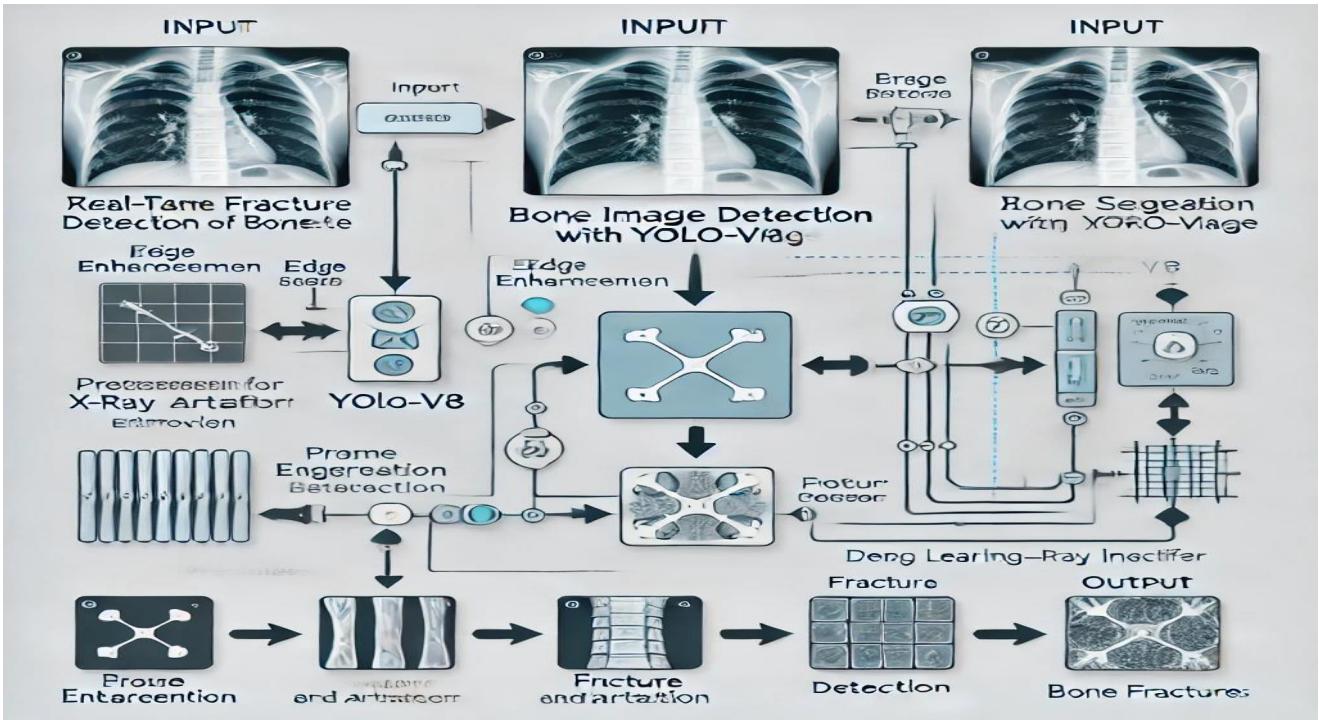
Project Initialization and Planning Phase

Date	20 Sep 2024
Team ID	team-740082
Project Name	Real-time Bone Fracture Detection with YOLO-V8 Using X-ray Images
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

Detecting bone fractures in X-ray images is often slow and prone to errors due to manual analysis, high workloads, and human fatigue. These delays can lead to misdiagnoses and improper treatment, worsening patient outcomes. Radiologists and doctors need a reliable, real-time AI-powered system to assist with accurate and faster fracture detection, reducing errors and enhancing patient care efficiency**.** Bone fractures are a common and potentially debilitating injury. Timely and accurate diagnosis is crucial for effective treatment and prevention of long-term complications. However, interpreting X-ray images to detect fractures can be challenging, even for experienced radiologists.



Example:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A radiologist or healthcare professional	Accurately detect bone fractures in X-ray images in real-time	Manual detection is time-consuming, error-prone, and requires expertise	Misdiagnosis or delayed diagnosis can severely impact patients	Overwhelmed and concerned about patient outcomes
PS-2	A patient in need of urgent care	Receive a quick and accurate fracture diagnosis	The process is slow due to manual X-ray interpretation in emergency settings	I need timely treatment to avoid complications	Anxious and frustrated by the delay