

SUMMER INTERNSHIP

(SEM II)

Submitted in partial fulfilment of the requirements

Of the degree of

BACHELOR OF ENGINEERING

In

INFORMATION TECHNOLOGY

By

Name: Darshan Rander

FE Roll number: 06



Information Technology Department

Thadomal Shahani Engineering College

University of Mumbai

2019-2020

CERTIFICATE

This is to certify that the “Internship report” submitted by Darshan Rander, (Roll. No.: 06) is work done by him/her and submitted during 2019 – 2020 academic year, in partial fulfilment of the requirements for the award of the degree of “BACHELOR of ENGINEERING” in “INFORMATION TECHNOLOGY”, Thadomal Shahani Engineering College.

Department Internship Coordinator

Dr. Shanthi Therese S.

Dr. Shachi Natu



Certificate No:FTC20147

INTERNSHIP CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that Mr. **Darshan Rander**, has undergone internship from **01st June 2020** to **31st August 2020** as a **Flutter developer Intern** in our organization.

I hereby certify his work is **good** to the best of my knowledge.

For further details, please contact hr@fametronix.com

We wish him all the best for his future endeavours.

Warm regards,



Nelson Vasanth J
Founder & CEO

Place : Indiranagar

Date : 20th September 2020



#1300, 1st Floor, 13th Cross, Eshwara Layout,
Indiranagar, Bangalore - 560038.

info@fametronix.com

Acknowledgement

I would like to thanks Himanshu who Tech lead for my internship at Fametronix, Milan and Sagadevan who were guides for my internship at BTTC app. I would also like to thanks my colleagues who became really good friend of my during both the internships.

Fametronix

I worked for Fametronix in this summer internship as a Flutter developer for 3 months. It is a start-up led by Nelson V. based in Bangalore. This company can be famously known for exploiting their interns and making them work hard and not paying them enough and telling them to install spywares so they can see what they are doing in 30fpm and logging what their interns are doing on their own system.

The Problem and opportunity

There were a lot of problem. To start with no one actually knew flutter so I was all on my own and community. Looking at the positive side I got to talk to a lot of great minds and came to know about a lot of tricks and felt more confident on my skills. It surely didn't gave me any opportunity to learn new things as everything was same and API's were never completed so I can integrate them to complete even a single project.

Methodology

It was a usual process, wake up early and tell what will you work on today. And at the end of the day just say what you have completed and fill the EOD report. Talking about the actual work. I had given designs and I have to look at them and start making UIs which are similar to them and to be honest I loved the designs.

Key parts of the report & your findings and solutions provided in the report.

Report consist of an overview about what I did as I have signed NDA and couldn't tell you much about the projects I worked on. So I have given information about the Framework (Flutter) I have used and some normal information that are required in all the flutter projects.

Benefits to the company/institution through your report

I don't know that it would benefit to the company in anyway but this can surely benefit to the students and make then understand that these internships won't give them anything other than waste of time and a pure disappointment.

Index

SR. NO.	CONTENTS	PAGE NO.
1	Learning Objectives/Internship Objectives	6
2	Weekly overview of internship activities	7
3	Introduction	19
4	Internship Discussion	23
5	Conclusion	26
6	Bibliography	27
7	2 nd Internship(BTTC)	28

Learning Objectives/Internship Objectives

In the Internship I had to deliver all of my task in given amount of time. I have learnt to make better UIs and also got to learn new methods for creating animations. I have learnt about the real world skill of how to get what you deserve and also joy of doing stuff for free. I have worked on few projects during my tenure and loved to work on them.

First month was great at work and I gave my 100% in it to do my work as soon as possible. But there were some issues started to arise and when I was waiting for the APIs to integrate them which never showed up and all of my projects were left half complete and this made me really sad and I feel like all of my work was in vain because at the end of the internship I had not completed not even a single project.

I also have grown a skill to assume things before they ever come to live and you could work on them. This was a really good experience for me and later in life I would start to be more conscious about which company I'm going to work for and won't waste my time in any internships who are going to pay me less than what service I provide to them.

Weekly overview of internship activities: Week 1

WEEK #1	Date	Day	Name of the topic/Module
	01-06-2020	Monday	Introduction
	02-06-2020	Tuesday	No work assigned
	03-06-2020	Wednesday	UI
	04-06-2020	Thursday	UI
	05-06-2020	Friday	UI
	06-06-2020	Saturday	UI

Weekly overview of internship activities: Week 2

WEEK #2	Date	Day	Name of the topic/Module
	08-06-2020	Monday	UI
	09-06-2020	Tuesday	UI
	10-06-2020	Wednesday	UI
	11-06-2020	Thursday	UI
	12-06-2020	Friday	UI
	13-06-2020	Saturday	UI

