



NITTE
EDUCATION TRUST

N.M.A.M. INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)

Nitte – 574 110, Karnataka, India

REPORT

ON

FOUR WEEKS OF INTERNSHIP

Carried out at

COLLEGE INNOVATORS CENTER

Submitted to

NMAM INSTITUTE OF TECHNOLOGY, NITTE

(An Autonomous Institution under VTU, Belagavi)

In partial fulfillment of the requirements for the award of the

Degree of Bachelor of Engineering
in
Computer Science & Engineering

by

SHARIQ ALI B N

USN: 4NM16CS134

Under the guidance of

Mr. DEEKSHITH



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(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)
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CERTIFICATE

*This is to certify that the “Internship report” submitted by Mr. SHARIQ ALI B.N bearing USN 4NM16CS134 of 8th semester B.E., a bonafide student of NMAM Institute of Technology, Nitte, has undergone at least four weeks of internship at COLLEGE INNOVATORS CENTER during May 2020 fulfilling the partial requirements for the award of degree of Bachelor of Engineering in **Computer Science & Engineering** at NMAM Institute of Technology, Nitte.*

Name and Signature of Mentor

Signature of HOD



CERTIFICATE OF INTERNSHIP

THIS CERTIFICATE IS PRESENTED TO

.....Sharig, Ali.....

in recognition of His/Her hard work and dedication in completing the Summer Internship

from 1st July 2019 to 31st July 2019 at CIC - NMAMIT

Date: 22/08/2019

COLLEGE
Innovators Center
Your Result Is Our Success


SIGNATURE

Keerthan Prabhu
Founder & CEO
College Innovators

ACKNOWLEDGEMENT

I take this opportunity to express my heartfelt gratitude and appreciation to all those who provided me the support and encouragement to complete these projects. Without their contributions, inputs and suggestions, I would not have succeeded in developing the idea and completing the project. I record my indebtedness to COLLEGE INNOVATORS CENTER for giving me a platform to learn during my internship.

My heartfelt thanks to my esteemed guide and mentor, **Mr. Deekshith** from COLLEGE INNOVATORS CENTER, for his valuable advice, endless support and motivation, constantly throughout.

I would like to thank **Dr. Niranjan Chiplunkar**, Principal, NMAMIT and the Department of Computer Science and Engineering for their consistent support and providing me this opportunity to do the internship.

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1. ABSTRACT

College Innovators Center introduces the College Internship Drive to let students of NMAMIT experience industry standards right in the college every year. These internship drives are sponsored and approved by the college for partial requirements for the award of degree of Bachelor of Engineering in Computer Science & Engineering at NMAM Institute of Technology, Nitte.

I have done my internship on Mobile App Development using Android Studios which helped me to understand the concepts of designing interface elements like Layout and Fragments and learnt about how, why and where to use them.

The objective of the internship was to develop 3 android apps individually to get a firm grasp on developing mobile apps and explore the different elements of Android Studios on developing mobile apps

The training focused heavily on commercial aspects of app development such as the usage of UI colors and when to use them as well as what makes for an appealing user interface. By learning the trips and tricks that industries use to expand their user base, I learnt ways to make myself more useful and appealing as an prospective employee to different industries.

2. INTRODUCTION TO THE INDUSTRY

College Innovators Center is an open platform that enables and empowers individuals to LEARN, DO, TEACH and EARN through practical, relevant and real time education. The platform's motive is to- re-innovate the education system where individuals get maximum results with less investment of time, energy and resources.

Founded by Keerthan Prabhu in 2015, though the platform is new, it provides a way for students to learn about the most relevant technology today such as IoT, 3D Printing, Mobile App development, VR, etc.

