SFWRENG 3K04: Software Development

Assignment 1 – Bonus

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October 27, 2019

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# FSM Implementation

To implement the pushbutton inhibition feature, the following condition was added to the FSM:

* *NOTE: The following procedure applies to both atrium and ventricle chambers, and the usage of ellipsis (…) implies either atrium or ventricle*

## Push Button Condition

### Remain in Charging State if Pushbutton is Activated:

* If **m\_pushButton == true** before the pace delay, ‘p\_...PaceDelay’, has elapsed, the FSM satisfies the self-pointing transition in the charging state and the FSM remains in the charging state
* If **m\_pushButton == false** and the conditions for AAI or VVI sensing are also false, then the FSM moves into regular pacing and a pace is not inhibited

# Hardware Hiding Implementation

* A pushbutton block was added into the hardware hiding subsystem and connected to the **m\_pushButton** monitored variable
* The pushbutton block was allocated to the onboard **SW2** pushbutton
* m\_pushButton has two states:
  1. When the SW2 pushbutton is pressed, **m\_pushButton == true**
  2. When the SW2 pushbutton is at rest, **m\_pushButton == false**