Project Ouline:

Purpose: To predict weather the person as lung infection or not by based on his chest x ray. This project will be a great help for the healthcare domain. As accuracy is very important the outline of our project is as follows:

1. Collect and pre-process data: Collect a large dataset of chest X-rays with labelled ground truth for lung infection. Pre-process the data by resizing, normalizing, and augmenting the images.
2. Train a deep learning model: Build a deep learning model using effectivenet do as a base model that can learn to detect patterns in the chest X-rays that indicate lung infection. Train the model using the pre-processed dataset and optimize its hyperparameters to maximize performance.
3. Evaluate model performance: Evaluate the performance of the trained model using a separate test dataset. Measure the model's accuracy, precision, recall, F1 score, and ROC curve.
4. Fine-tune the model: Analyse the results of the model evaluation to identify areas where the model needs improvement. Fine-tune the model by adjusting its architecture or training procedure to improve performance.
5. Deploy the model: Once the model achieves satisfactory performance, deploy it in a real-world application. This could involve integrating the model into a web or mobile app that allows users to upload chest X-rays for analysis.
6. Monitor and update the model: Monitor the performance of the deployed model and update it periodically as new data becomes available or as new techniques for deep learning model development emerge.