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

Date	03 October 2022
Team ID	PNT2022TMID00684
Project Name	Project - Intelligent Vehicle Damage Assessment & Cost Estimator for Insurance Company
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Figure 1: Architecture for the - Intelligent Vehicle Damage Assessment & Cost Estimator for Insurance Company

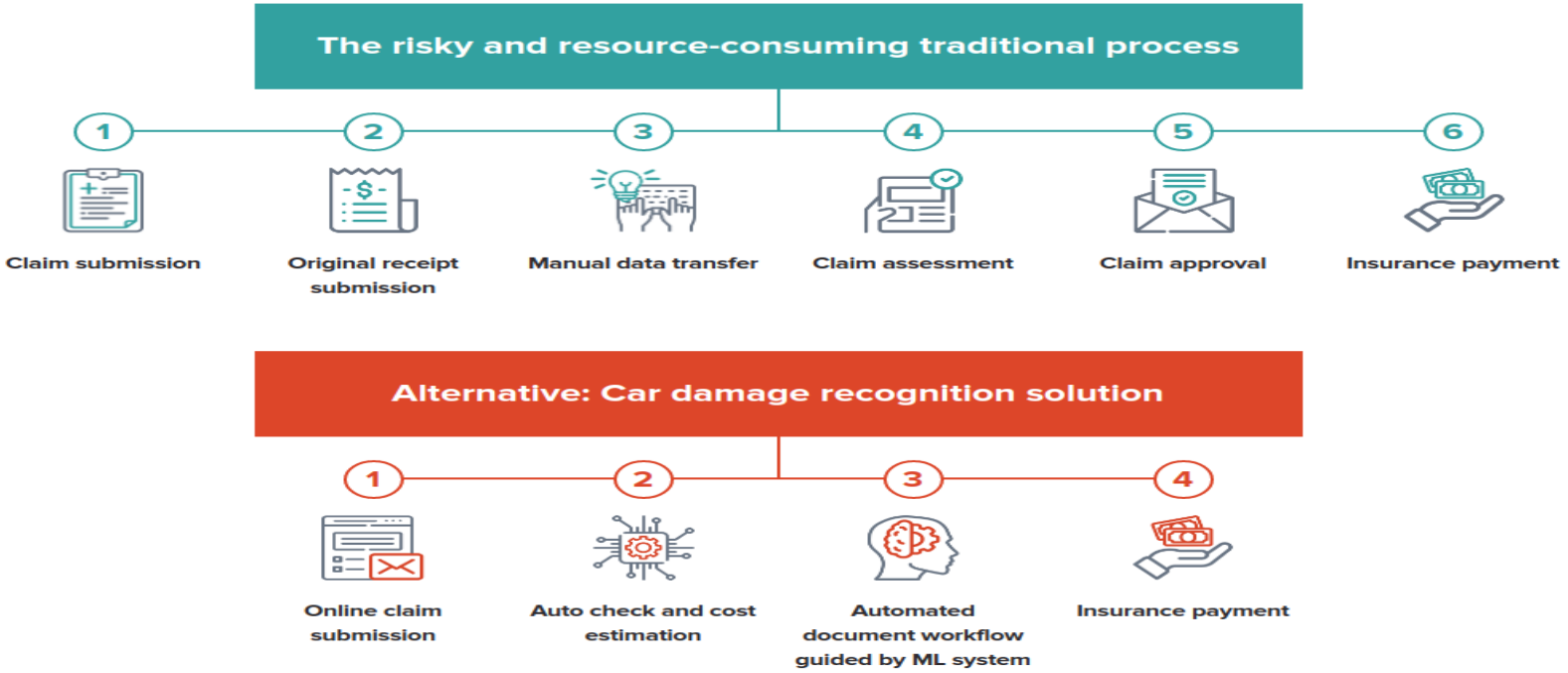

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can use the website to claim the insurance.	HTML, CSS, JavaScript
2.	Application Logic-1	Image processing and recognition.	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service

4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Dataset	System
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, 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:

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,	Technology used

S.No	Characteristics	Description	Technology
		Micro-services)	
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:

https://ieeexplore.ieee.org/abstract/document/9752971

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4118440

https://www.taylorfrancis.com/chapters/edit/10.1201/9781003180593-10/damaged-vehicle-parts-recognition-using-capsule-neural-network-kundjanasith-thonglek-norawit-urailertprasert-patchara-pattiyathanee-chantana-chantrapornchai