

LOCOFINDER -Mobile Application for Locating Historical Places

Dr. B. Muthusenthil, Kanuparthi Saranya, Kavi Bharathi. K, Manoranjani. D,

Department of Computer Science and Engineering
SRM Valliammai Engineering College, Chennai, Tamil Nadu, India

Abstract: *This as an Era of Discovering and visiting the Historical places around us. Google map and google places has provided the user with easier access to close by institutions and places of diverse use and interest and are even able to provide the user with relevant information on the desired location. Map provides the user to easily and quickly search any places from anywhere. However, Google map consists of details of many Places that may Distract the user from reaching the destination. This "HISTORICAL MAP" provides the accurate information to the user based on the Geographical Location. This Mobile Application will allow the user to visualize the surrounding sites and provides the Related Historical Data which are categorized into various group like Historical temples, Palaces ...etc. This project aims at producing a mobile application that would provide accurate information to the user, based on his/her geolocation. This app will be Developed for the android Operating System using the technologies such as Android Studio and Firebase..*

Keywords: Map, Mobile Application, User Authentication, Android Studio, Travelers.

I. INTRODUCTION

Our history spans more than a hundred years and predates the state's establishment. several ancient cultures and civilizations have left their imprint on the land of our beloved country at various points in history, from the beginning. From Classical Antiquity to Early Islamic lands, to the more recent struggle for independence. historical and cultural history is so rich that it has been studied extensively.

Many well-known historians and archaeologists around the world. Only a few years ago, scientists estimated the human population to be around 200,000. A discovery and research put a stop to this theory when the earliest human (Homo sapiens) was discovered.

UNESCO has also designated nine historical sites as World Heritage and has submitted bids for thirteen additional sites to be examined. In addition, over 300 sites have been designated as National Heritage. This historical legacy comprises more than archaeological sites and monuments. These significant bits of history cannot be seen, as is the case with other types of places. Our country's past and present have been shaped by history. Unfortunately, we are poorly informed and educated about our country as citizens.

II. RELATED WORKS

A mobile Application for the maps which can able to find the way source to the destination to the user. Maps became a Web Mapping platform and consumer application offered by Google. Hence this web mapping offers satellite imagery ,view of streets ,Traffic conditions route planning.

Dr. Sr. Bindu Antony (2015)

On April 29, 2015, users of the classic Google Maps were forwarded to the new Google Maps with the option to revert removed from the interface. In 2016, the Government of South Korea offered Google conditional access to the country's geographic database - access that already allows indigenous Korean mapping providers high-detail maps. Google declined the offer, as it was unwilling to accept restrictions on reducing the quality around locations the South Korean government felt were sensitive.

In May 2018 Google announced major changes to the API structure starting June 11, 2018. This change consolidates the 18 different endpoints into three services and merges the basic and premium plan into one. A major consequence of this change is a 1400% price raise for users of the basic plan with only six weeks of notice. This sudden move caused a harsh reaction

within the developer's community.

In June, Google postponed the change date to July 16, 2018. In August 2018, Google maps designed its over-all view into a 3D globe dropping the Mercator projection, which was used to project the planet onto a flat surface. In January 2019, Google maps added speed trap and speed camera alerts as reported by other users.

Dr. OMAR A. IBRAHIM1, KHALID J. MOHSEN (2014)

This paper introduces an application for android mobile, which is implemented to provide the android mobile user to add, remove and review specific locations on the online map. The proposed applications also present the basics navigation operations like showing directions with the optimal path between source and destination and calculating the distance and expected driving time. Google Maps APIs, Google Direction APIs, PHP, JSON, and MySQL have been integrated and used in this application to obtain solutions.