Industry experts are continuously invited to impart their valuable experience to the college students in hope of preparing the students and reducing the gap between industry and college

3. DETAILS OF THE TRAINING UNDERGONE

3 apps were developed for training purposes and they are as follows:

3.1 Calculator App

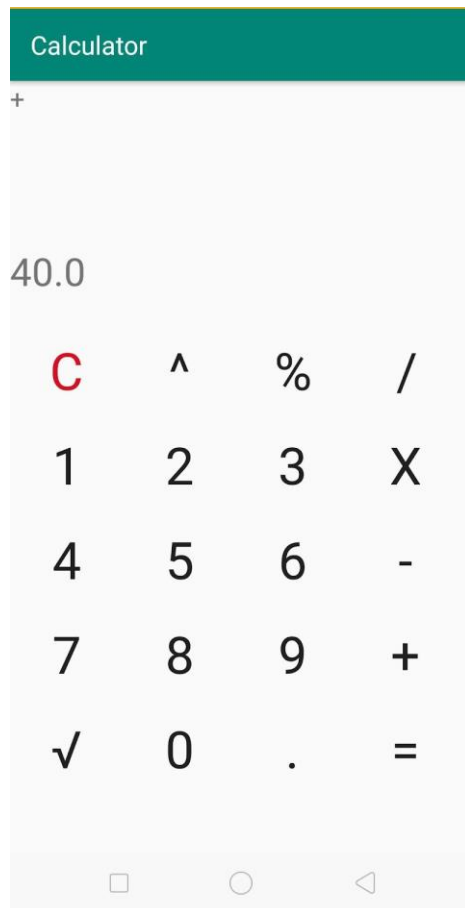


Figure 3.1 Calculator

Training started with learning of basics. To get familiar with buttons and programming of UI elements, A simple calculator app was developed.

As seen from Figure 3.1, it mainly consisted of buttons representing different numbers and operators. Linear layout was used to arrange the buttons and the screen while switch cases were used to switch between different operators.

3.2 Fragments and Recycler View

After being familiar with the basic UI components like Fragments, Scroll View, RecyclerView was taught to us.

