International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 1082-1084 www.ijaem.net ISSN: 2395-5252

Covid19 Real Time Counter

Rohini Khalkar, Abhishek Mishra, Pratik Bhardwaj , Manikant

Assistant Professor, Department of Computer Engineering, BharatiVidyapeeth (Deemed to be University) College of Engineering, Pune, Maharashtra, India.

Submitted: 10-07-2022 Revised: 17-07-2022 Accepted: 21-07-2022

ABSTRACT - This project is Android application that contains information about the Covid19 Virus Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment

It is an Android application that contains information about the Covid19 Virus. It contains detailed information about all countries. Daily case numbers, death numbers can be learned. This is majorly coded the project in Java language.

I. INTRODUCTION

Although mobile apps are successfully used for managing chronic diseases the ongoing COVID-19 pandemic has pushed the need for mobile app solutions at the forefront to reduce the risk of cross-contamination caused by close contact . Mobile technology has been leveraged in a number of ways to control the spread of COVID-19. Mobile apps are accessible, acceptable, and easily adopted, and have the ability to support social distancing efforts. As such, they have been widely developed and implemented during the previous months in an attempt to "flatten the curve" of the increasing number of

COVID-19 cases, providing knowledge and information to civilians while attempting to relieve the pressure from health care systems.

Despite increasing reliance on mobile health solutions as part of COVID-19–related response plans, major knowledge gaps exist about their utility and efficacy during the current pandemic for both health professionals as well as for the general population.

This project aims to Track and record real time covid cases and Deaths related to it for general information.

SOME FREQUENTLY USED TERMINOLOGIES:

API –Application Programming Interface.

RESTful API - Representational State Transfer (REST) API or RESTful web services are architectural styles for communications often used in web services development (RESTful API 2020). These APIs use less bandwidth than the Simple Object Access Protocol (SOAP) and hence they are useful for cloud applications. The RESTful API uses the HTTP methodologies which are defined by the RFC 2616 protocol.

Open API- Open APIs can be designed in a variety of different ways, but the main priority of any open API is to be easily consumed and accessed by as many different clients as possible.

As a result, using proprietary protocols or custom data formats to create open APIs is discouraged, while using open source technology and community-driven standards makes the most sense.

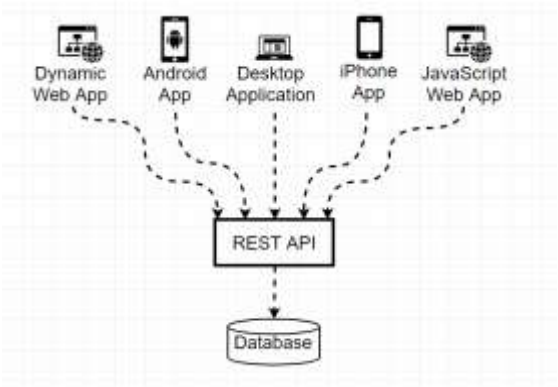
API

An API is a set of definitions and protocols for building and integrating application software. It's sometimes referred to as a contract between an information provider and an information user—establishing the content required from the consumer (the call) and the content required by the producer (the response). For example, the API design for a weather service could specify that the user supply a zip code and that the producer reply with a 2-part answer, the first being the high temperature, and the second being the low.

REST

REST is a set of architectural constraints, not a protocol or a standard. API developers can implement REST in a variety of ways.

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 7 July 2022, pp: 1082-1084 www.ijaem.net ISSN: 2395-5252



When a client request is made via a RESTful API, it transfers a representation of the state of the resource to the requester or endpoint. This information, or representation, is delivered in one of several formats via HTTP: JSON (Javascript Object Notation), HTML, XLT, Python, PHP, or plain text. JSON is the most generally popular file format to use because, despite its name, it's language-agnostic, as well as readable by both humans and machines.

Something else to keep in mind: Headers and parameters are also important in the HTTP methods of a RESTful API HTTP request, as they contain important identifier information as to the request's metadata, authorization, uniform resource identifier (URI), caching, cookies, and more. There are request headers and response headers, each with their own HTTP connection information and status codes.

