# Scaled Down to Size

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When we play virtual reality games on devices such as the HTC Vive, we sometimes forget the amount of work that goes into making the virtual world seem like reality. Each object needs to be scaled to a size that looks realistic while maintaining the same scale as every other object in the room. If extra care isn't taken, you could end up with a blurry stapler the size of a vending machine.
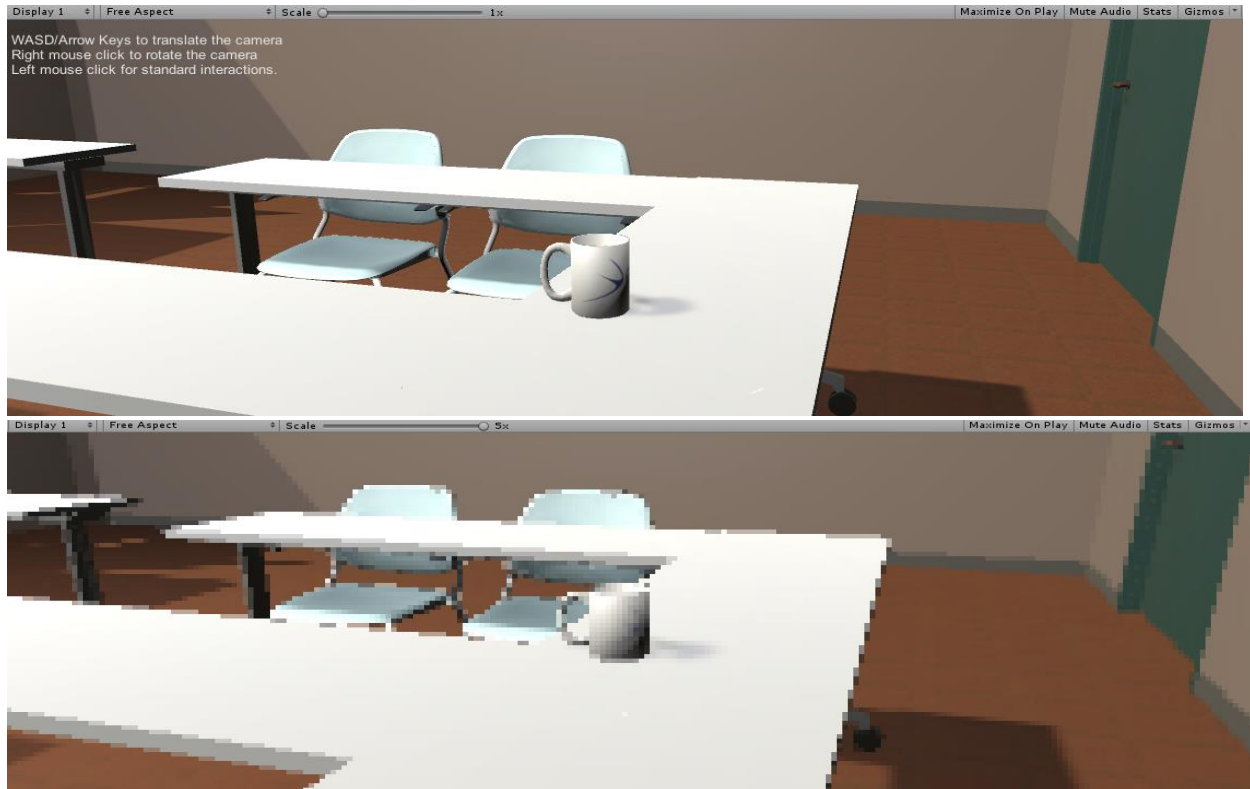
Above are two screen shots of the same image with different Fields of View and different scaling. The top image has a Field of View of 30 and 1x scaling and the bottom image has a Field of View of 105 and 5x scaling. After experimenting with the scaling of the mug and Field of View of the room the mug could look like its physically filling the same amount of space, but the resolution would but far too pixelated. Suddenly a world that was supposed to be crystal clear looks like it's from the 90's. In modern gaming, every pixel is important so it's imperative that the picture be as clear as possible.

From a builder's perspective, trying to work in a pixelated environment is extremely inconvenient. Comparing the two pictures above, it's hard to tell if the mug is resting on the table or if its floating directly above it. Of course, the scaling feature is also used to show attention to detail. The higher an object is scaled, the more important it is for the object to be detailed.