Project Design Phase-II
Technology Stack (Architecture & Stack)
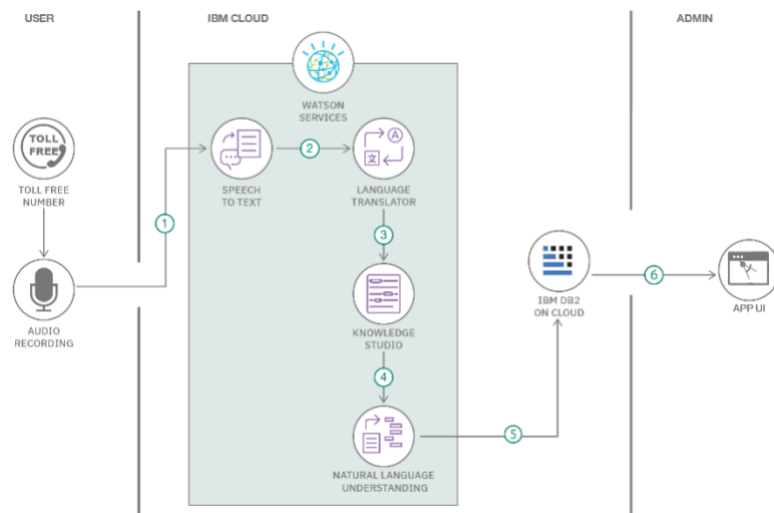
Team ID	PNT2022TMID08412
Project Name	Project - AI-based localization and classification of skin disease with erythema
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
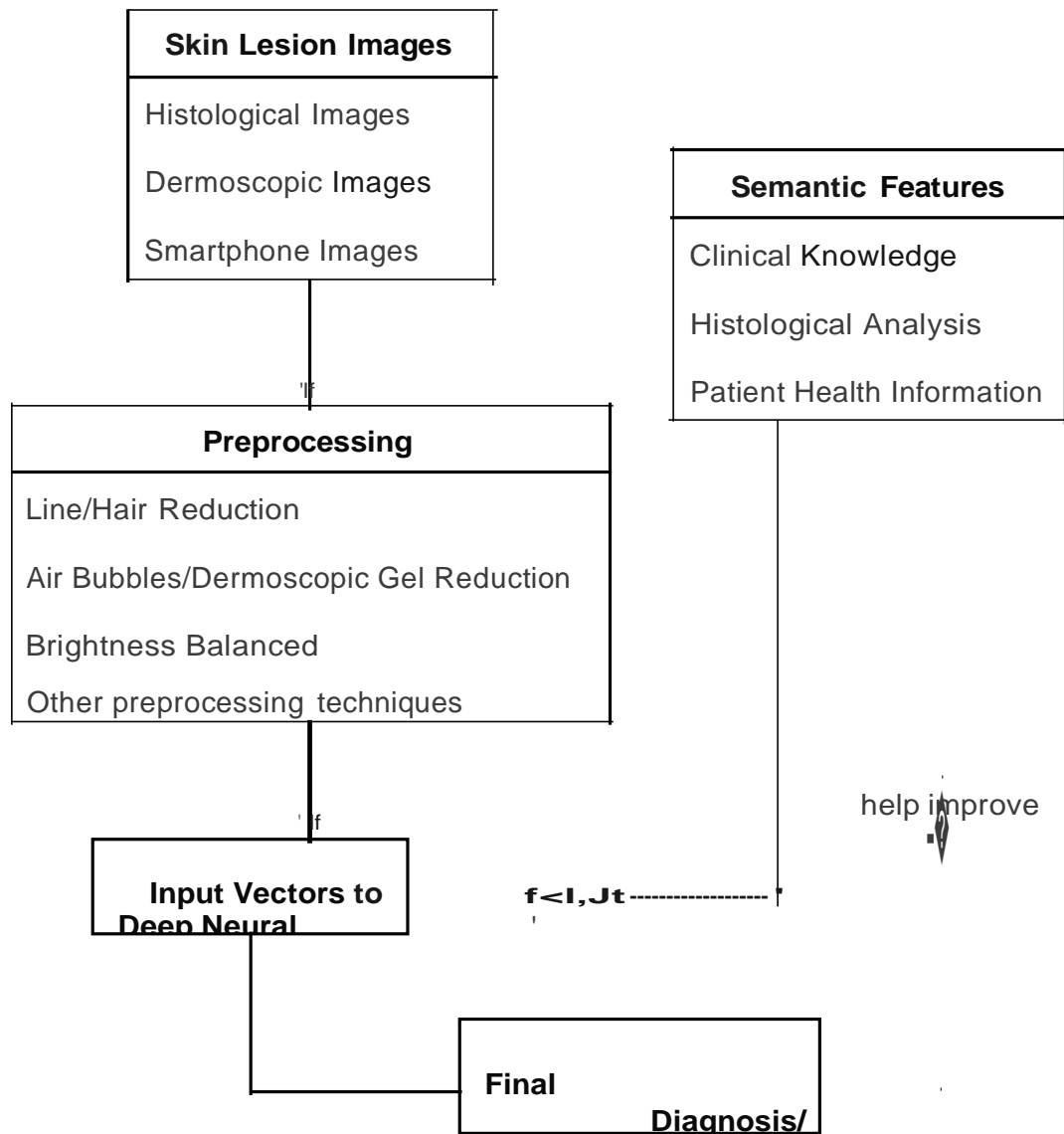
Example: Order processing during pandemics for offline mode