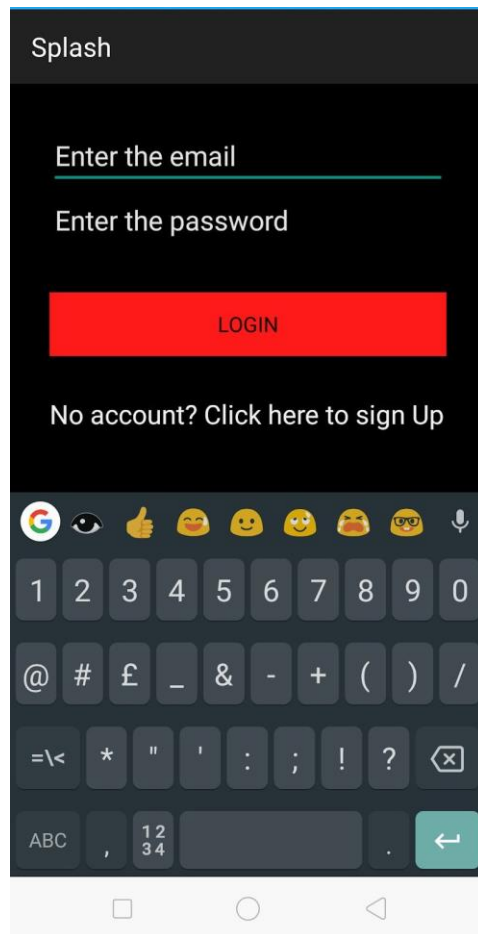


Figure 3.2.1 Login Fragment

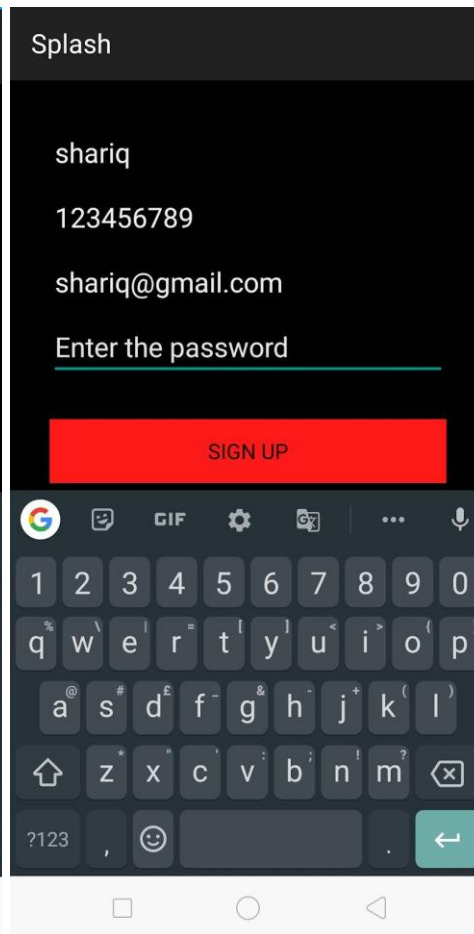


Figure 3.2.2 Sign Up Fragment

Fragments consisted of a group of UI elements that can be used in any of the layouts without using too much memory. During training, Login and SignUp were developed using fragments as shown in figures 3.2.1 and 3.2.2 respectively. Both of them were in single layout, even though it appeared as if there were multiple layouts. This concept reduces the size of the final app.



Figure 3.2.3 Scroll View of Pics



Figure 3.2.4 Splash Screen

After signing in, Scroll View was used to let the user smoothly scroll down to view different images as shown in Figure 3.2.3. Special care was made to compress the image so as to not appear laggy while scrolling down. Splash screen was used at the beginning of the project as well and where a pic was displayed for a few seconds before that app starts. The above Figure 3.2.4 shows the splash screen image used in the project.

