

# HVAC Workshop

Your team will integrate with another team's code to control an HVAC system. The other team will implement code to communicate with the hardware, and their code will be behind this interface:

```
public interface HVAC {  
    void heat(boolean on);  
    void cool(boolean on);  
    void fan(boolean on);  
    int temp();  
}
```

- heating & cooling elements are across the room from the thermostat, so increasing the temperature requires heat + fan, decreasing it requires cool + fan, etc.
- rules:
  - best effort: keep the temperature between 65 and 75
  - hard rule: the fan can't run for 5 minutes after the heater is turned off
  - hard rule: the fan can't run for 3 minutes after the cooler is turned off

Your job is to create a class called `EnvironmentController` that implements this method to keep the environment in the range described above:

```
- void tick();
```

`tick()` is called 1x per minute by the *\*rest\** of the application. Your production code doesn't call `tick()` - it gets called by another part of the system [though the tests should call it, of course].