

# PLASMA DONOR APPLICATION

## INTRODUCTION

Cloud computing helps in on-demand deliver of IT resources over the internet with pay-as-you-go pricing model where users have to pay only for the resource that they use. This helps to reduce the additional infrastructural cost and users can access technology services such as power, storage, compute, database, networking, analytics and also intelligence over the internet in order to offer flexible, innovation, and economies of scale. Users can run their infrastructure more efficiently and scale their business according to their requirement. Cloud deployment modules such as public cloud, private cloud, hybrid cloud and community cloud helps the users to choose the type of deployment options that are beneficial for their company. Cloud service models consists of software as a service (saas), platform as a service (paas) and infrastructure as a service (iaas). In Software as a service a third party service providers will host the applications and make them available over the internet. Some a requires purchasing of licensed version with involves huge cost and with the help of software as a service those applications can also be used without having to buy the license of the software which is more cost effective. with the help of platform-as-a-service customers can run, develop and manage the applications without any complexity of building and maintaining the infrastructure which is associated with developing and launching the applications. Infrastructure as a service allows the enterprise to rent or lease the servers for compute and storage in cloud. Microsoft Azure. The main goal of our project is to design a user-friendly web application that is like a scientific vehicle from which we can help reduce mortality or help those affected by COVID19 by donating plasma from patients who have recovered without approved antiretroviral therapy planning for a deadly COVID19 infection, plasma therapy is an experimental approach to treat those COVID-positive patients and help them recover faster. Therapy, which is considered reliable and safe. If a particular person has fully recovered from COVID19, they are eligible to donate their plasma. As we all know, the traditional methods of finding plasma, one has to find out for oneself by looking at hospital records and contacting donors have been recovered, sometimes may not be available at home and move to other places. In this type of scenario, the health of those who are sick becomes disastrous. Therefore, it is not considered a rapid process to find plasma. The main purpose of the proposed system, the donor who wants to donate plasma can simply upload their covid19 traced certificate and can donate the plasma to the blood bank, the blood bank can apply for the donor and once the donor has accepted the request, the blood bank can add the units they need and the hospital can also send the request to the blood bank that urgently needs the plasma for the patient and can take the plasma from the blood bank.

## **LITERATURE SURVEY**

### **Paper 1 – Plasma Donor Application by Serverless Computing**

1) Ref-"**Severless computing:Economic and architectural impact**",ESEC/FSE,2017.

According to R. C. Gojko Adzic ,in this paper the author has carried out analysis based on the opportunities presented by serverless computing. They emphasize that serverless services are more affordable approach for many network services and it is more user friendly as serverless approach will relieve the customers from the intricacies of deployment. These services will help to improve the new business opportunities.

2) Ref -"**Building a chatbot with severless computing**",IBM watson research center,2016.

According to C. P. C. a. V. I. M. Yan ,in this paper author conducted a survey of existing serverless platform in this paper from source projects, industry, academia, use cases, and key characteristics and has described the challenges and the open problems associated with it. Authors work presented a experience of serverless technologies using different services from different cloud provides such as Amazon, Google, IBM, Microsoft Azure.

3) Ref-"**Cloud Event Programming Paradigms:Applications and Analysis**",**"9th IEEE International Conference on Cloud Computing(CLOUD),pp.pp.400 - 406,2017.**

According to S. E. a. B. J. J. Short , in this paper three demonstrators for IBM Bluemix OpenWhisk was presented. They exhibit even-based programming triggered by weather forecast data, speech utterances and Apple WatchOS2 application data. And also demonstrated a chatbot using IBM Bluemix OpenWhisk that calls on the IBM Watson services which include dates, weather, alarm services, news and music tutor.

4) Ref - "**Making Serverless Computing More Serverless**", **IEEE 11th International Conference on Cloud Computing (CLOUD), pp. pp. 456-459, 2018., 2018.**

According to S. Z. Al-Ali , in this paper serverlessOS was designed. It comprises of components such as 1. desegregation model that leverages desegregation for abstraction but it will enable resources to move fluidly between servers for the performance. 2. The second key component is cloud orchestration layer which helps to manage fine-grained resource placement and allocation throughout the application lifetime with the help of global and

local decision making 3. And the third component is an isolation capability which enforces data and resource isolation.

5) Ref - **“EMARS: Efficient Management and Allocation of Resources in Serverless”**, IEEE 11th International Conference on Cloud Computing (CLOUD), pp. pp. 827-830, 2018.

According to A. S. a. S. Jindal , in this paper an efficient resource management system for serverless computing framework was proposed which aims to enhance resource with a focus on memory allocation among the containers and the design which was added on top of an open-source serverless platform, openLambda and it is based on allocation workloads and serverless functions memory needs events are triggered.