracking product developed by Atlassian that allows bug tracking and agile project management.

References

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