C# excercise

Microwave oven controller:
Please supply a complete Visual studio (2017) solution including the controller code and unit tests.
It's a very simple microwave oven. It has:
A heater – Can be turned on or off
A door – Can be opened and closed by user
A Start Button – Can be pressed by the user

User stories:
When I open door Light is on.
When I close door Light turns off.
When I open door heater stops if running.
When I press start button when door is open nothing happens.
When I press start button when door is closed, heater runs for 1 minute.
When I press start button when door is closed and already heating, increase remaining time with 1 minute.

Any additional requirements that may be missed can be assumed by you, but please note those down.

The hardware of the unit is controlled using this interface:

```csharp
/// <summary>
/// Interface to the Microwave oven hardware
/// </summary>
public interface IMicrowaveOvenHW
{
    /// <summary>
    /// Turns on the Microwave heater element
    /// </summary>
    void TurnOnHeater();

    /// <summary>
    /// Turns off the Microwave heater element
    /// </summary>
    void TurnOffHeater();

    /// <summary>
    /// Indicates if the door to the Microwave oven is open or closed
    /// </summary>
    bool DoorOpen { get; }

    /// <summary>
    /// Signal if the Door is opened or closed,
    /// </summary>
    event Action<bool> DoorOpenChanged;

    /// <summary>
    /// Signals that the Start button is pressed
    /// </summary>
    event EventHandler StartButtonPressed;
}
```