Design Class Diagram
updated: 11/25/16

<<entity>>
Scheduler

- cEvents:[EKEvent]
- tasks:[NSManagedObject]
- taskEvents: [EKEvent]

+ Scheduler(name, completionTime):Subtask
+getScheduleAsDictionary(): [Day :[EKEvent]]

<<entity>>
Task

- name:string
- completionTime:int
- deadline:date
- earlierPriority: boolean
-percentage complete:float
- subtasks:Subtask[]

+ Task(name,completionTime,deadline):Task

<<entity>>
Subtask

- name:string
- completionTime:int
- Finished:boolean

+ Subtask(name, completionTime):Subtask

1   0..*

1   0..*   1

1   1   1   1

<<controller>>
ScheduleViewController

- schedule:EKEvent[]
- availableHoursPerDay: dictionary

+ ScheduleViewController():ScheduleViewController
- updateCalander():void
- Schedule():void

<<controller>>
TaskListViewController

- tasks:Task[]

+TaskListViewController():TaskListViewController
+ ShowTask()

1   0..1

0..1   0..1   0..1

<<controller>>
TaskFormViewController

- name:string
- completionTime:int
- deadline:date

+ TaskFormViewController():TaskFormViewController
- createTask()
- addSubtask(name,completionTime):boolean
- deleteSubtask(name):boolean
+completeSubtask(name):int

0..1   1

<<controller>>
ShowTask

- name:string
- completionTime:int
- deadline:date
-subtasks:[NSManagedObjects]

+ ShowTask(task, subtasks):ShowTask
+dismiss():void
+update():void

<<controller>>
CalendarViewController

- calandars:String[]

+ Calendar(params):returnType
+ enableCalandar(String):boolean
+ disableCalandar(String): boolean

1   1   1   1   1

<<boundary>>
ScheduleView

- add task:button
-calandars:button
- list:tab
- scheduleItem[]:EKEvent

<<boundary>>
TaskFormView

-name:textfield
- completionTime:time
- deadline:date picker
- concentration:option
- creative: option
- addSubtask:button
- save:button
- cancel:button

<<boundary>>
CalendarView

-calandars[]:strings
-done:button

<<boundary>>
TaskListView

- add task:button
-calandars:button
- list:tab
- tasks[]:Task