



Data Collection and Preprocessing Phase

| Date | 09-07-2024 |
|---------------|---|
| Team ID | SWTID1720433291 |
| Project Title | CovidVision: Advanced COVID-19 Detection From Lung X-Rays With Deep Learning |
| Maximum Marks | 2 Marks |

Data Collection Plan:

| Section | Description |
|-----------------------------|---|
| Project Overview | The goal of this project is to develop an advanced AI system that utilizes deep learning techniques to rapidly and precisely detect COVID-19 from lung X-ray images. The aim is to enhance diagnostic capabilities, alleviate healthcare system burdens, and improve patient outcomes by providing a reliable and scalable diagnostic tool. |
| Data Collection Plan | Identify datasets related to COVID-19 detection that leverage lung X-rays and deep learning techniques. Prioritize datasets that have a balanced distribution of COVID-19 positive, pneumonia, and normal cases. This will help ensure robust model training and validation. |
| Raw Data Sources Identified | The raw data sources for this project is taken from kaggle website. The provided sample data contains a subset of information such as covid-19 status x ray images etc for analysis. |

Raw Data Sources report:

| Source | | | | | Access |
|--------|-------------|--------------|--------|------|-------------|
| Name | Description | Location/URL | Format | Size | Permissions |
| | | | | | |





| Covid-19 Radiography Database | Collection of chest X-ray images for covid detection and related research | https://www.kaggle.com/datasets/tawsifurrahman/covid19-radiography-database | Images and CSVs | 1.16 GB | Public, requires kaggle account |
|--------------------------------------|---|---|-----------------------|------------|----------------------------------|
| CoronaHack chest x-ray Dataset | A dataset of chest X-ray images for diagnosing COVID-19 and other related illnesses | https://www.kaggle.com/datasets/praveengovi/coronahack-chest-xraydataset | Images And CSVs | 1 GB | Public,Requires a Kaggle account |