Alarm501-CD-P1

Alarm.cs

- _time: DateTime
- _isOn: bool
- _snoozeTime: int
- _sound: AlarmSounds
+ Time: DateTime
+IsOn: bool
+ SnoozeTime: int
+ Sound: AlarmSounds

<<override>> + ToString(): string

AddForm.cs

+ newTime: DateTime
+ newSnooze: int
+ newAlarm: Alarm

<<constructor>> + AddForm()
- uxDateTimePicker_ValueChanged(object, EventArgs): void
- uxCancel_Click(object, EventArgs): void
- uxSet_Click(object, EventArgs): void

EditForm.cs

+ _alarm: Alarm

<<constructor>> + EditForm(object)
- EditForm_Load(object, EventArgs): void
- uxEdit_Click(object, EventArgs): EventArgs): void
- uxCancel_Click(object, EventArgs): void

<<enumeration>> AlarmSounds

Radar
Beacon
Chimes
Circuit
Reflection

Form1.cs

+ timer: System.Timers.Timer
+ targetAlarmIndex: int

<<constructor>> + Form1()
- Form1_Load(object, EventArgs): void
- Timer_Elapsed(object, System.Timers.ElapsedEventArgs): void
- uxEdit_Click(object, EventArgs): void
- uxAdd_Click(object, EventArgs): void
- uxSnooze_Click(object, EventArgs): void
- uxStop_Click(object, EventArgs): void
- uxAlarmList_SelectedIndexChanged(object, EventArgs): void
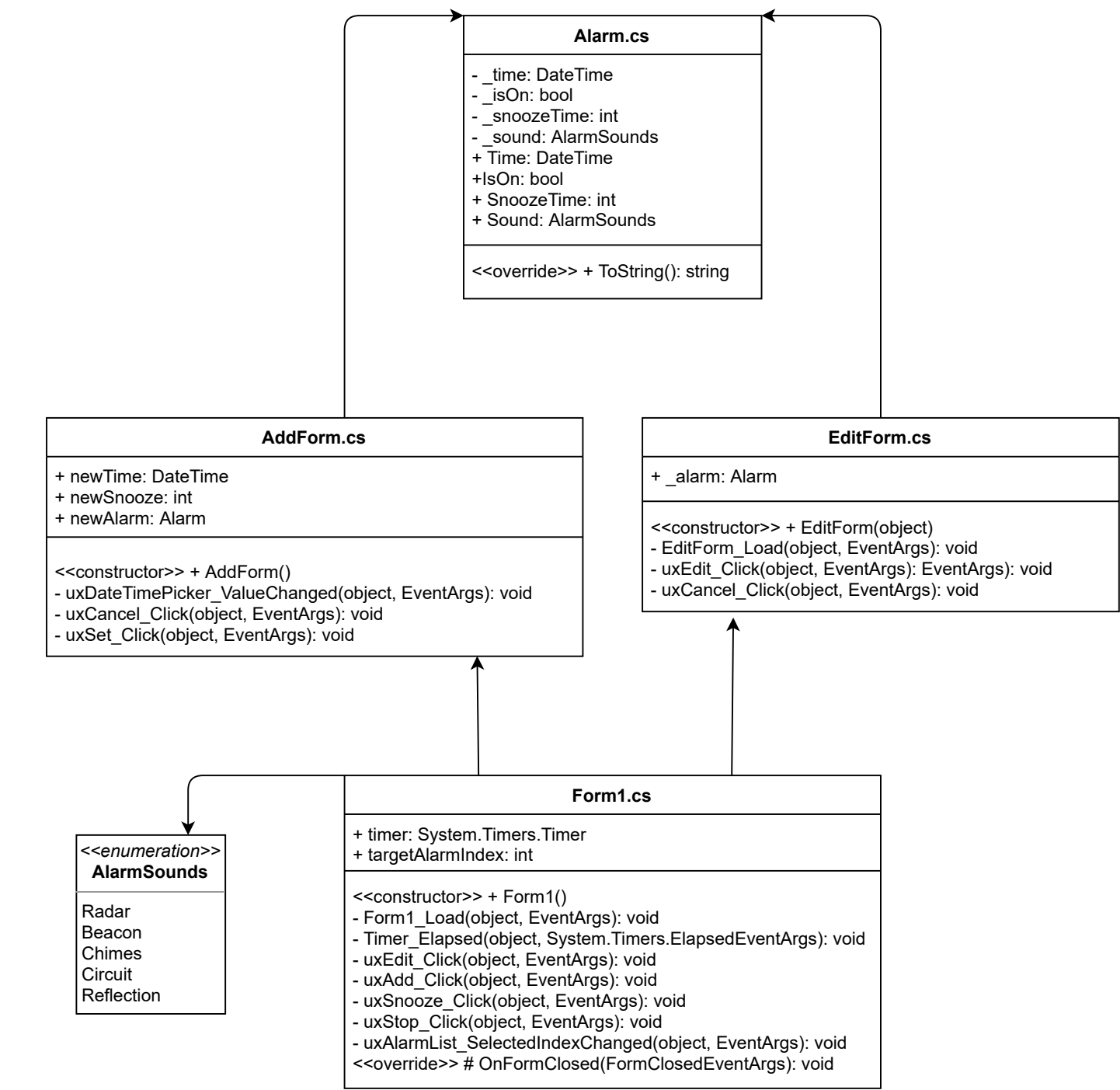<<override>> # OnFormClosed(FormClosedEventArgs): void