Weekly overview of internship activities: Week 3

WEEK #3	Date	Day	Name of the topic/Module
	15-06-2020	Monday	UI
	16-06-2020	Tuesday	UI
	17-06-2020	Wednesday	UI
	18-06-2020	Thursday	UI
	19-06-2020	Friday	UI
	20-06-2020	Saturday	UI

Weekly overview of internship activities: Week 4

WEEK #4	Date	Day	Name of the topic/Module
	22-06-2020	Monday	UI
	23-06-2020	Tuesday	UI
	24-06-2020	Wednesday	UI
	25-06-2020	Thursday	UI
	26-06-2020	Friday	UI
	27-06-2020	Saturday	UI

Weekly overview of internship activities: Week 5

WEEK #5	Date	Day	Name of the topic/Module
	29-06-2020	Monday	Backend + UI
	30-06-2020	Tuesday	UI
	01-07-2020	Wednesday	UI
	02-07-2020	Thursday	UI
	03-07-2020	Friday	Backend + UI + Testing
	04-07-2020	Saturday	Testing

Weekly overview of internship activities: Week 6

WEEK #6	Date	Day	Name of the topic/Module
	06-07-2020	Monday	Testing
	07-07-2020	Tuesday	Testing
	08-07-2020	Wednesday	UI
	09-07-2020	Thursday	UI
	10-07-2020	Friday	UI
	11-07-2020	Saturday	UI

Weekly overview of internship activities: Week 7

WEEK #7	Date	Day	Name of the topic/Module
	13-07-2020	Monday	Testing
	14-07-2020	Tuesday	Testing
	15-07-2020	Wednesday	Testing
	16-07-2020	Thursday	Testing
	17-07-2020	Friday	Testing
	18-07-2020	Saturday	Testing

Weekly overview of internship activities: Week 8

WEEK #8	Date	Day	Name of the topic/Module
	20-07-2020	Monday	Testing
	21-07-2020	Tuesday	Testing
	22-07-2020	Wednesday	Testing
	23-07-2020	Thursday	No work assigned
	24-07-2020	Friday	No work assigned
	25-07-2020	Saturday	No work assigned

Weekly overview of internship activities: Week 9

WEEK #9	Date	Day	Name of the topic/Module
	27-07-2020	Monday	No work assigned
	28-07-2020	Tuesday	No work assigned
	29-07-2020	Wednesday	No work assigned
	30-07-2020	Thursday	No work assigned
	31-07-2020	Friday	No work assigned
	01-08-2020	Saturday	No work assigned

Weekly overview of internship activities: Week 10

WEEK #10	Date	Day	Name of the topic/Module
	03-08-2020	Monday	No work assigned
	04-08-2020	Tuesday	No work assigned
	05-08-2020	Wednesday	No work assigned
	06-08-2020	Thursday	No work assigned
	07-08-2020	Friday	No work assigned
	08-08-2020	Saturday	No work assigned

Weekly overview of internship activities: Week 11

WEEK #11	Date	Day	Name of the topic/Module
	10-08-2020	Monday	No work assigned
	11-08-2020	Tuesday	No work assigned
	12-08-2020	Wednesday	UI
	13-08-2020	Thursday	UI
	14-08-2020	Friday	UI
	15-08-2020	Saturday	Holiday

Weekly overview of internship activities: Week 12

WEEK #12	Date	Day	Name of the topic/Module
	17-08-2020	Monday	UI
	18-08-2020	Tuesday	UI
	19-08-2020	Wednesday	UI
	20-08-2020	Thursday	UI
	21-08-2020	Friday	UI
	22-08-2020	Saturday	UI

Weekly overview of internship activities: Week 13

WEEK #13	Date	Day	Name of the topic/Module
	24-08-2020	Monday	UI
	25-08-2020	Tuesday	UI
	26-08-2020	Wednesday	UI
	27-08-2020	Thursday	UI
	28-08-2020	Friday	UI
	29-08-2020	Saturday	UI

Weekly overview of internship activities: Week 14

WEEK #14	Date	Day	Name of the topic/Module
	31-08-2020	Monday	UI

Introduction

- **Flutter**

Flutter is an open-source UI software development kit created by Google. It is used to develop applications for Android, iOS, Linux, Mac, Windows, Google Fuchsia, and the web from a single codebase.

The first version of Flutter was known as codename "Sky" and ran on the Android operating system. It was unveiled at the 2015 Dart developer summit, with the stated intent of being able to render consistently at 120 frames per second. During the keynote of Google Developer Days in Shanghai, Google announced Flutter Release Preview 2, which is the last big release before Flutter 1.0. On December 4, 2018, Flutter 1.0 was released at the Flutter Live event, denoting the first "stable" version of the Framework. On December 11, 2019, Flutter 1.12 was released at the Flutter Interactive event.

