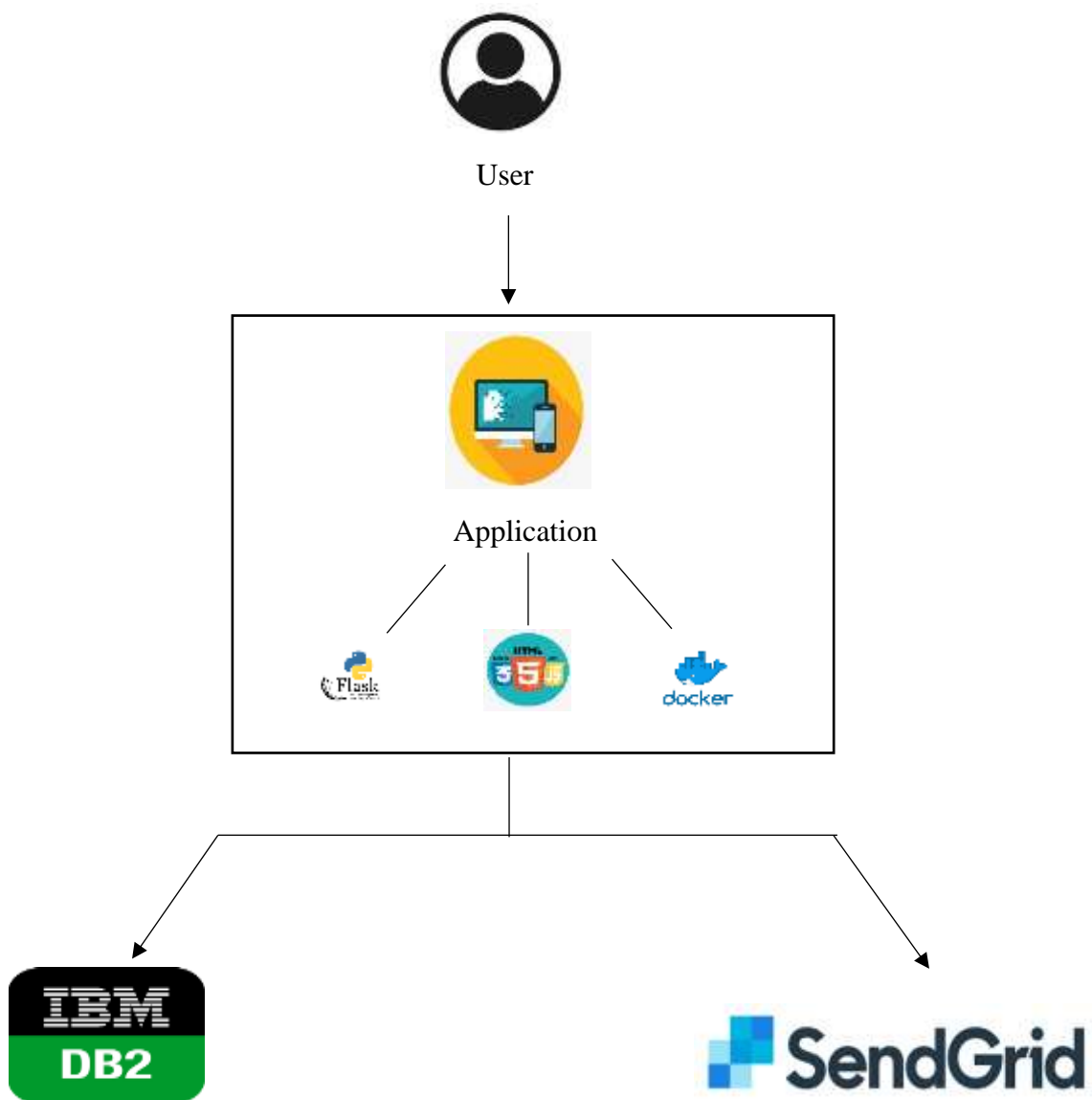


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Team ID	PNT2022TMID51780
Project Name	Plasma donor application
Maximum Marks	4 Marks

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



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

S.No	Component	Description	Technology
1.	User Interface	User interaction with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, bootstrap etc.
2.	User registration	User data will be collected and will be verified and validated before pushing it into database.	Java script, Python flask, IBM_DB
3.	Chatbot	Clarify user doubts	IBM Watson service
4.	Confirmation e-mail	Sending the confirmation email to the verified users	SendGrid
5.	Database	store, Configuration, retrieve the user's details	MySQL
6.	Cloud Database	To store and view the information about the donor and requester	IBM DB
7.	File storage	File storage requirements	IBM block storage or other storage services or Local file system

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python flask framework is used	Python flask
2.	Security Implementations	Mandatory access control (MAC) and kubernetes is used	SHA-256, Encryptions, IAM Controls, OWASP.
3.	Scalable Architecture	3 Tire Architecture is used	Web server- HTML, CSS, JS Application server- Python flask Database server- IBM_DB2
4.	Availability	Using load balancer to reduce traffic in the network	IBM load balancer
5.	Performance	User friendly API	IBM content delivery network