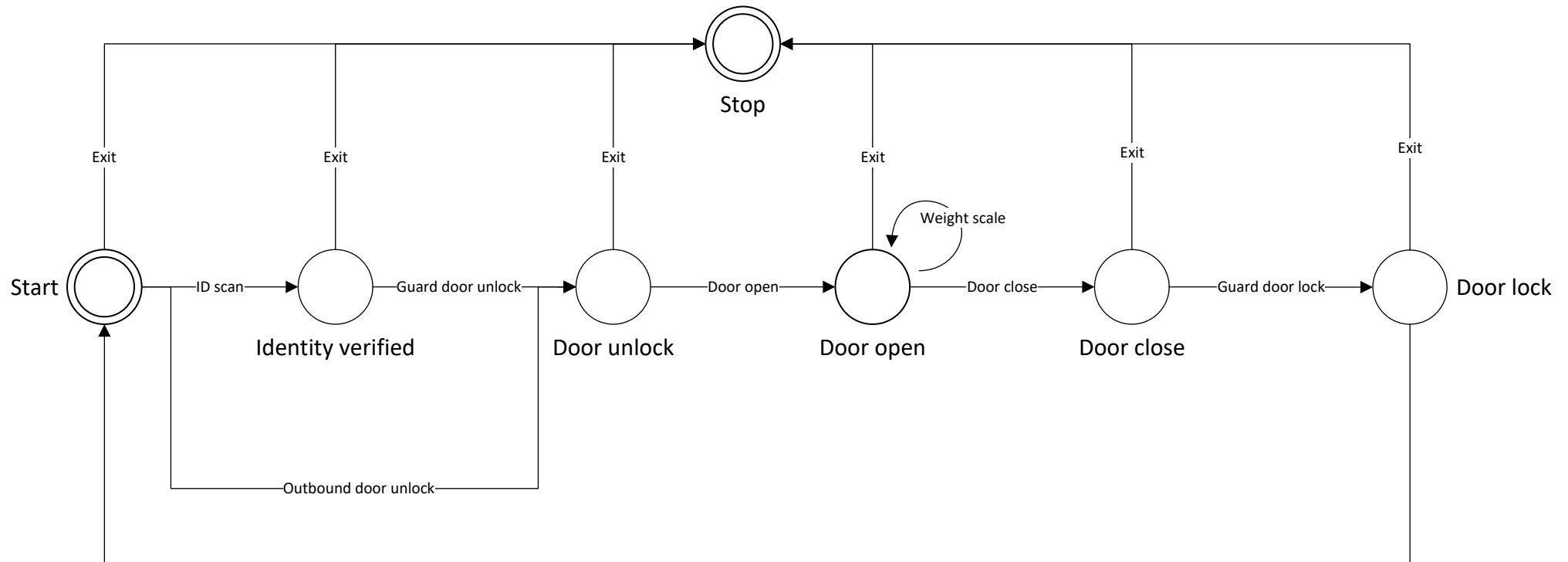# Door Entry System FSM

Inputs	States	Outputs
ID scan (*SCAN_ID*): Person scans id on a door	**Start (START):** Initial state	**ID_SCANNED:** Person scanned ID
Guard door unlock (*UNLOCK_DOOR*): Guard unlocks a door	**Identity verified (IDENTITY_VERIFIED):** Person completed ID scan and is authenticated	**WEIGHED:** Person weighed
Outbound door unlock: Guard unlocks a door for an already authenticated person leaving the building	**Door unlock (DOOR_UNLOCK):** Guard unlocked a door	**LEFT_OPEN:** Person opened left door
Door open (OPEN_DOOR): Person opens a door	**Door open (DOOR_OPEN):** Person opened a door	**RIGHT_OPEN:** Person opened right door
Weight scale (WEIGHT_SCALE): Person is weighed	**Door close (DOOR_CLOSE):** Person closed a door	**LEFT_CLOSE:** Left door closed (automatically)
Door close (CLOSE_DOOR): Person closes a door	**Door lock (DOOR_LOCK):** Guard locked a door	**RIGHT_CLOSE:** Right door closed (automatically)
Guard door lock (LOCK_DOOR): Guard locks a door	**Stop (STOP):** End state	**GUARD_RIGHT_UNLOCK:** Right door unlocked by Guard
		GUARD_RIGHT_LOCK: Right door locked by Guard
		GUARD_LEFT_LOCK: Left door locked by Guard
		GUARD_LEFT_UNLOCK: Left door unlocked by Guard
		EXITED: Exit Display