On May 6, 2020, the Dart SDK in version 2.8 and the Flutter in version 1.17.0 were released, where support was added to the Metal API, improving performance on iOS devices (approximately 50%), new Material widgets, and new network tracking tools.

- **Dart platform**

Flutter apps are written in the Dart language and make use of many of the language's more advanced features.

On Windows, macOS, and Linux. Flutter runs in the Dart virtual machine, which features a just-in-time execution engine. While writing and debugging an app, Flutter uses Just In Time compilation, allowing for "hot reload", with which modifications to source files can be injected into a running application. Flutter extends this with support for stateful hot reload, where in most cases changes to source code are reflected immediately in the running app without requiring a restart or any loss of state.[11]

Release versions of Flutter apps are compiled with ahead-of-time (AOT) compilation on both Android and iOS, making Flutter's high performance on mobile devices possible.

- **Flutter engine**

Flutter's engine, written primarily in C++, provides low-level rendering support using Google's Skia graphics library. Additionally, it interfaces with platform-specific SDKs such as those provided by Android and iOS. The Flutter Engine is a portable runtime for hosting Flutter applications. It implements Flutter's core libraries, including animation and graphics, file and network I/O, accessibility support, plugin architecture, and a Dart runtime and compile toolchain. Most developers interact with Flutter via the Flutter Framework, which provides a reactive framework and a set of platform, layout, and foundation widgets.

- **Foundation library**

The Foundation library, written in Dart, provides basic classes and functions that are used to construct applications using Flutter, such as APIs to communicate with the engine.

- **Design-specific widgets**

The Flutter framework contains two sets of widgets that conform to specific design languages: Material Design widgets implement Google's design language of the same name, and Cupertino widgets implement Apple's iOS Human interface guidelines.

Internship Discussion

- **How the objectives achieved?**

I don't which objectives should I say here, so let's start with go with all. The company achieved its objective for getting their work done for real cheap and that's clear how they did it was by hiring me by saying that they will help me to build my skills which was totally not the case. I can't totally blame the company as I was not that attentive while accepting the offer letter and accepted all the terms as this was my first internship. They just got their work done by hiring me and make me work on projects which to be obvious were not completed.

I have achieved my objectives by working on VSCode and writing codes for days and googling stuff and asking questions on stackoverflow. Other objectives include that I learnt how to work in community

Some animations were complex enough so that I almost gave upon them but my Tech lead was kind enough to boost my confidence and community also helped me. I also learnt from the packages which were made by others and built animations for myself.

- **What skills (scientific and professional) were learned during the internship?**

- Learnt how to deal with people

As I have faced a lot of problems during by internship so I built tactic to deal with people and get my work done.

- Learnt to how to read other's code

As I was facing issues with animations so I had to look upon others code for reference and make some tweaks to my code and work upon it.

- Learnt to better optimize the code

As I was in the fantasy of getting the app into the app store and with users with it. I felt to better optimize the program.

- Made contacts with people and expanded my network

My colleagues were very generous and I had really great time talking to them. Hope I could work with them again in some time.

- **Results/observations/work experiences get in the internship company**

Results are amazing. I totally hate internships now, I really feel like rather than making summer internships compulsory allow us to learn and explore different technologies and they literally don't care or overlook how companies are exploiting their interns.

I have also observed that how these companies lie about themselves and make fresher like us to join in and be happy about what we are doing at this company until we realize that we are just working so much and not learning anything but to how to fight for what you deserve and feel that everyone is in same condition.

Working over there was like a really good experience. I never expected to work for three months and feel like I have done nothing productive in that whole time. Learning was of only one month and rest were what they assign you must be done. To sum up the work I have done in the internship I would like to say that. I have done 9-5 job with an underpaid salary.

Conclusion

Overall experience at the internship was a mixed bag. I learnt a few things and lot of social skills. I will be more considerate while hunting for next internship and will try to be more attentive in terms of the offer letter. And I also now understand the importance of being in a great community is greater than being in a great work team. People can be very helpful if you know who and how to talk. Always look for companies online before joining in and start to work in it and decide your term at that time.

Bibliography

- [https://en.wikipedia.org/wiki/Flutter_\(software\)](https://en.wikipedia.org/wiki/Flutter_(software))

BTTC App

I got this internship from my college MAD CLUB it was a project on which 5 student worked under the guidance of Milan and Sagadevan. I really enjoyed to work with these guys they were so good. As in everywhere you go might find some annoying people around but our Milan and Sagadevan helped me out and were always there for us.

We worked for on the app for BTTC (Bombay Teachers' Training College). It was a really good experience but I feel that we have extended the project time a lot. As this was a native android development project and I have very less knowledge in it so I got to learn a lot in it.

This internship has given me friends for life time and I'm very happy that I didn't missed this opportunity and worked on this project.