Embedded System – Smart Watering

**Actors**

1. Soil Moisture Sensor (MS)
2. Sprinkler (S)
3. Controller (C)

**Signals**

MS to C ( moisture level change )

C to S ( start/stop the sprinkler )

**Interactions**

* Initially, S is in *stopped* state;
* MS keeps checking the level of water from the soil, normalizing the data to be between 0 and 100%; MS **signals** C every time the value of the moisture changes; the signals contain the new value of soil moisture
* if the moisture is less than or equal to 40% and S is in the *stopped* state, C **signals** S to start watering; S will go to the *watering* state;
* if the moisture reaches at least 80% and S is still in *watering* state, C **signals** S to stop watering; S will go to the *stopped* state.