

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

Date	21 October 2022
Team ID	PNT2022TMID08666
Project Name	Project – AI-based discourse for Banking Industry
Maximum Marks	4 Marks

Technical Architecture:--

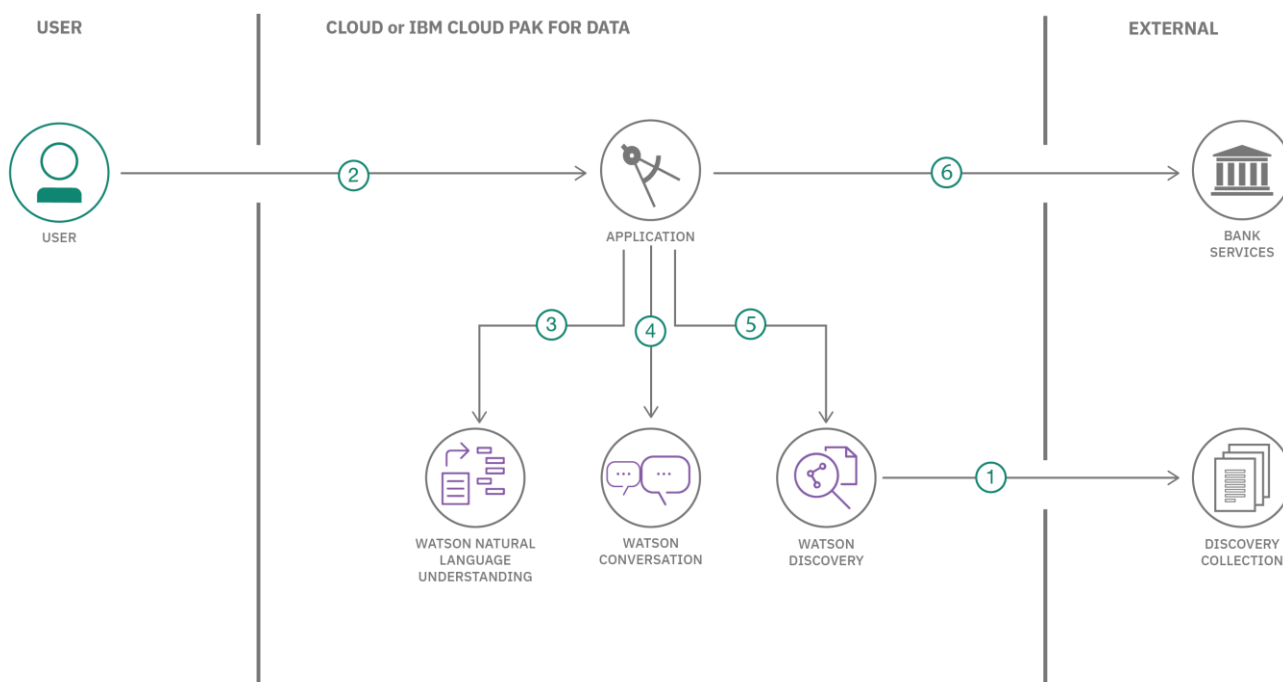


Table 1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	A chatbot using Watson's assistant. This chat should have the many capabilities.	HTML, CSS, JavaScript, Python
2.	Chatbot	The Bot should be able to guide a customer to create a bank account. The Bot should be able to answer loan queries. The Bot should be able to answer general banking queries. The Bot should be able to answer queries regarding net banking.	IBM Watson Assisstant
3.	Database	To store the FAQs	MySQL

4.	Machine Learning Model	Ability to understand text and spoken words in much the same way human beings can	Natural Language Processing
5.	Infrastructure (Server)	Server side scripting	Node.js

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A software for which the original source code is made freely available and may be redistributed and modified according to the requirement of the user.	Bootstrap, Node JS
2.	Security Implementations	Authentication, with which chatbots verify the user identity and authorisation, which grants the user access to information or function. These processes ensure that the person using the device is legitimate and not fraudulent	JavaScript
3.	Scalable Architecture	Most chatbot architectures consist of four pillars, these are typically intents, entities, the dialog flow (State Machine), and scripts.	Python, JS
4.	Availability	The Chatbot is available to be accessed, whenever and wherever Internet Connectivity is present.	Python, JS, NodeJS
5.	Performance	Increase Customer Engagement. Improve Lead Generation. Reduce Customer Service Costs. Monitor Consumer Data to Gain Insights. Devise a Conversational Marketing Strategy. Balance Automation with Human Touch. Meet Customer Expectations. Achieve Scalability of Support.	Python, JS, NodeJS, NLP