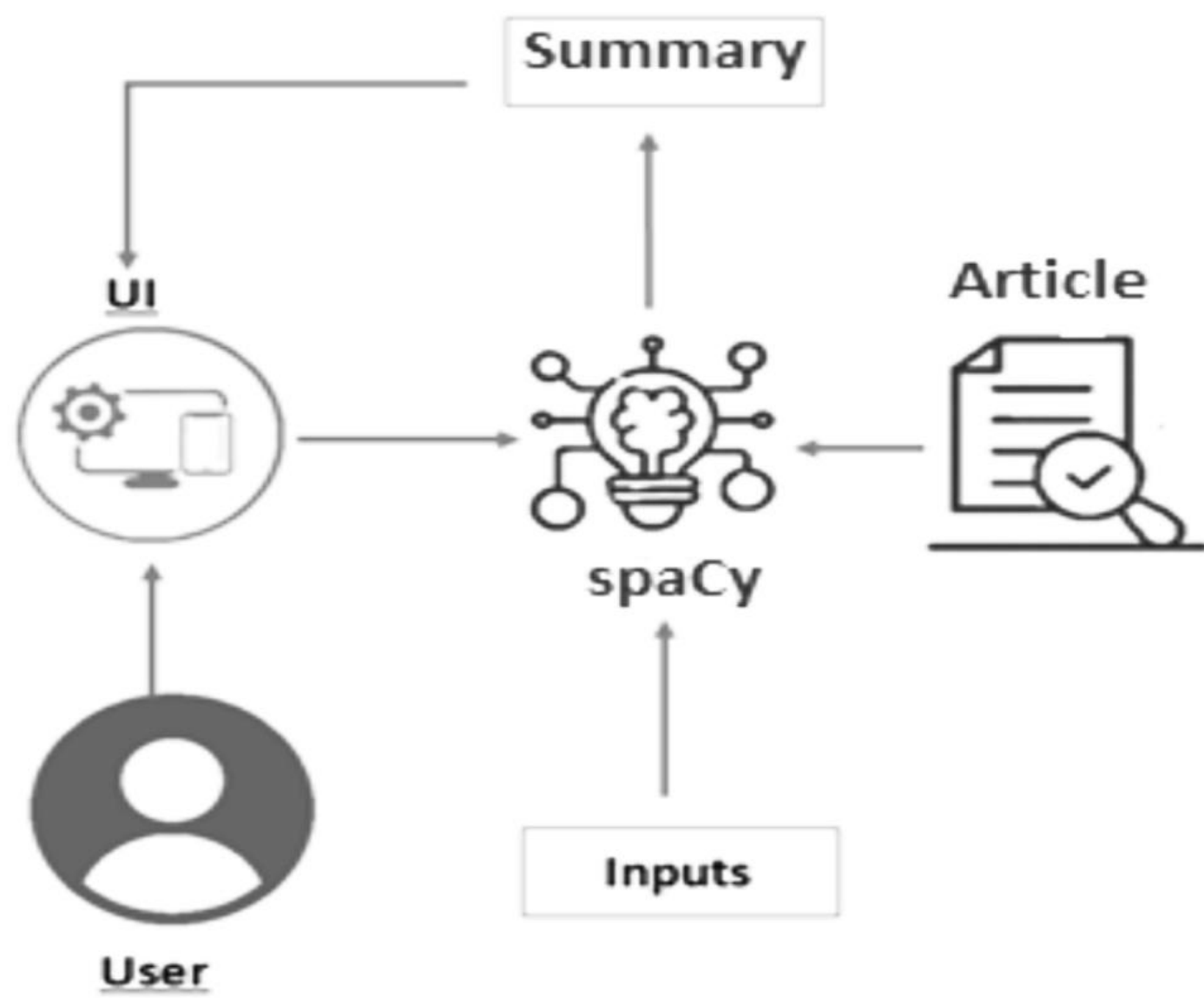


Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	592223
Project Name	Extracting intelligent insights with AI based systems
Maximum Marks	4 Marks

Technical Architecture:



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

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Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Text Pre-processing	Java / Python
3.	Application Logic-2	Word Tokenization	Java / Python
4.	Application Logic-3	Sentence Tokenization	Java / Python
5.	Database	Data Type: unstructured data.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	Google cloud
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	pip install spacy	python libraries
9.	External API-2	pip install Flask	python libraries
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)		Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used

S.No	Characteristics	Description	Technology
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used

References:

1. "Text Summarization Techniques: A Brief Survey" by R. Karthika and R. Sivaranjani in the International Journal of Computer Applications.
2. "A Survey on Text Summarization Techniques" by A. Gupta and M. Gupta in the International Journal of Computer Applications.
3. "Automatic Text Summarization: A Review" by M. S. Khedkar and P. Bhosale in the International Journal of Computer Applications.
4. "Extractive Summarization: A Survey" by A. K. Singh and S. Kumari in the Journal of King Saud University - Computer and Information Sciences.
5. "Abstractive Text Summarization: A Survey" by P. Gupta, A. S. Chauhan, and K. K. Sharma in the Journal of King Saud University - Computer and Information Sciences.