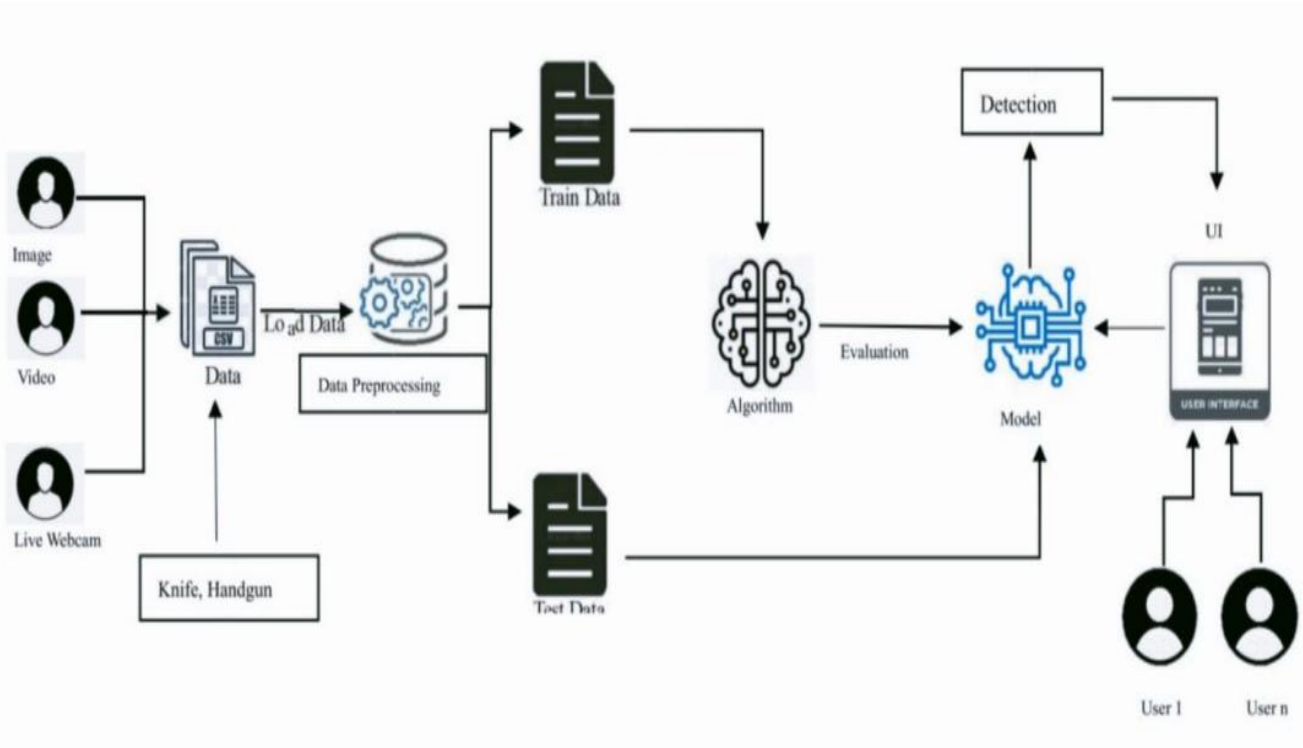
Technology stack



Component:	Description:	Function:	Technology Used:
Dashboard	We can access the Arming Against Violence dashboard to view real-time insights and recommended actions related to weapon detection.	The Dashboard prominently displays Real-Time Threat Alerts,Collaboration Tools, Historical Weapon Detection Trends.	HTML/CSS/JAVASCRIPT/FLASK
Data collection	We need a large dataset for the better accuracy of yolo model.so we merged 3 datasets from kaggle together.	Dataset is used for training yolo	kaggle
Data pre-processing	Annotate every image in the dataset and creating labels for them .Split data to train and test.Create a data.yaml file for training yolo model	Using data.yaml file we train yolo model	Robo-flow
Training Model	We run and process the images/videos so that we can train the model for identifying the model	The helps us to train the model which later on detects the arms/guns/weapons	YOLO (YOU ONLY LOOK ONCE)
Platform notebook	We train/run the model using a software/platform	This helps us to run/ train the model using a easy to use platform which is built for training such models	Chrome notebook/kaggle notebook
Implementing web application	To display the working of yolo model with good ui	Display the yolo web application	flask