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Coupling Ratio of Alarm501-CD-P1

A
AF A
EF A
AF EF A
F1 AF EF A

5 Sub-Assemblies / 4 Classes = 1.25

Alarm501-CD-P2

Coupling Ratio of Alarm501-CD-P2

A
AF A
EF A
AF EF A
C A
AF EF C A
AF C A
EF C A
F1 C EF AF A

9 Sub-Assemblies / 5 Classes = 1.8

Cohesion of Alarm501-CD-P2

(8+2) / (2 * 2)
= 2.5

AddForm.cs

+ newTime: DateTime
+ newSnooze: int
+ newAlarm: Alarm

<<constructor>> + AddForm()
- uxDateTimePicker_ValueChanged(object, EventArgs): void
- uxCancel_Click(object, EventArgs): void
- uxSet_Click(object, EventArgs): void

EditForm.cs

+ _alarm: Alarm

<<constructor>> + EditForm(object)
- EditForm_Load(object, EventArgs): void
- uxEdit_Click(object, EventArgs): EventArgs): void
- uxCancel_Click(object, EventArgs): void

Alarm.cs

- _time: DateTime
- _isOn: bool
- _snoozeTime: int
- _sound: AlarmSounds
+ Time: DateTime
+IsOn: bool
+ SnoozeTime: int
+ Sound: AlarmSounds

<<override>> + ToString(): string

Form1.cs

+ controller: Controller
+ timer: System.Timers.Timer
+ targetAlarmIndex: int

<<constructor>> + Form1()
- Form1_Load(object, EventArgs): void
+ ControllerSet(Controller): void
- Timer_Elapsed(object, System.Timers.ElapsedEventArgs): void
- uxEdit_Click(object, EventArgs): void
- uxAdd_Click(object, EventArgs): void
- uxSnooze_Click(object, EventArgs): void
- uxStop_Click(object, EventArgs): void
+ DisplayState(State, Alarm): void
- uxAlarmList_SelectedIndexChanged(object, EventArgs): void

<<enumeration>> InputHandler

+ update()

Delegate

<<enumeration>> AlarmSounds

Radar
Beacon
Chimes
Circuit
Reflection

<<enumeration>> State

Start
Run
Buzz
Add
Edit
Snooze
Stop

Controller

+ controlRef: ControlReference
- view: Form1

<<constructor>> + Controller(Form1)
+ handle(State, Alarm): void

<<enumeration>> ControlReference

+ handle()

Delegate