

Human Elephant Conflict Prevention

Week 2:

In Week 2, the project moved from planning to technical development. The complete system workflow was designed, outlining how the camera would capture frames, the YOLO model would detect elephants, and alert systems like Pushbullet, digital boards, and sound alarms would be triggered. The development environment was set up by installing required Python packages, testing the webcam, and configuring the YOLOv9 model for elephant detection. The first working prototype was created by writing code to detect elephants in real time using the model. Additional functionalities were implemented, such as saving detection screenshots with timestamps, sending instant Pushbullet alerts to forest rangers, and activating continuous beeping sounds to protect crops whenever an elephant remained in the area. This week established the core technical backbone of the system, transforming the idea into a functional early-stage model ready for refinement.