

# **KSOLVES INDIA LIMITED**

A Project-II Report

Submitted in partial fulfillment of requirement of the

Degree of

**BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE &  
ENGINEERING**

BY

**Shivkant Sisodiya**

**EN18CS302046**

Under the Guidance of

**Mr. Vivek Gupta**



**Department of Computer Science & Engineering**

**Faculty of Engineering**

**MEDI-CAPS UNIVERSITY, INDORE- 453331**

**Jan-June[2022]**

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## **Report Approval**

The project work “**KSOLVES INDIA LIMITED – News App**” is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approved any statement made, opinion expressed, or conclusion drawn there in; but approve the “Project Report” only for the purpose for which it has been submitted.

Internal Examiner

Name:

Designation

Affiliation

External Examiner

Name:

Designation

Affiliation

## **Declaration**

I hereby declare that the project entitled “**KSOLVES INDIA LIMITED – News App**” submitted in partial fulfillment for the award of the degree of Bachelor of Technology in ‘Computer Science & Engineering’ completed under the supervision of **Mr. Vivek Gupta** , Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

**Shivkant Sisodiya**

**April 19, 2022**

## Certificate

I, **Mr. Vivek Gupta** certify that the project entitled “**KSOLVES INDIA LIMITED – News App**” submitted in partial fulfillment for the award of the degree of Bachelor of Technology by **Shivkant Sisodiya** is the record carried out by him under my guidance and that the work has not formed the basis of award of any other degree elsewhere.

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Mr. Vivek Gupta

Dept. of Computer Science & Engineering

Medi-Caps University, Indore

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External Examiner

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Dr. Pramod S. Nair

Head of the Department

Computer Science & Engineering

Medi-Caps University, Indore

# Offer Letter of the Project work-II/Internship



## Internship Offer

Date: 30<sup>th</sup> September, 2021

Dear Mr. Shivkant Sisodiya,

On behalf of **Ksolves India Ltd.**, I am pleased to extend to you this offer of internship for **development** profile. If you accept this offer, you will begin your internship of twelve months with the Company on **4<sup>th</sup> October 2021**. Your internship is expected to end on **4<sup>th</sup> August 2022**.

**Compensation:** During internship, you would be given a stipend of **Rs. 20,000 per month**.

**Job Location: Noida**

**Leaves:** During internship you are not entitled for any earned leaves however in case of unavoidable circumstances; leave without pay (LOP) can be taken with concerned manager and HR's consent. Subsequent to completion of internship, you will earn 12 days for the first year and 18 days from second year onwards.

**Employment offer:** During internship, your performance will be evaluated by your supervisors on regular basis. On the basis of your performance, company will offer a full-term employment upon successful completion of internship. You will be offered a role with starting cost to company (CTC) of **Rs. 3,50,000** per year.

**Employment contract:** Company as part of new joiner training would be incurring material amount of investments in form of but not limited to on-job training, classroom training, and hardware & software costs. In case you resign from contract with Ksolves India Ltd. within 24 months (10 months of internship & 14 months of employment); you would be liable to pay **Rs. 1,00,000/-** to the Company as compensation of such costs and also to serve the prescribed notice period. You are required to submit a cheque of **Rs 1,00,000/-** (Rupees One Lakh) in name of "Ksolves India Limited" with blank date. Same will be returned to you upon completion of contract period.

**Notice for contract termination:** You are required to serve **Three (3) Months' notice period from the date of your resignation**, this notice period is applicable during and after stipulated contract period of 24 months (comprising of 10 months of internship and 14 months of employment),

**Confidential information:** During your internship, you may have access to trade secrets and confidential business information belonging to the Company. By accepting this offer of employment, you acknowledge that you must keep all of this information strictly confidential, and refrain from using it for your own

Ksolves India Limited (Formerly known as Ksolves India Private Limited)  
Registered Office: H.No. B-8/1, Ground Floor, Saidulajab, Delhi, South Delhi- 110030, India  
Telephone No: 9871977038 Email Id: cs@ksolves.com Website: www.ksolves.com

CIN: L72900DL2014PLC269020

purposes or from disclosing it to anyone outside the Company. In addition, you agree that, upon conclusion of your employment, you will immediately return to the Company all of its property, equipment, and documents, including electronically stored information.

