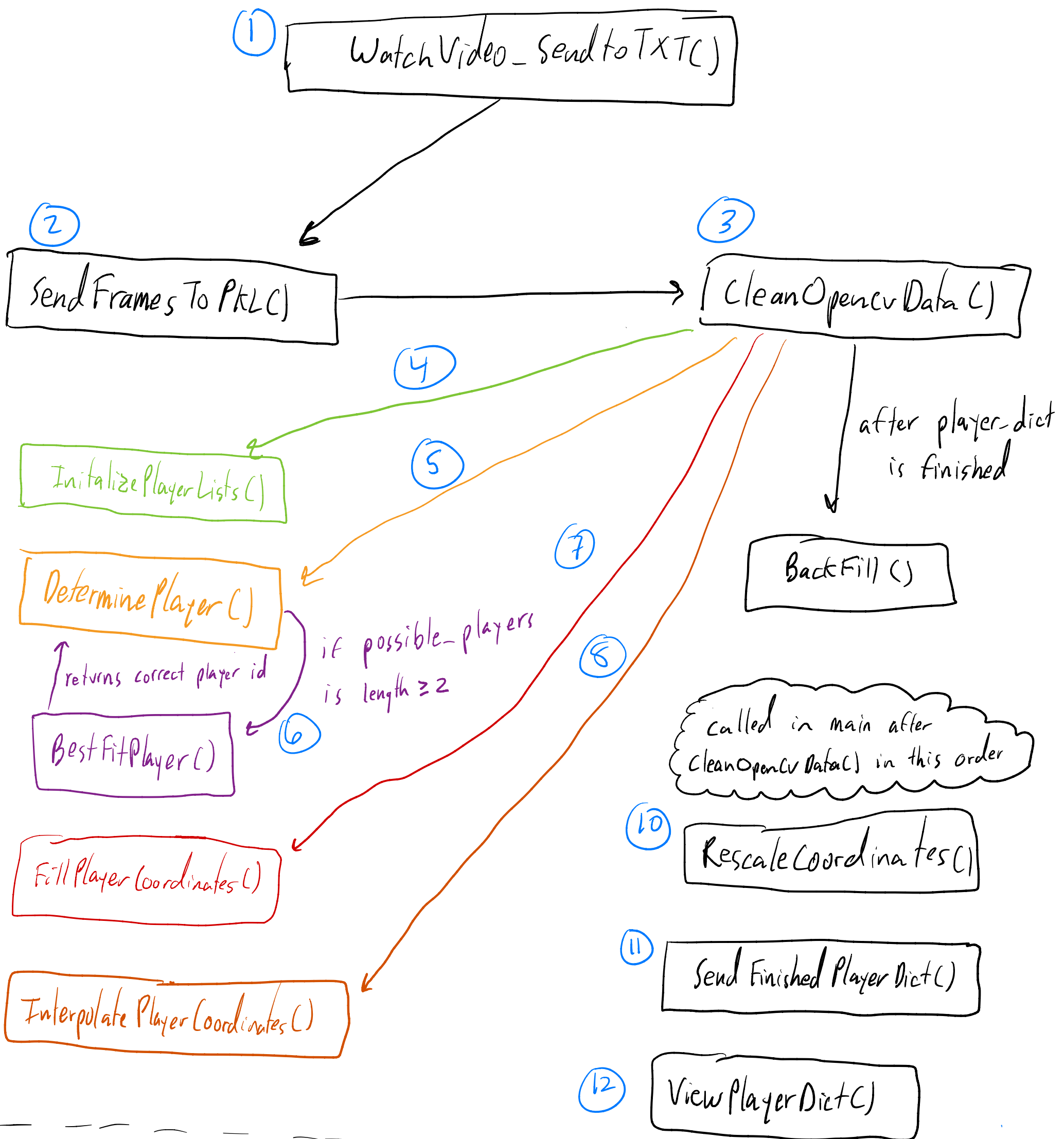


ProcessVideo()



ProcessVideo() class finished and produces

• json and • pkl to be used in GUI

To use GUI create correct path to json and pkl files and run

① Loops through video and calculates center coords of moving objects
→ sends these coords to .txt file

② • loops through video and stores frames in a list
→ sends this list of PTKL file
→ List is used to watch video in GUI

③ • Acts as "main()" for cleaning functions
• Loops through .txt file coords and sorts player coords into player lists
→ calls all necessary functions to sort player coords to correct list

④ • Adds new spot at the end of each player list w/ that player's most recent coords
(makes sure all player list is the same size)

⑫ • Sends player_dict to .txt file for viewing

⑤ • Is sent player coords, id, and frame num
• Determines who the coords belong to based on distance

⑥ • Determines the correct player for coords based on which direction players are moving

⑦ • Fills in gaps in frames between consecutive elements of all player lists

⑧ • Fills in jumps in coordinates
→ smooths jumps in coordinates
["100,200", "100,200", "200,300"]
→ ["100,200", "150,250", "200,300"]

⑨ • Fills in all missing frames before player was initially tracked all the way to frame 1
→ Ex: if player started moving at frame 30, this function creates 29 new spots for frame num 1-29 (these spots are filled in with position found at frame 30)

⑩ • Rescales coords (in player_dict) to size 0.25 for watching in GUI

⑪ • sends finished player_dict (stores all finished player lists) to .json file for GUI