Shunfu and Ting (2008-2020)

Shunfu and Ting from the University (Edwardsville) in the state of Washington in the United States develop a mapping service on the Internet to view thousands of parks in U.S. states on the internet for the U.S. Department of Agriculture using Google Maps, and a database of Microsoft SQL and ASP. NET, and is applied to the major browsers such as (Chrome, Firefox, and IE). Shunfu does research in Geography, Geoinformatics (GIS/multimedia mapping) and Hydrology. His most recent publication is 'Web-based Multimedia Mapping for Spatial Analysis and Visualization in the Digital Humanities: a Case Study of Language Documentation in Nepal.

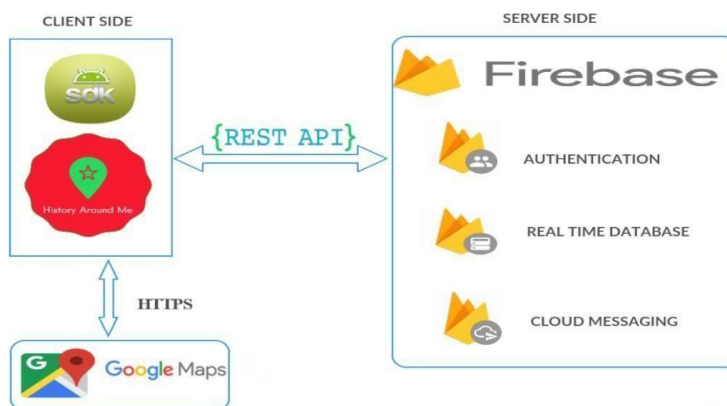
III. SOFTWARE USED OR REQUIRED

We have come up with an advanced work for the enrichment of historical places. There are many ways (methods) to helping people, but those works may not be up to a level of success. We mainly developed this method for people who don't know about the historical places. modules used in history around me are Authentication, Cloud messaging, Cloud storage, Android Studio, Firebase.

IV. SYSTEM DESIGN

Our project architecture falls under the Server-less architecture using the BAAS(back end as a service) Firebase which takes care of managing server-side logic and state. Here Server-less does not mean that the app is not dependent on a server, but rather means that the app is reliant on third party services commonly known as FASS (Function as a Service) or BaaS, Firebase in our case.

Such services significantly reduce the cost and complexity of developing n- tier architecture apps. In our case, Firebase takes care of processing HTTP requests coming from the client tier regarding the data stored on the Real Time Firebase Database to be then returned and displayed on the client side. It will also take care of ensuring that the authentication is done successfully, either through email and password or through third party authentication services, such as Google, Facebook, etc. For the implementation of this mobile application, as previously mentioned, we chose to develop it for the Android operating system and to make it dynamic, i.e. for it to be developed on two fronts: a server side and a client side.



The reason behind this choice is pretty obvious as we wanted it to have features such as authentication and have access to a shared dynamic database in addition to the app being as light as possible in terms of storage. Furthermore, as potential future work, we would like to have the option of pursuing the development of the web app along with one for the IOS operating system which will have access to the same database together with the android app.

V. AUTHENTICATION

Firebase Authentication integrates tightly with other Firebase services, and it leverages industry standards like OAuth 2.0 and OpenID Connect, so it can be easily integrated with your custom backend. User authentication is must for security purpose, every user must be authentication to avoid any intruder treat for the users. The security of the application is major focus in this case. Firebase Authentication aims to make building secure authentication systems easy, while improving the sign-in and onboarding experience for end users. It provides an end-to-end identity solution, supporting email and password accounts, phone auth, and Google, Twitter, Facebook, and GitHub login, and more.

VI. CLOUD STORAGE

Firebase Cloud Storage—also called Firebase File Storage or Firebase Object Storage, is an object storage service offered on Google Cloud Platform. When Google cloud storage is incorporated into Firebase apps, you gain accessto Google security measures and the ability to secure any uploads or downloads in your app.

VII. CLOUD MESSAGING

Firebase Cloud Messaging (FCM) is a cross-platform service that handles the sending, routing, and queueing of messages between server applications and mobile client apps. FCM is a service that facilitates messaging between mobile apps and server applications. FCM acts as an intermediary between message senders and clients. A client app is an FCM-enabled app that runs on a device.