By accepting this offer, you agree that throughout your internship and employment, you will observe and abide all policies and practices governing the conduct of our business, interns and employees. This letter sets forth the complete offer we are extending to you, and supersedes and replaces any prior inconsistent statements or discussions. It may be changed only by a subsequent written agreement by both sides.

I hope that your association with the Company will be successful and rewarding. Please indicate your acceptance of this offer by signing below and returning it to HR Manager. If you have any questions, do not hesitate to contact me.

**Very truly yours,**

**For Ksolves India Limited**



**Kirti Jain**  
**HR Manager @ Ksolves India Ltd.**

I accept internship with the Company on the terms and conditions set out in this letter.

\_\_\_\_\_ Name \_\_\_\_\_ Signature \_\_\_\_\_ Date

## Completion certificate/Letter



Date: 16<sup>th</sup> May 2022

### PROVISIONAL INTERNSHIP CERTIFICATE

#### TO WHOM IT MAY CONCERN

This is to certify that Mr. Shivkant Sisodiya, B.Tech in Computer Science student from CTIS, was working as an Intern (From 4<sup>th</sup> Oct'2021 – till date) at Ksolves India Ltd.

During this period, he is getting exposure and training on the technology like “Android & Flutter” and have worked on a live project.

Further, we found him sincere, hardworking, technically sound and result oriented.

Akanksha Saini  
Senior HR Manager  
@Ksolves India Limited

Ksolves India Limited (Formerly known as Ksolves India Private Limited)  
Registered Office: H.No. B-8/1, Ground Floor, Saidulajab, Delhi, South Delhi- 110030, India  
Telephone No: 9871977038 Email Id: cs@ksolves.com Website: www.ksolves.com

CIN: L72900DL2014PLC269020



## **Acknowledgments**

I would like to express my deepest gratitude to Honorable Chancellor, **Shri R C Mittal**, who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) Dilip K Patnaik**, Vice Chancellor, Medi-Caps University, whose unfailing support and enthusiasm has always boosted up my morale. I also thank **Prof. (Dr.) D K Panda**, Pro Vice Chancellor, **Dr. Suresh Jain**, Dean Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Dr. Pramod S. Nair** for his continuous encouragement for betterment of the project.

I express my heartfelt gratitude to my **External Guide, Mr. Chinmay Mourya, Senior Software Developer, Ksolves India Ltd** as well as to my Internal Guide, **Mr. Vivek Gupta, Professor, Department of Computer Science Engineering, MU**, without whose continuous help and support, this project would ever have reached to the completion.

I would also like to thank to my team at **Ksolves, Mr. Chinmay Mourya, Mr. Ramesh Shinde, Mr. Ashish Singh Tanwar, Mr. Siddhant Kumar Singh, Mr. Kunal Wadhwa** who extended their kind support and help towards the completion of this project.

It is their help and support, due to which we became able to complete the design and technical report. Without their support this report would not have been possible.

**Shivkant Sisodiya**

B.Tech IV Year

Department of Computer Science & Engineering

Faculty of Engineering

Medi-Caps University, Indore

## **Executive Summary**

As world's technology is rapidly growing we have fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have these facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is android mobile application where user have access to latest news from 120+ newspapers from 50+ countries. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way.

The main objective of the project is to provide people a handy android application through which people can access all types of news and information. Through this application, any user can gain technical knowledge of the world and its surrounding with just one click ahead. User does not have to visit multiple sites for different related information. All information is going to be in one place. Many people generally get the redundancy in the information. Sometimes, people even spread fake news, which circulates and spread more like a disease of false information in WhatsApp and other social media. Various myths are also likely to spread as soon as possible which gives more harm than good to the people. This app while cross-checks the redundancy in the information along with the false and misleading information, which later results in panic in the people.

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## **Chapter 1.1 : About the Company**
















### **Ksolves India Limited**

Ksolves is an award-winning software development firm providing services to organizations of all sizes, right from Small and Medium scale companies to startups building their business. We leverage the latest technologies to untangle complex client problems and put them on a path to success.

Ksolves India Limited is a publicly listed company on India's largest stock exchange, National Stock Exchange (NSE), having a team of 350+ developers and architects and 30+ global clients with our Offices in the USA, India & East Africa.

