

# An Android and Firebase Technology: Polling

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**Abstract**— Polling is system that gives you the facility of creating any type of polls, cast your vote for the available polls and look at its results. This system is made so that the user has a prior knowledge on others interests of certain topics. This project is created to reduce the users time and help them create polls and get results quicker. This eliminates the traditional system of paper voting and thus helping the users to efficiently generate their own polls and get unbiased results quicker.

**Keywords:** Android, Java, Xml, Google, Firebase

## I. INTRODUCTION

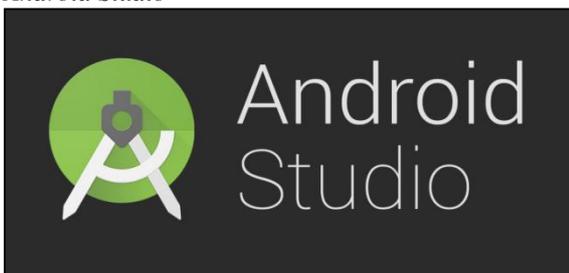
“Polling” is a system that enables its users to create polls to get an opinion on any topic. The application allows functionalities like creating a poll, casting vote on a poll, viewing the graphical results of an earlier poll. This application helps users to work efficiently by providing them an unbiased vote count and quick polling results. Today, before undertaking important decisions, the opinions of various groups are of utmost importance. This process of carrying out a huge poll successfully can be tough and inefficient to carry. Therefore, Polling application helps its users to do the same in a very easy and tedious manner. The results that the user get are unbiased and are quick, therefore allowing the user to carry out a very successful and statistical polling on any topic of his/her choice.

## II. LITERATURE SURVEY

### A. Background

When developing an android application, there are some tools and technologies that can be used to make the development easier and make the application robust. We have defined the terms of tools and technologies which have been referred here. The choice of technology and the tools used totally depends upon the extent and the level of usage of any application. We, based on our experience and familiarity, chose these as our tools and technology into developing this application. The description of every technology used is vast, so we have given only a brief introduction of each.

#### 1) Android Studio



Android Studio is the official Integrated Development Environment (IDE) for Android app development. It is based on IntelliJ IDEA. It provides developers with a powerful code editor and developer tools which makes android development easier and more efficient for developers.

#### 2) Java



Java is a fast, secure and reliable programming language that is used in various development projects all across the globe. It is also one of the important language that can be used for Android development.

#### 3) XML



XML stands for Extensible Markup Language. It is scalable and simple to develop. In Android, we use xml for the designing of layouts, as it is lightweight so it doesn't make out layouts heavy.