VIII. CONCLUSION

First, the topic of the project was to be selected and it was thanks to my team for precious suggestion of a mobile app that would provide the users with information about historical places surrounding them. Once the idea in mind, the project was initiated, and analysis study was performed to fully understand the requirements of the app. After the analysis phase came the design phase where several modelling techniques were followed to better emphasize the understanding of the requirements and prepare the ground for the implementation of our app. The implementation phase was initiated and carried on with the requirement in mind and following the blueprints set up during the design phase, whereas the testing and debugging and maintenance of the app was performed in parallel throughout the implementation progress. To conclude, this project provided my team with an opportunity to put into practice many skills, practices, and concepts I acquired throughout years. From the programming classes such as C and Java, to the more conceptual ones such as Software Engineering, Database Design, Computer Networks and Cryptography Systems, therefore providing me with an opportunity to grow as a future software developer and engineer.

REFERENCES

- [1] "Activity diagrams: What they are and how to use them." IBM - United States, 22 Apr. 2004, www.ibm.com/developerworks/rational/library/2802.html.
- [2] "Android Developers." Android Developers, 10 Nov.2017, [developer .android.com/develop/index.html](http://developer.android.com/develop/index.html).
- [3] "Documentation | Firebase." Google, Google, firebase.google.com/docs/.
- [4] Google Accounts, Google, console.firebase.google.com/.
- [5] "Mobile App Backend Services | Solutions | Google Cloud Platform." Google, Google, cloud.google.com/solutions/mobile/mobile-app-backend-services.
- [6] mondial, UNESCO Centre du patrimoine. "Maroc." UNESCO Centre du patrimoine mondial, whc.unesco.org/fr/etatsparties/ma.
- [7] Rathi, Amit. "Architectural Shift in Web Applications - DZone Web Dev." Dzone.com, 5 Apr. 2017, dzone.com/articles/architectural-shift-in-web-applications-with-emerg.

- [8] says, Tinotenda Mazikana, et al. "Home." ISTQB Exam Certification, istqbexamcertification.com/what-is-prototype-model-advantages-disadvantages-and-when-to-use-it/.
- [9] "Stack Overflow - Where Developers Learn, Share, & Build Careers." Stack Overflow - Where Developers Learn, Share, & Build Careers, www.stackoverflow.com/.
- [10] "System Properties Comparison Firebase Realtime Database vs. GraphDB." Firebase Realtime Database vs. GraphDB Comparison, [db-engines.com/en/system/Firebase Realtime Database%3BGraphDB](http://db-engines.com/en/system/Firebase%20Realtime%20Database%3BGraphDB).
- [11] "Types of NoSQL Databases." MongoDB, www.mongodb.com/scale/types-of-nosql-databases.
- [12] YouTube, YouTube, www.youtube.com/.
- [13] "History Here | HISTORY," History.com. [Online]. Available: <http://www.history.com/history-here>. [Accessed: 06-Dec-2017].
- [14] S. Johnson, "Ten Reasons to Choose the Android Platform for Apps Development," Artificial Intelligence, Machine Learning, Data Science, IoT, Enterprise Mobility, Wearable, Cloud, Apps Development Services & Solutions | Fusion Informatics Limited, 18-Aug-2017. [Online]. Available: <https://blog.fusioninformatics.com/enterprise-mobile-application-development/tenreasons-choose-android-platform-apps-development/>. [Accessed: 06-Dec-2017].
- [15] T. M. says, S. says, S. says, S. dogzky says, O. says, P. Says, A. J. says, U. N. I. S .A .K . A. B. B. A. says, L. Says, L. Says, and O. Says, "Home," ISTQB Exam Certification. [Online]. Available: <http://istqbexamcertification.com/what-is-prototype-model-advantages-disadvantages-and-when-to-use-it/>. [Accessed: 06-Dec- 2017].