Until now, the obstacles that faced in the world of animation is a rigid motion animation, because animation is created by using animation software. Therefore, the will to design and created a “human like” 3D animation movement technique is needed. One of the technique is motion capture. This final project designed and implemented motion capture method by using multicamera, where the markered moving object is captured by the camera, which will be reconstructed into 3D Stick Figure. The moving object is the movement of human, which is markered with 13 markers, and captured by using multicamera. By using OpenCV, each marker point on input video will be reconstructed into 3D Stick Figure. The distance between each point will be calculated, then it will be compared with the real distance. From the comparation, the rate of the error is 3,21%. This means that this motion capture method is very useful and can be applied for the making 3D animation.