

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

Date	03 October 2022
Team ID	PNT2022TMID39972
Project Name	Personal Expense Tracker application
Maximum Marks	4 Marks

Technical Architecture:

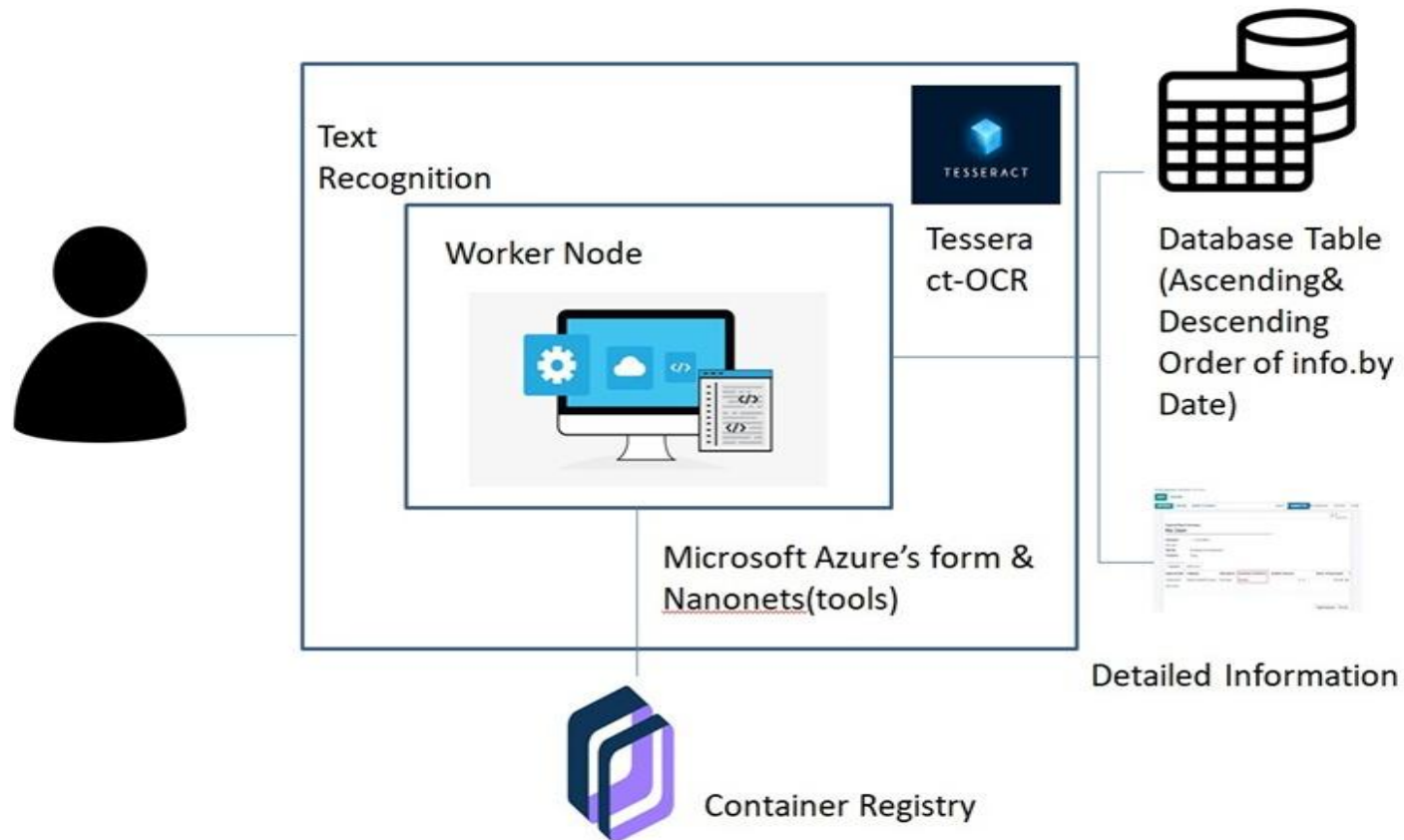


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Home page, login page, chatbot, sign page	HTML, CSS, JavaScript
2.	chatbot	Chatbot to suggest to the users	IBM Watson Assistant
3.	Authentication and user credentials	Used to login users and save the user information	IBM DB2
4.	Product images and details	Logic for a process in the application	IBM Watson Assistant
5.	Database	Load and show to the user	IBM block storage
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant, cloud registry
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Email service	To send notification to users	sendgrid
9.	Containerization	To convert all the resources into iso image file	Docker
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	To function the application	Flask, sendgrid, docker
2.	Security Implementations	To secure the transactions between server and client and save from intruders	SSL certification
3.	Scalable Architecture	Effective database, responsive , robust architecture	IBM DB2, IBM Watson assistant, IBM block storage

S.No	Characteristics	Description	Technology
4.	Availability	Resources are containerized and uploaded in cloud so user can access them thorough a simple web browser	Docker, Kubernetes, IBM cloud
5.	Performance	The application will be responsive even multiple requests raised because of containerization instead of traditional server method	Docker, kubernetes