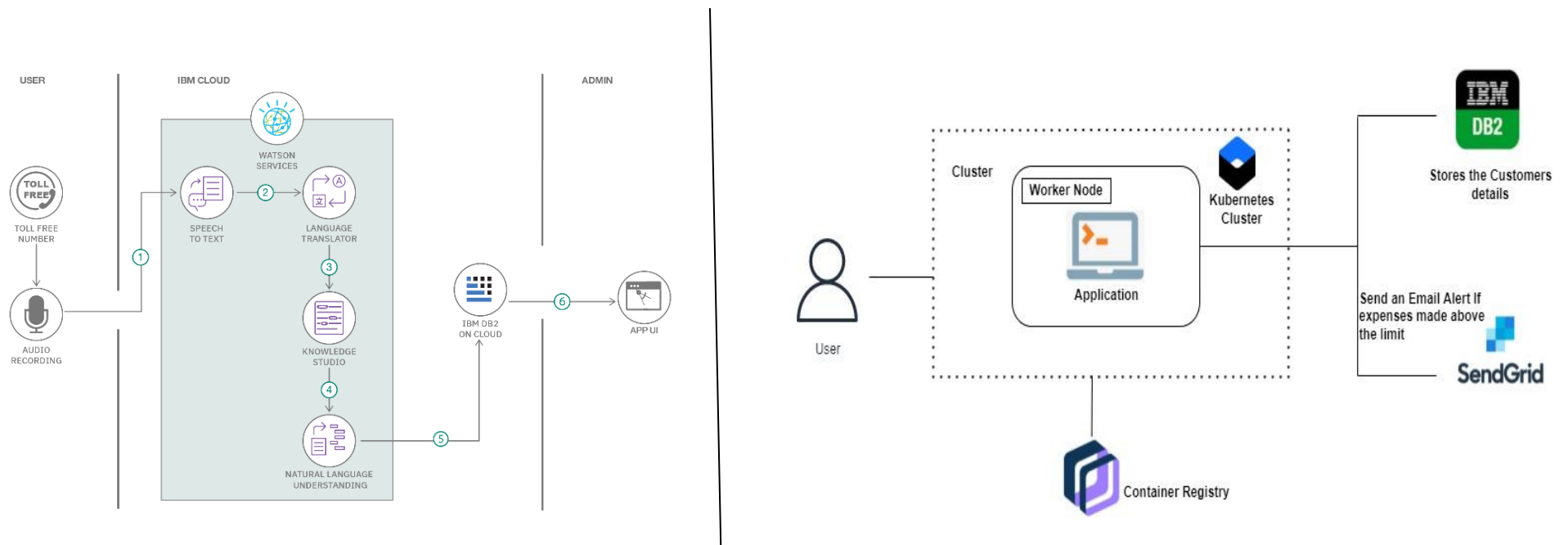


## Project Design Phase-II Technology Architecture

Date	29 October 2022
Team ID	PNT2022TMID10256
Project Name	Personal Expense Tracker Application (Cloud Based)
Team Members	Hari S, Gudan K , Bharathi K , Ajith kumar S

### Technical Architecture:



## Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user can Interact with the application with use of IBM Watson Chat bot.	HTML, CSS, JavaScript
2.	Application Logic-1	The application contains sign in/sign up where the user can login into the main dashboard.	Java / Python
3.	Application Logic-2	Dashboard contains the fields like Add income, Add Expenses, Add budget, Profile etc...	IBM Watson STT service
4.	Application Logic-3	The user can get the expense report in the Statistics form and get alerts if the expense exceeds the limit that was set.	IBM Watson Assistant
5.	Database	The Income and Expense data are stored in the IBM Cloud database.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM-Cloudant etc.
7.	File Storage	IBM Cloud Storage used to store the financial data of the user	IBM Block Storage or Other Storage Service or Local File system
8.	External API	Purpose of External API used in the application	Aadhar API, etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

<b>S. No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	Flask Framework in Python is used to implement this application to connect the UI and the Backend.	Flask
2.	Security Implementations	This Application Provides high security to the user financial data. It can be done by using the Container Registry in IBM cloud	SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Expense Tracker is a lifetime access web application. Itsdemand will increase along with increase in users.	Container Registry, Kubernetes Cluster.
4.	Availability	This application will be available to the user at any part of time using the Internet.	Container Registry, Kubernetes Cluster