Our expertise includes Apache Spark, Apache Cassandra, Apache NiFi, Salesforce, Machine Learning, Artificial Intelligence, OpenShift, Microservices, Penetration Testing, DevOps etc.

### **Our Expertise :**

	Salesforce	→		DevOps	→
	AI & Machine Learning	→		Big Data	→
	Serverless Architecture	→		Apache Cassandra	→
	Apache Kafka	→		Apache Spark	→
	Apache Nifi	→		MERN & MEAN Stack	→
	Java/Micro Services	→		Openshift	→
	Magento Development	→		Odoo Development	→
	Node.js Development	→			

## **Chapter 1.2**

### **Introduction**

Android provides simple application structure and requires Java and Mark-up languages knowledge to work with. Such as, an discrete movement delivers a solitary screen for a user interface and a service whole completes work in the contextual. We can work on different module separately and can combine at the end, we can also add future modules easily afterwards. API (Application Programming Interface) which is an intermediate interface between different applications. It provides automation, immediacy, adaption and personalization. News API provides us the source of news articles from many different sources at one place and updates it. To expand the sources old fashioned Admin panel can be used where writers will fill the gap of API.

In 2014, a design language has been created by google named Material Design which is based on “cards” uses grind based layouts, responsive animation, padding and depth effects like shadow to create an responsive, attractive and easy user interface. With the use of different libraries and material design it is possible to use attractive UI.

## **Chapter 1.3**

### **Purpose**

The purpose is to develop an android application, which will eliminate the problems faced in the current scenario. This application will provide all the information and news related to cyber security, E- sport, Science, and Technology or that are in trend at one place. So, it will save time and efforts of the users by making it more efficient. Using, this application will terminate the possibility of information redundancy.

## **Chapter 1.4**

### **Motivations and Scope**

The Motivations and scope behind this project are to connect people through this application and provide a medium to share their views on the topic/ news/ information. Then, People with the same interest can interact with each other. However, they can even share more information on the topic. Later on, we can publish this application on the Play Store.

## **Chapter 2.1**

### **Modules**

#### **User Interface :**

One of the factors in successful news app development is visualization of news and its feature with user. For the development of an android app material design is very useful and provides smooth experience with custom layout, views and animations. For this news app user should be able to select from different categories, countries and newspaper. Short News as list view with header, little description and image before showing full article can be helpful to user to determine what type of news they are looking for. View Holder can be used for this list view for better and fast experience. Library like Picasso can be used for better image handling. This User interface will be connected to API and Admin Panel database which will give full article in form of web view of that article. Because of this structure the integrity of writer of that article will not be in harm.

#### **API :**

News API has been used for collecting different news sources at one spot. On sending request it will give response in JSON format which contains source id, title, description, image URL, article URL, author, time etc. We need to handle and parse this JSON into string format which is our required format.

#### **Admin Panel :**

This module of app controls the User and Writers logins from database. Writers can add news, update and delete from its database as per required. Writers will only has access to admin panel while Main Admin will has access to database as well. Main Admin can add Users, Writers, and News. He can also approve, update and delete it. Using this approach we can create network in local areas connect by writers and local admins which will provide news at local level and we can also implement location feature which will update local news of different location or city.

## **Chapter 2.2**

### **Available Features**

#### **Global Support:**

Different type of newspaper will be available from all around the world in different languages with this user will be able to get news from all around the world.

#### **Short News:**

News will be displayed in short format with title, image and little description in list view. It will help user to access required news faster.

#### **Search Option:**

User will be able to search from not only one source but many different sources available within API.

#### **Favourite /Offline Reading:**

News can be added as favorites which will automatically will be saved for offline reading.