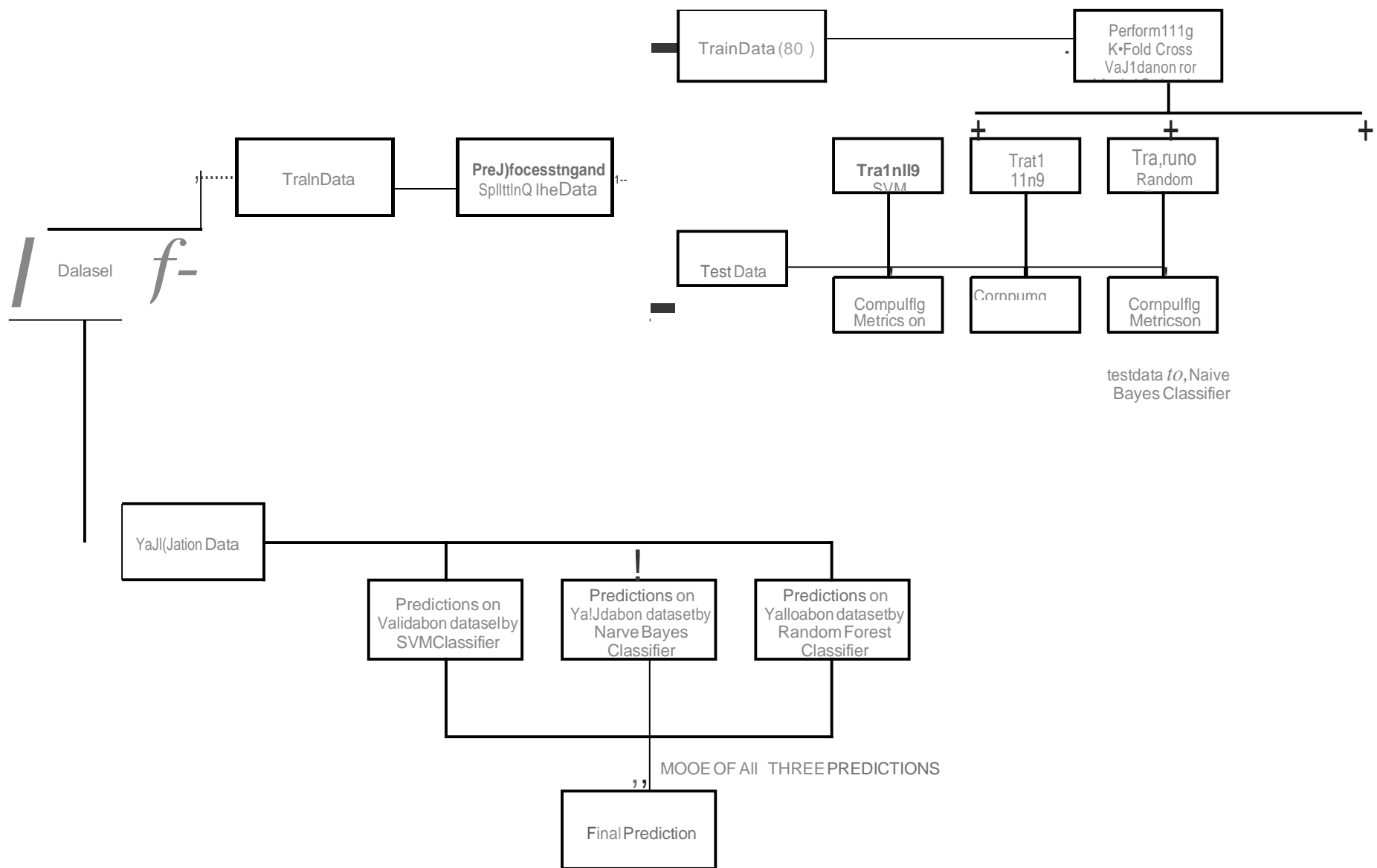**Reference:** **https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/**

Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Skin Lesion Images

Histological Images

Dermoscopic Images

Smartphone Images

Semantic Features

Clinical Knowledge

Histological Analysis

Patient Health Information

Preprocessing

Line/Hair Reduction

Air Bubbles/Dermoscopic Gel Reduction

Brightness Balanced

Other preprocessing techniques

help improve

Input Vectors to Deep Neural

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Final Diagnosis/

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Trat1 11n9

Tra,runo Random

Test Data

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Cornpuma

Cornpulflg Metricson

testdata *to*, Naive Bayes Classifier

YaJl(Jation Data

Predictions on Validabon dataselby SVMClassifier

Predictions on Ya!Jdabon datasetby Narve Bayes Classifier

Predictions on Yalloabon datasetby Random Forest Classifier

MOOE OF All THREE PREDICTIONS

Final Prediction

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d