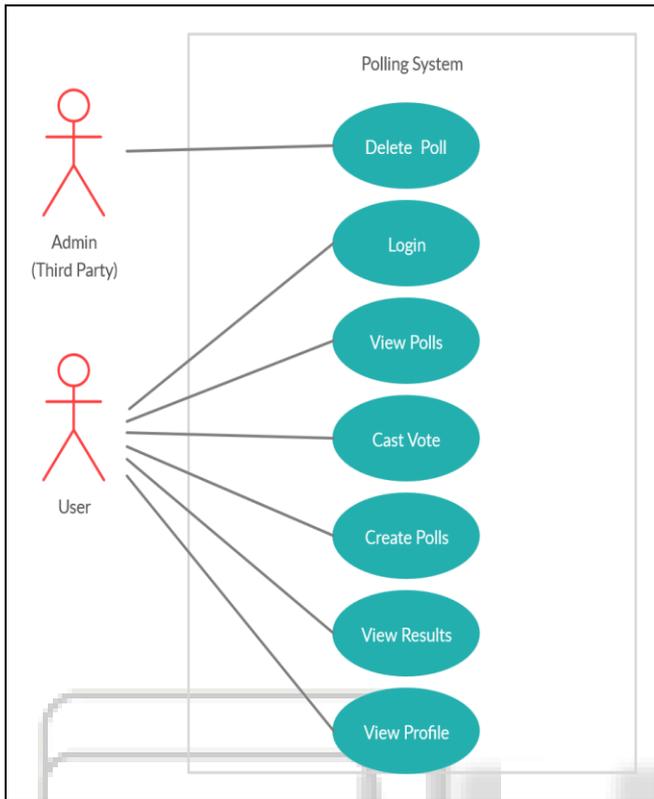
#### 4) Firebase



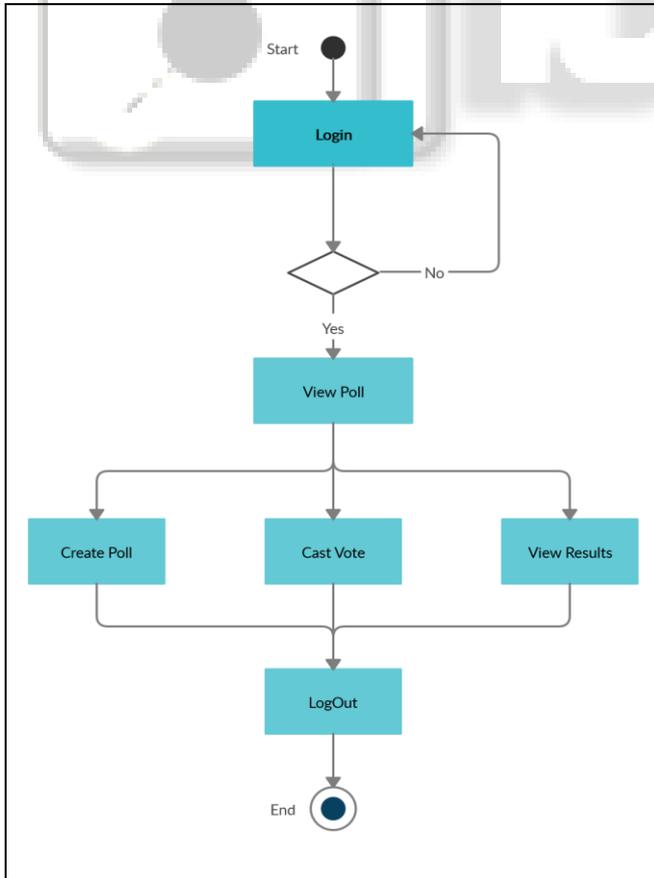
Firebase is a Google-backed application development software that helps in development of iOS, Android and web applications. It provides various tools for tracking analytics, reporting and fixing app crashes etc.

### III. SYSTEM DESIGN DIAGRAMS

#### A. Use Case Diagram



#### B. Activity Diagram



### IV. RESULTS

We have achieved improvement in the current voting process. The voting process is made more easy for users. An additional project aspiration is to make this application as a means for conducting government electoral voting application. We also desired to adopt an improvement methodology that would be adapted across the Institute in administrative, executive, technical and science divisions.

### V. CONCLUSION

This is to conclude that the project that we undertook was worked upon with a sincere effort. Most of the requirements have been fulfilled up to the mark and the requirements which have been remaining, can be completed with a short extension. This project would definitely satisfy all the requirements of the college and would be beneficial for the students and the college staff. This paper introduced an Android based application that uses firebase to help its users to cast vote. The main purpose of the proposed solution is to maximizing efficiency through the usage of new technology, which results in a robust experience.

### VI. FUTURE ENHANCEMENTS

If we talk about future enhancement, we can enhance various UI/UX designs to provide users with a more visualised data. We will also try to develop and implement our project on latest technology, that is, flutter, so that the project can be used over both mobile platforms, Android and IOS, which is very helpful in increasing the scalability of our project. We can also place ads using Google Admob, thus providing more customised advertising and introducing Google Analytics tools to monitor the clients. We are also looking to increase the security on our project so that it can be used in future for government based voting also.

### VII. ACKNOWLEDGMENTS

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