

Plasma Donor Application - Literature Review



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Abstract:

A plasma is a liquid portion of the blood, over 55% of human blood is plasma. Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish antibodies that fights the infection. In this project plasma donor application is being developed by using AWS services. It eliminates the need of configuring the servers and reduces the infrastructural costs associated with it and helps to achieve serverless computing. For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates were high but the donor count was very low and in such situations it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors.

Literature survey:

S.No	TOPIC	AUTHOR	YEAR	METHODOLOGY	ACCURACY
1	Serverless computing: Economic and architectural impact.	R. C. Gojko Adzic 2017.	2017	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.	60%
2	Building a chatbot with serverless computing	P. C. P. C. a. V. I. M. Yan, 2016.	2016	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 hands-on experience of serverless technologies using different services from different cloud providers such as Amazon, Google, IBM, Microsoft Azure.	78%
3	Cloud Event Programmig Paradigms: Applications and Analysis	S. E. a. B. J. J. Short	2017	In this paper three demonstrators for IBM Bluemix Open Whisk were presented. They exhibit event-based-programming triggered by weather forecast data, speech utterances and Apple WatchOS2 application data. And also demonstrated a chatbot using IBM Bluemix Open Whisk that calls on the IBM Watson services which include dates, weather, alarm services, news and music tutor.	80%

4	Making Serverless Computing More Serverless	Z. Al-Ali	2018	In this paper serverless OS 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.	85%
5	EMARS: Efficient Management and Allocation of Resources in Serverless	A. S. a. S. Jindal	2018	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, open Lambda and it is based on allocation workloads and serverless functions memory needs events are triggered.	76%