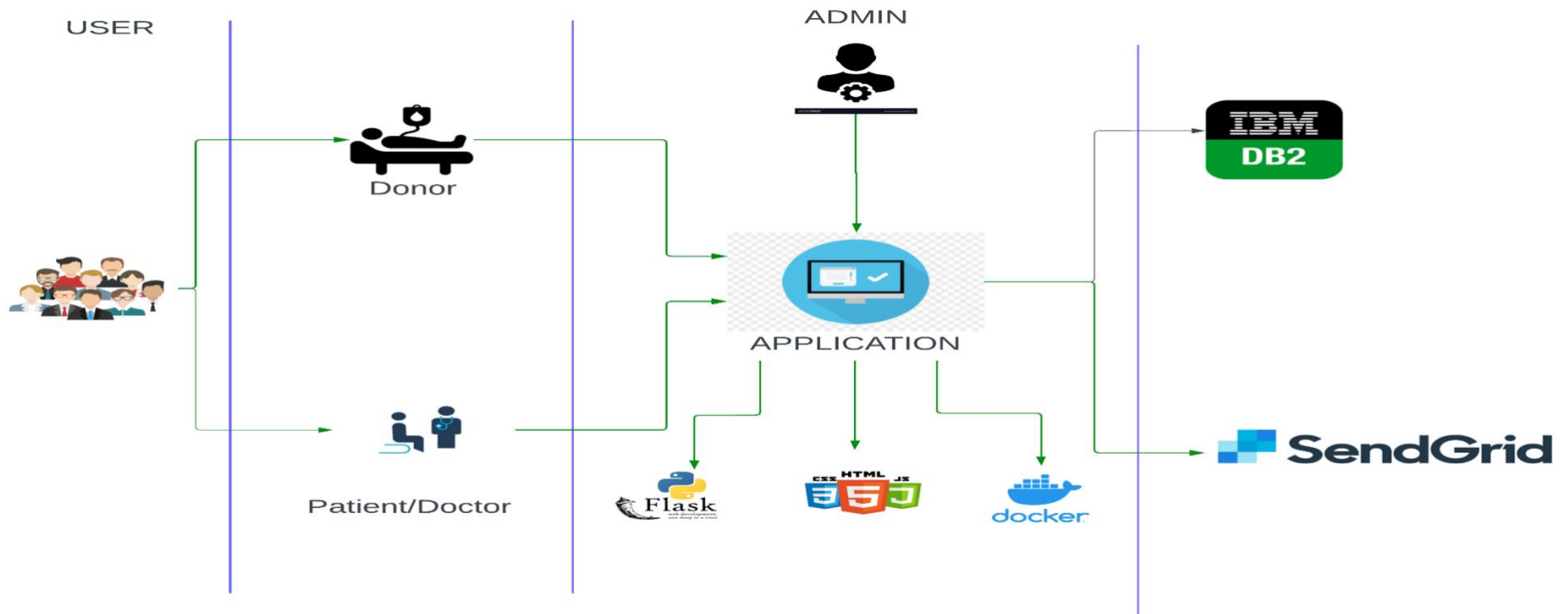


## PLASMA DONOR APPLICATION - TECHNOLOGY ARCHITECTURE



**Table-1: Components & Technologies:**

SNO	Component Description	Description	Technology
1	User Interface	The interaction between the user and application e.g., Web UI, Mobile App, Chatbot	HTML, CSS, JavaScript / Bootstrap etc.
2	Application Logic-1	Framework used for design the application.	Python, Python - Flask
3	Application Logic-2	Accessing the cloud and storing details of the users both donors and patients.	IBM Cloud, IBM DB2
4	Application Logic-3	Docker is an open-source platform for building, deploying, and managing containerized applications.	Docker
5	Database	Data Type, Configurations etc.	SQL.
6	Cloud Database	Database Service on Cloud	IBM Cloudant, IBM DB2
7	File Storage	File storage requirements	IBM Block Storage or Object Storage Service or Local Filesystem

**Table-2: Application Characteristics:**

sno	Characteristics	Description	Technology
1	Open-Source Framework	Python – flask is an open-source framework used to develop the application.	Python – flask is an open-source framework used to develop the application.
2	Security Implementation	Container registry and Kubernetes Cluster are used for encryption of data.	Container registry and Kubernetes Cluster
3	Scalable Architecture	Kubernetes Cluster allow containers to run across multiple machines and environments.	Kubernetes Cluster
4	Availability	Kubernetes Cluster provides all time availability.	Kubernetes Cluster
5	Performance	Docker improves the application performance.	Docker