#### **Sharing:**

User will be able to share news easily on social media



## **Chapter 2.3**

### **Software Requirement Specifications**

#### **2.3.1 Hardware Requirements**

Below mentioned are the minimum requirements by the phone :

CPU	Octa-core 1.3GHz and above
RAM	2GB and Above
Display	1080*1920
Resolution	16:9 ratio and above
Internal memory	8GB
Chipset	MediaTek/Snapdragon/Exynos
Size	4.0+ inches (401 PPI)
GPU	Adreno, Mali, Bionic

#### **2.3.2 Software Requirements/Technologies Used**

Operating system	Android 6.0 (Marshmallow) and above
Coding Language	Java, XML, Kotlin
Java Platform	JRE 1.8.0 amd64 and JDK 64-bit Server VM by JetBrains
IDE	Android Studio 3.5.2 and above

## **Chapter 2.4**

### **Experimental Setup**

1. Install the latest version of IDE ANDROID STUDIO in your System to set the environment for the project.
2. Configure the android studio by downloading the Intel HAXM installer.
3. Select the starting activity in the initial window of the IDE. Configure the minimum requirement for the application.
4. We have to create an Android Virtual Device(AVD) to test and run the application on the virtual platform before deploying.
5. After completion, the debugging of the application is done before deploying

## Chapter 2.5

### Basic Implementation

**Step 1 :** Install And Configure your Android Studio with the new version, then afterward create a new android project, application name “**News App**” with minimum android and tablets API 4.0 jelly Bean configuration with configuring activity “main activity”.

**Step 2 :** Now configure Gradle Scripts in build gradle for customizing dependencies then sync it, now in android manifest give the user permission for INTERNET.

**Step 3 :** Now the main design process starts from res session accompany with drawable, layout, mipmap, and values (color). Change it according to your desire.

**Step 4 :** Now create the package modules in java, afterward create the **News**, **Article** and **Source class** in that module package as mention in News API.

**Step 5 :** Generate your News API key from **www.newsapi.org**, API News Is JSON API for live news and blog articles from the media.

**Step 6 :** Create another package for API in the same java folder then, add a new **API client class** and **API interface** in it.

**Step 7 :** API Interface uses retrofit2 as HTTP Client. Retrofit is a REST Client for Java and Android. Its use is very easy.

**Step 8 :** Now the overall design process started by adding the new resource file name item in the layout folder.

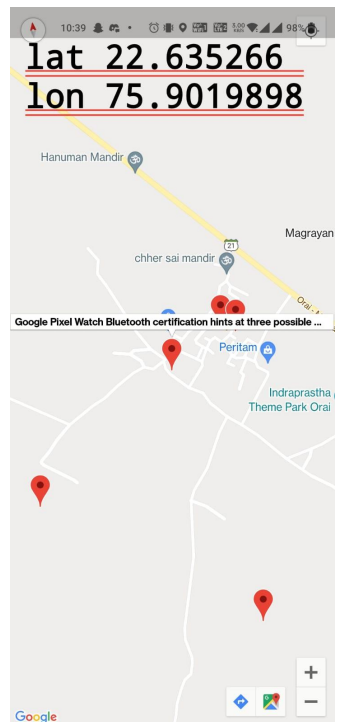
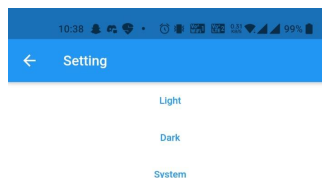
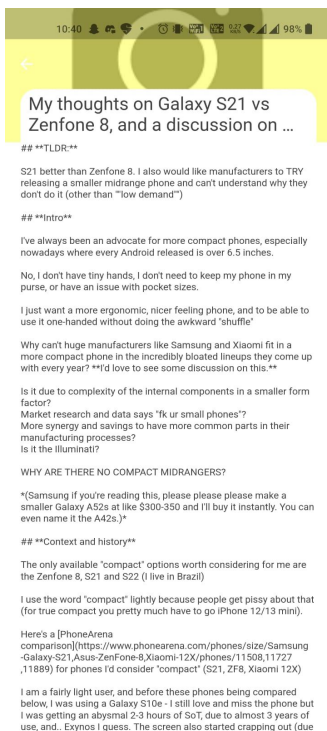
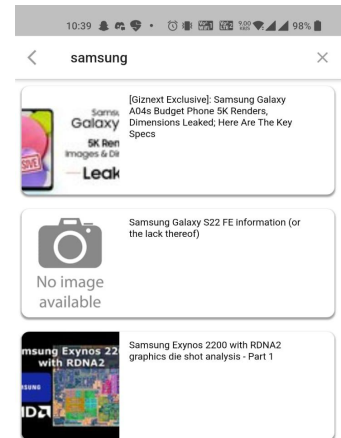
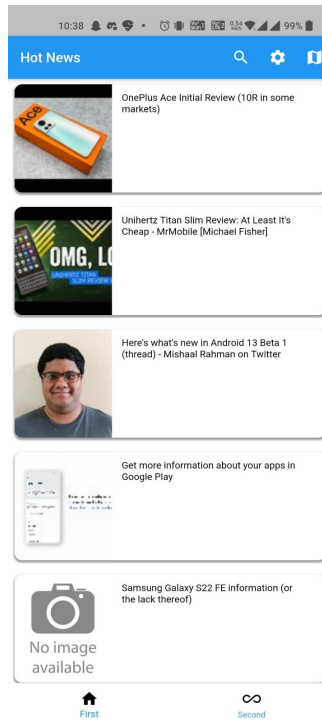
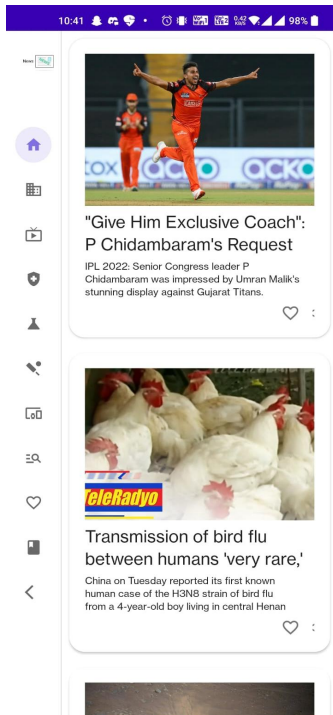
**Step 9 :** Configure your desire layout then, extend all the classes code in the **Adaptor class** And **util class**.

