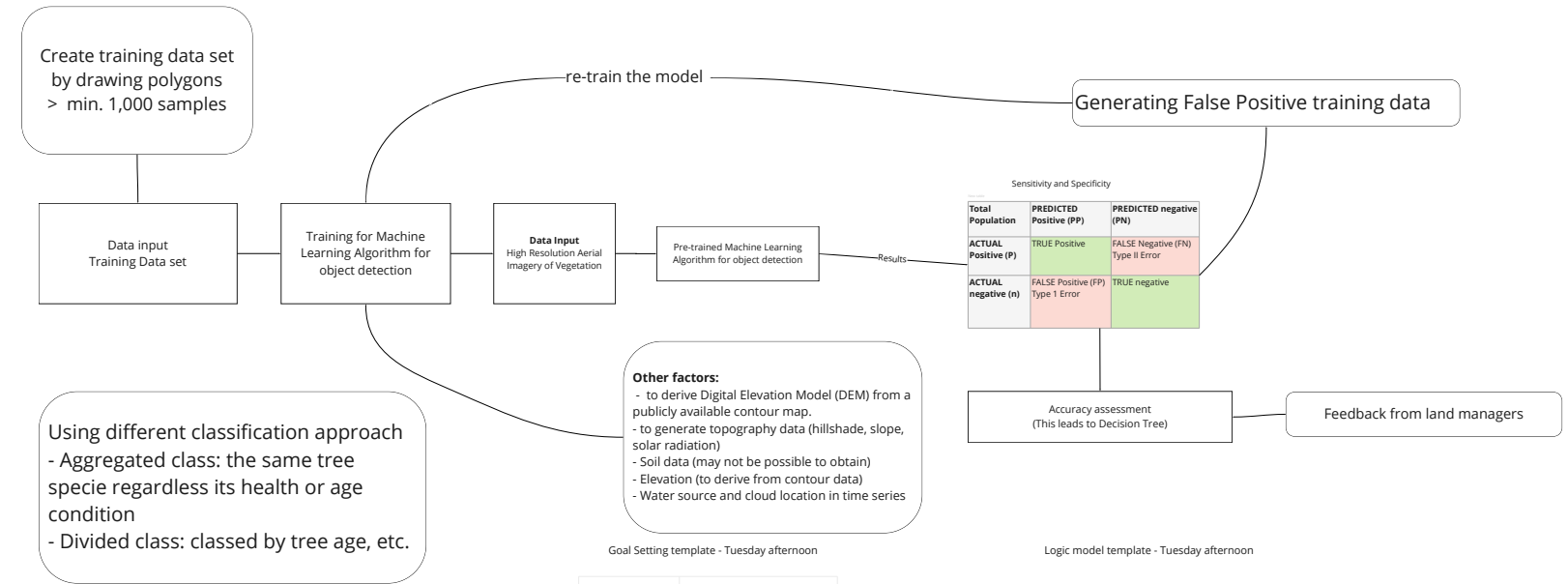


Goal: to map invasive tree/shrub species using Machine Learning object detection technique to assist land managers for effective and efficient land management.



Goal Setting template - Tuesday afternoon

Problem Statement What is the target technology? What should domain researchers using the target technology be able to do?	The goal of this project is to map invasive tree/shrub species using Machine Learning object detection technique to assist land managers for effective and efficient land management.
Must Have Capabilities What capabilities must existing ML be able to provide the desired outcome from the domain perspective?	<ul style="list-style-type: none">- High performance computer with powerful GPU- Sufficiently sized high-resolution aerial imagery for the area of interest
Must Have Technologies What specific technology approaches must be developed to enable these capabilities?	<ul style="list-style-type: none">- Machine Learning (ML) algorithm in Python- At ML, at least four, 8 GB, 1 core
Let three to four SMART objectives for the project that integrate both technical and domain research	<ul style="list-style-type: none">- To detect invasive tree/shrub species- Create training data set (it will be repeated 10 times)- Train the model and get results (the process will be repeated until desired accuracy is achieved)- Conduct accuracy assessment - Bayesian statistics, chi-square, confidence scores, visual inspection, feedback from land managers (the data from the ML model again after the accuracy assessment)- The entire project should be completed within six months.

Logic model template - Tuesday afternoon

