**Use Cases: John and Elliot**

Client Perspective:

Case 1: Client uploads photos with no trail users

Approach: Program initially disregards empty photos

Case 2: Client uploads photos with multiple trail users

Approach: Program initially sorts images based on number of users in image.

Case 3: Client uploads multiple photos with same trail users

Approach: If two images back-to-back both classify a skier, flag a human to check it out and decide if it is the same skier

Case 4: Client uploads photos from multiple trail locations

Approach: Require one location per upload.

Data Training Perspective:

Case 1: Manipulating photos to differentiate photos with nothing in it vs. at least something

Approach: Use blob detection to identify 0, 1, 2, 2+ users within a single photo.

Case 2: Program classifies images incorrectly

Approach: Once the program finishes, allow the client to check whether the images was classified correctly. True/false button and if false, what was the correct answer.

Case 3: Photos are from the daytime

Approach: By knowing the images are from the daytime, we will be able to understand if there are more darker pixels than an image with no one in it then there’s a good chance one or more people are in the image.

Case 4: Photos are from the nighttime

Approach: By knowing the images are from the nighttime, we will be able to understand if there are more lighter pixels than an image with no one in it then there’s a good chance one or more people are in the image because of flashlights, snowmobile lights, etc.