**Step 10 :** Then add your Secret News API key in the main Activity class.

**Step 11 :** Run the program.

## Chapter 2.6

### Output/ Result/ Screenshot



## **Chapter 3**

### **Results and Discussions**

The internship provides a way to get exposure in the corporate world. After the internship, the intern learns the following things-

- The intern now has a good understanding of Java, Dart, Kotlin, Flutter and Android Studio.
- Ability to work with different people i.e team work in achieving departmental as well as organizational goals.
- Improvised verbal and written communication skills
- Strong organizational and management skills
- Planning and Preparing for deadline goals
- Learn the culture of the IT industry
- Learn the basics of writing and maintaining leadership and time management capabilities
- Implement ideas into reality, maintaining and fixing bugs in real time
- Manage work and scheduling using standard software applications and in house softwares of the company.

## **Chapter 4**

### **Conclusions**

- The online news App provides the users flexibility
- The online news App overcome wastage of paper
- The news are available for all the time.
- The users don't wait for the newspaper to read the updated news.

## **Chapter 5**

### **Future Scope**

As the project comes up with some limitations which can be improved in future and further more advancement can also be done. The different features that can be added are as follows

- Videos of different news can be provided related to various fields like Entertainment, International, National, Sports, Business etc.
- Reader can be alerted through e-mail, cell phones or other devices about availability of any new news of their interest.
- Readers can easily forward interesting news items to others.
- Live support should be enabled.
- More fields can be added.

## **Chapter 6**

### **Appendix**

The Internship Program provides real life experience and exposure to us. To enable the intern gain first hand experience of working in real life which is remarkable towards our career. The internship program aided us to have in-depth knowledge about practical problem solving in the corporate world. We have been enlightened on the application of theories in real life situations. Ksolves has offered us opportunities to learn and develop in many areas. This industry has prepared us to serve the needs of industry upon graduation. This included providing real life experience and exposure, thus first-hand exposure to working in the real world, granting the opportunity to learn more about ourselves, our potential and abilities and developing professional networks. We gained a lot of experience, especially in designing web applications. Before the placement took place my ideas did not match the experiences we have gained during our internship. This internship was definitely an introduction to the actual work field for me. We have learned to work in a business organization and apply our knowledge into practice. Deepest gratitude we give to the management of Ksolves, most especially the CEO. We perceive this opportunity as a big breakthrough in our career development. We would also like to acknowledge with much appreciation the important role of the staff of Ksolves, especially Mr. Chinmay Mourya, who in spite of his duties, got time to listen, guide and keep us on the correct path. We say thank you. We would like to thank all staff that provide us assistance during our internship.

## **Chapter 7**

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