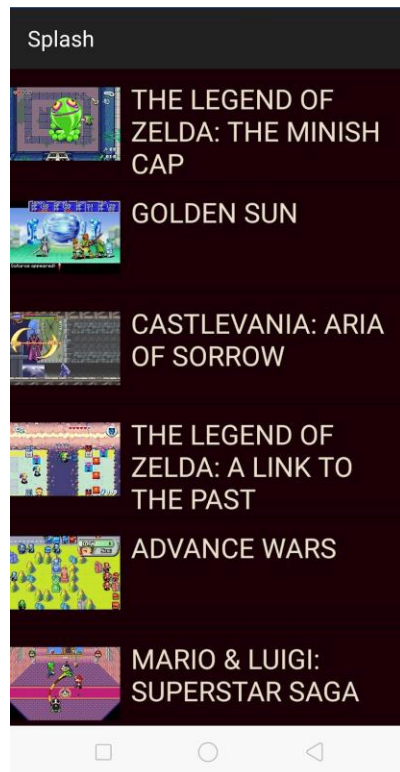


Figure 3.2.5 Recyclerview

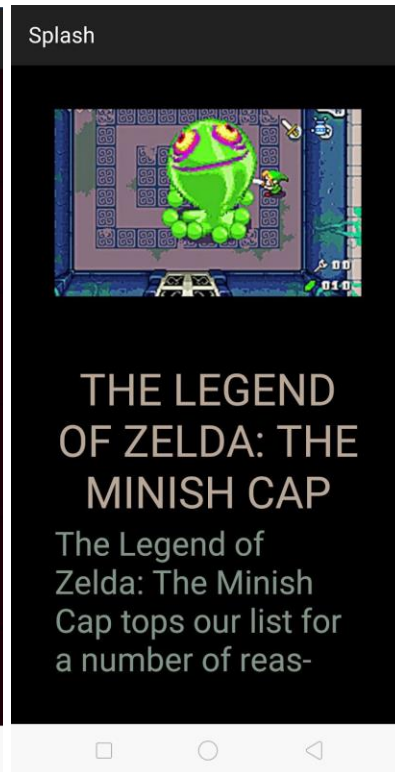


Figure 3.2.6 Game Details

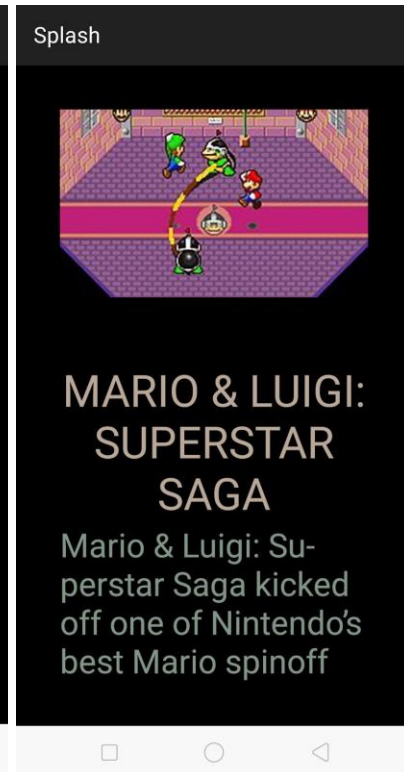


Figure 3.2.7 More Game Details

Next Recycler view was used to represent different games as shown in Figure 3.2.5. Games could be easily scrolled through using this view. Tapping on any of the games would display their details in the next layer as shown in both Figure 3.2.6 and Figure 3.2.7. An interactive UI was developed this way.

3.3 Library App

After being trained on different concepts, we were asked to develop our own apps without any help or guidance. It was time to demonstrate the skills we learnt until now. I developed a library app with some dummy books in it.

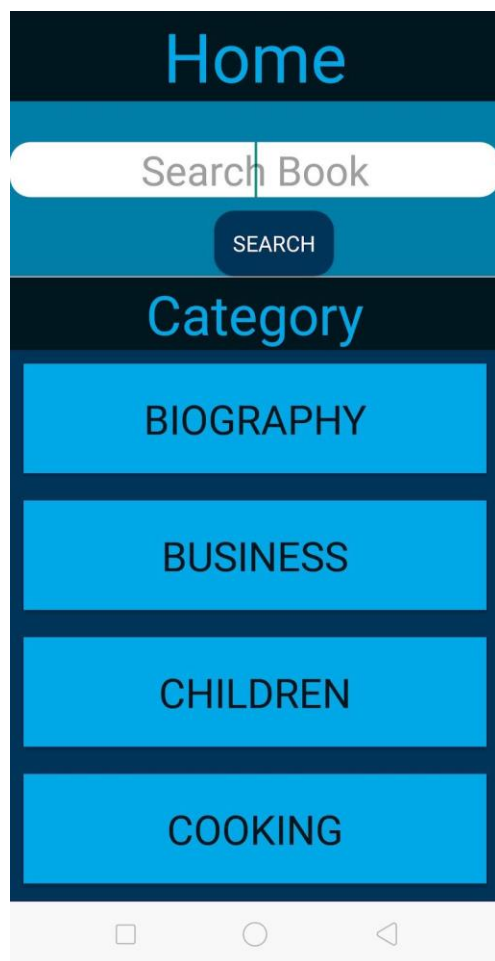


Figure 3.3.1 Library Home

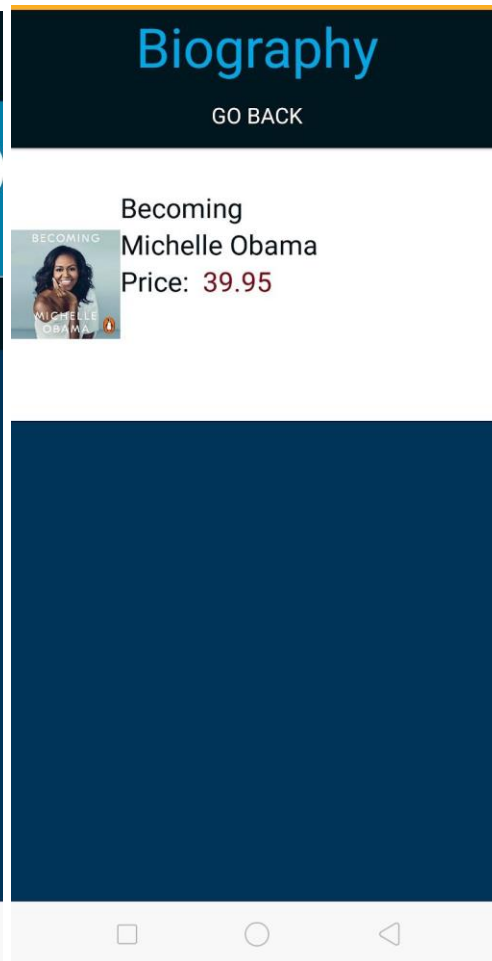


Figure 3.3.2 Biography View

Home screen consisted of a search bar and a scroll view consisting of different categories of books to choose from as shown in Figure 3.3.1. Upon choosing any category, the books will be shown using a recycler view as demonstrated in the Figure 3.3.2.