In order for an API to be considered RESTful, it has to conform to these criteria:

1. A client-server architecture made up of clients, servers, and resources, with requests managed through HTTP.
2. Stateless client-server communication, meaning no client information is stored between get requests and each request is separate and unconnected.

3.Cacheable data that streamlines client-server interactions.

4.A uniform interface between components so that information is transferred in a standard form.

5. A layered system that organizes each type of server (those responsible for security, load-balancing, etc.) involved the retrieval of requested information into hierarchies, invisible to the client.

6. Code-on-demand (optional): the ability to send executable code from the server to the client when requested, extending client functionality.

Though the REST API has these criteria to conform to, it is still considered easier to use than a prescribed protocol like SOAP (Simple Object Access Protocol), which has specific requirements like XML messaging, and built-in security and transaction compliance that make it slower and heavier.

We took the API "https://corona.lmao.ninja/ "

corona.lmao.ninja/v3/covid-19/all
is a Open API which has no Proprietary tools which allows it to be used in Flutter and PHP without 3rd party tools inclusion and data can directly be fetched from it.

Which made it easier for us to locate and track the countries and cases in the app by fetching information in the logical format.
It represented all the active and recovered cases from the regions one is searching for.

II. CONCLUSION

In the recent Covid-times, the market has seen the appearance of numerous mobile-applications for tracking and managing the pandemic. The app-market remains disorganized and unregulated in several countries. The present review provides an overview of mobile applications available in United Kingdom, USA and India; summarize their strengths and limitations through a qualitative assessment; and delineates key functions and features needed for future applications. Rapid population-based longitudinal studies and randomized trials would characterize the use and efficacy of mobile apps on health knowledge, behaviours and use to limit the spread of COVID-19 and help reduce its burden on the public health and clinical systems.

REFERENCES

[1]. Coronavirus disease 2019 (COVID-19): situation report – 78. World Health Organization. 2020. Apr 07, [2020-07-01]. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200407-sitrep-78-covid-19.pdf.

[2]. Smith AC, Thomas E, Snoswell CL, Haydon H, Mehrotra A, Clemensen J, Caffery LJ. Telehealth for global emergencies: implications for coronavirus disease 2019 (COVID-19) J Telemed Telecare. 2020 Jun;26(5):309–313. doi

[3]. : 10.1177/1357633X20916567. https://journals.sagepub.com/doi/10.1177/1357633X20916567?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

[4]. Triantafyllidis A, Kondylakis H, Votis K, Tzovaras D, Maglaveras N, Rahimi K. Features, outcomes, and challenges in mobile health interventions for patients living with chronic diseases: A review of systematic reviews. Int J Med Inform. 2019 Dec;132:103984. doi: 10.1016/j.ijmedinf.2019.103984. [PubMed] [CrossRef] [Google Scholar]

[5]. Chidambaram S, Erridge S, Kinross J, Purkayastha S, PanSurg Collaborative Observational study of UK mobile health apps for COVID-19. Lancet Digit Health. 2020 Aug;2(8):e388–e390. doi: 10.1016/S2589-7500(20)30144-8. https://linkinghub.elsevier.com/retrieve/pii/S2589-7500(20)30144-8. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

[6]. Menni C, Valdes A, Freidin M, Sudre CH, Nguyen LH, Drew DA, Ganesh S, Varsavsky T, Cardoso MJ, El-Sayed Moustafa JS, Visconti A, Hysi P, Bowyer RCE, Mangino M, Falchi M, Wolf J, Ourselin S, Chan AT, Steves CJ, Spector TD. Real-time tracking of self-reported symptoms to predict potential COVID-19. Nat Med. 2020 Jul;26(7):1037–1040. doi: 10.1038/s41591-020-0916-2. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

[7]. Crico C, Renzi C, Graf N, Buyx A, Kondylakis H, Koumakis L, Pravettoni G. mHealth and telemedicine apps: in search of a common regulation. Ecancermedicalscience. 2018;12:853. doi: 10.3332/ecancer.2018.853. http://europepmc.org/abstract/MED/30079115. [PMC free article] [PubMed] [CrossRef] [Google Scholar]