**Project Design Phase-I**

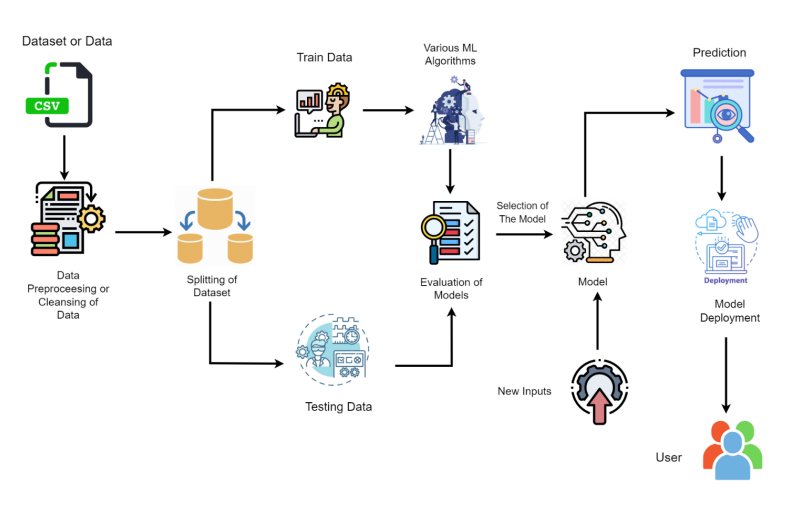
**Solution Architecture**

| Date | 1 November 2023 |
| --- | --- |
| Team ID | Team-592942 |
| Project Name | Detecting COVID-19 From Chest X-Rays Using Deep Learning Techniques |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

* **Best Tech Solution:**
  + The "Covid-19 Detection using Deep Learning with Chest X-rays" project aims to harness the power of deep learning algorithms to facilitate early and accurate diagnosis of Covid-19 by analyzing chest X-ray images
* **Behavior and Aspects:**
  + The software behavior is dynamic, adapting to changing data patterns. Aspects include data preprocessing, using best image preprocessing algorithms like RESNET-50, and Transfer learning..
* **Development Phases:**
  + Our application undergoes iterative development phases:
    - Data Preprocessing: Cleaning and preparing data for analysis.
    - Model Training: Using RESNET-50.
    - Evaluation: Assessing model accuracy and fine-tuning.
    - Integration: Seamlessly integrating into existing healthcare systems.
* **Solution Requirements:**
  + Key requirements include:
    - Data Quality: High-quality fetal health data.
    - Computational Resources: Adequate resources for model training.
    - Integration: Compatibility with existing healthcare infrastructure.

**Solution Architecture Diagram:**

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