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

Date	13 May 2023
Team ID	NM2023TMID00055
Project Name	Project – Pixel Perfection: Transforming your photos with our cutting-edge image editing platform.

Technical Architecture:

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

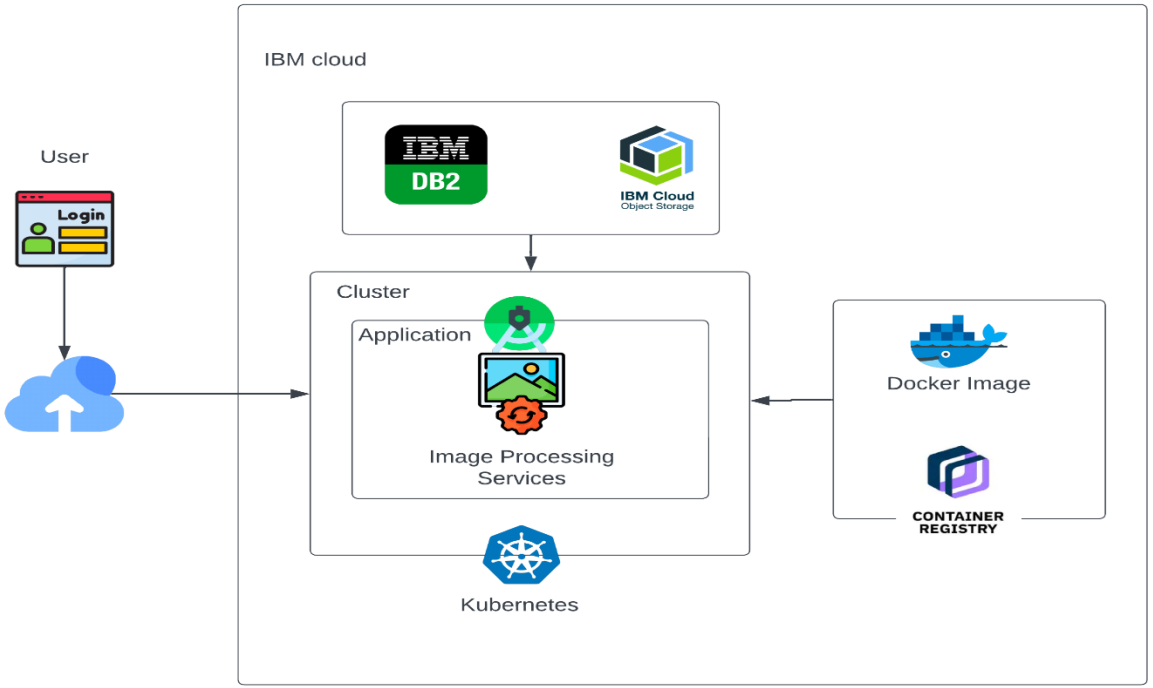

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	1.User Registration / Login 2.Navigation the web application 3.Uploading Photo 4.Saving and Export	HTML, CSS, JavaScript
2.	Application Logic	Route throughout the web application Connect with IBM DB2 to store the user details Store the Objects such as files, images to IBM Object storage	Python
3.	Cloud Database	Database Service on Cloud Used to Data of Name and Password of User Used to Data of Email , Name and Password	MySQL, IBM DB2,
4.	File Storage	Used to store image	IBM Cloud Object Storage
5.	External API-1	Used to change remove background from the image	Backgroud Remover API
6.	External API-2	Used to change image to cartoon image	Cartoon API
7.	External API-3	Used to make the image fair	Face Beauty
8.	External API-4	Used to improve the image resolution	Image Upscalar
9.	Container	Make the container image	Docker
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Kubernetes Service

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Enhance and upscale images	GPFGAN
2.	Security Implementations	Store the password in encrypted format	SHA-256
3.	Scalable Architecture	3-tier architecture Application can be scaled by increasing the worker nodes.	Kubernetes Service
4.	Availability	Application made available by deploying it through Kubernetes service.	Kubernetes Service
5.	Performance	Perforance based on the worker nodes in Kubernetes	Kubernetes Service