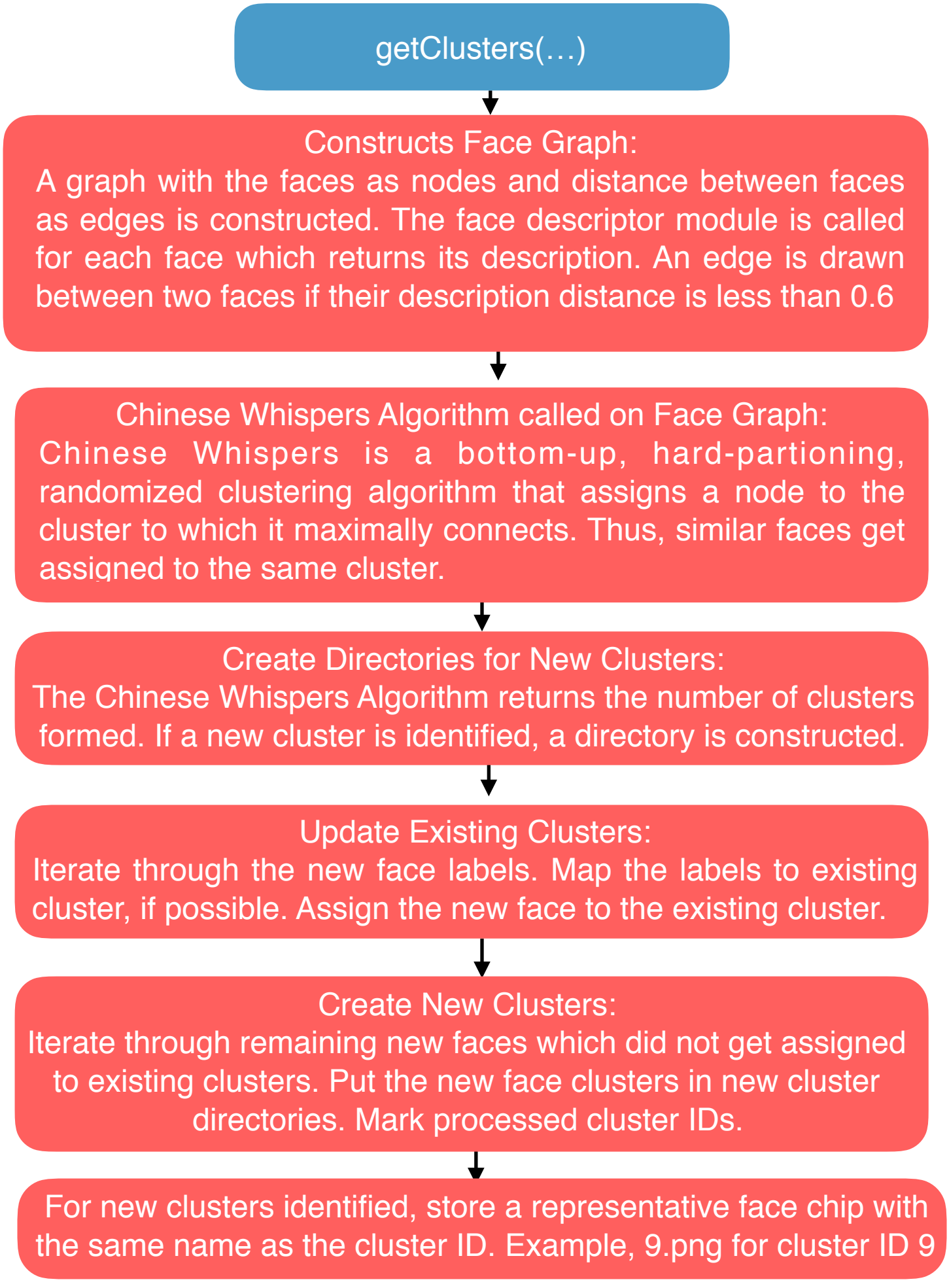
getClusters(…)
Constructs Face Graph:
A graph with the faces as nodes and distance between faces as edges is constructed. The face descriptor module is called for each face which returns its description. An edge is drawn between two faces if their description distance is less than 0.6
Chinese Whispers Algorithm called on Face Graph:
Chinese Whispers is a bottom-up, hard-partioning, randomized clustering algorithm that assigns a node to the cluster to which it maximally connects. Thus, similar faces get assigned to the same cluster.
Create Directories for New Clusters:
The Chinese Whispers Algorithm returns the number of clusters formed. If a new cluster is identified, a directory is constructed.
Update Existing Clusters:
Iterate through the new face labels. Map the labels to existing cluster, if possible. Assign the new face to the existing cluster.
Create New Clusters:
Iterate through remaining new faces which did not get assigned to existing clusters. Put the new face clusters in new cluster directories. Mark processed cluster IDs.
For new clusters identified, store a representative face chip with the same name as the cluster ID. Example, 9.png for cluster ID 9