Microsoft Face API Documentation

Face – Detect: Find Faces in picture
- Generates **faceId** per face in picture
- faceId = random hash
- Expires 24 hours after detection call
- Up to 64 faces can be returned for an image
- **INPUT:**
    - Image URL (has to be .jpg/.jpeg)
- **OUTPUT:**
    - faceID
    - faceRectangle (size of face)
    - faceLandmarks (position of eyes/nose/mouth)
    - faceAttributes (age/gender/emotion/hair/etc)

Face – Verify: Verify whether two faces belong to the same person
- Tells you if faces are identical, and confidence of whether two faces belong to same person
- **INPUT:**
    - Two face IDs
- **OUTPUT:**
    - IsIdentical: true/false
    - confidence: between 0 and 1

Face – FindSimilar: Choose a main face, look through a FaceList and compare each face in the array to the "main face", and produce a confidence score for each comparison
- Tells you if faces are identical, and confidence of whether two faces belong to same person
- **INPUT:**
    - Main faceId
    - Array of faceId's to compare too
    - maxNumberOfCandidates
    - mode: matchPerson / MatchFace
- **OUTPUT:**
    - faceId
    - confidence: between 0 and 1

Face – Group: Divides faces into groups based on face similarity
- Looking at an array of faceIds, makes groups based on similarity, faces that are not similar to any other are put into a messyGroup
- **INPUT:**
    o Array of FaceIds –-> MAX = 1000
- **OUTPUT:**
    o Groups (of faceIds that look similar)
    o MessyGroup (face ids array that have no similar matches, essentially the leftover)

FaceList – Create : Create an empty face list (list of faces)
- FaceList Max: 1000, LargeFaceList Max: 1 million faces
- Can use FindSimilar on FaceList to find matches
- **INPUT:**
    o Name of list

FaceList – Add Face: Add face to a face list
- PersistedFaceIds: do not expire
- **INPUT:**
    o Image URL
- **OUTPUT:**
    o PersistedFaceID of the added face