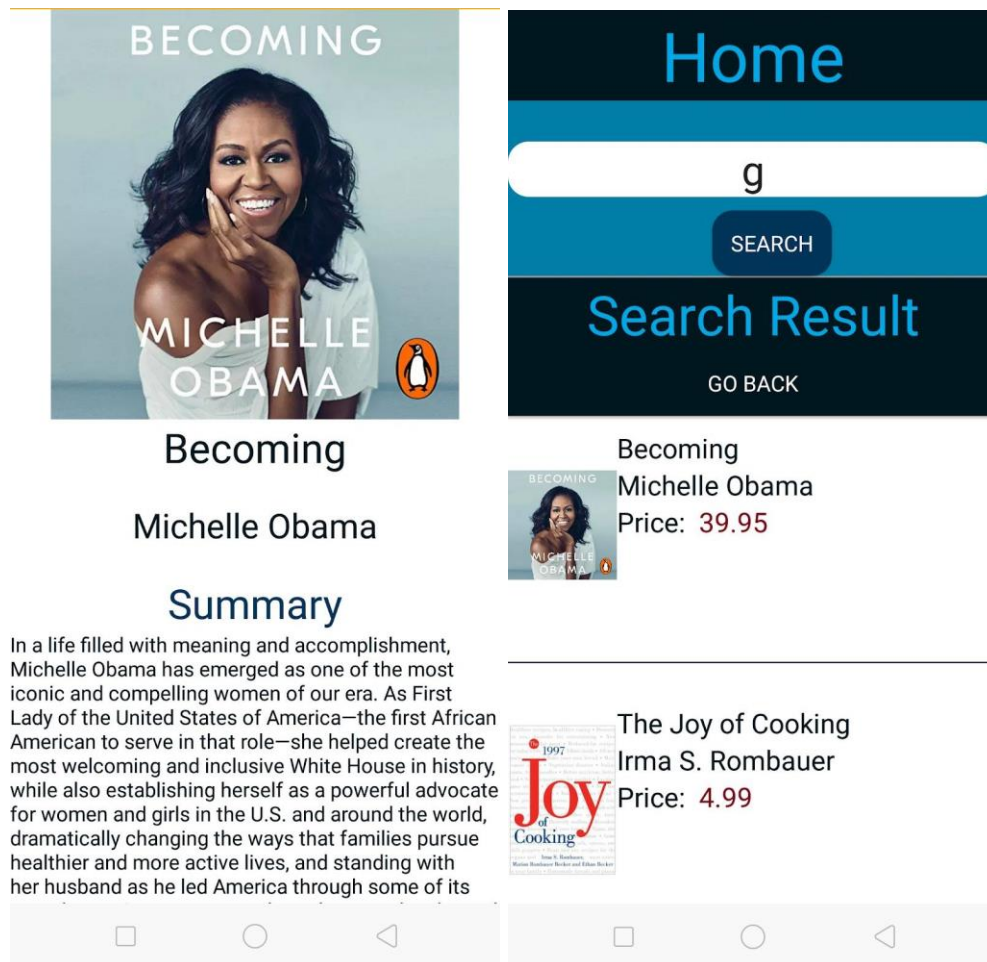


Figure 3.3.3 Book Details

Figure 3.3.4 Search View

Upon clicking a book, the details of the book would be shown along with the summary as you can see in Figure 3.3.3. The search bar from the Home Page can also be used to find books from any category by searching book titles. The Figure 3.3.4 shows the search results for letter 'g'. All the books with the letter 'g' in it were displayed as results in a recycler view.

4. CONCLUSION

I have worked on developing 3 different android apps and came out more experienced as an app developer. The 4 weeks of internship also gave me insight into little tips and tricks they use to become more successful.

I have come out of internship more confident in myself and would like thank COLLEGE INNOVATORS CENTER for letting me into their platform for this amazing experience

5. REFERENCES

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