SumTime

SumTime is a program for adding (and subtracting) Hours and Minutes, Minutes and Seconds or Hours, Minutes and Seconds. It consists of two modeless dialogs: SumTime and Totalizer. The SumTime dialog comes in three flavors each of which operates in the same fashion. You can select one of the three SumTime dialogs (Hrs+Mins, Hrs+Mins+Secs or Min+Secs) from the "File" menu. Then simply type numbers into the hours, minutes and / or seconds boxes and press the "Add" button. The sum of all times entered is displayed. The "Zero" button resets the total to zero while the "Done" button closes the SumTime window (but does not quit).

In addition to clicking the buttons with the mouse you can use [Enter] or [Return] to "press" the "Add" button. $\hat{a}\mathbb{E}^{-}$. D and $\hat{a}\mathbb{E}^{-}$ -period press the "Done" button. Finally, $\hat{a}\mathbb{E}^{-}$ -Z will zero the dialog. Think of it as "undoing" the total.

Note that you are not limited to 60 seconds or minutes in the Seconds and Minutes boxes. You can enter, for example, "120" in the seconds box and it will come out as 2 minutes.

Totalizer

Totalizer consists of 20 boxes into which you enter times (more correctly, durations). Each time has an associated checkbox. If the checkbox is ON (checked) then the respective time contributes to the total; OFF, it does not. Very Simple. But what is it good for? For the answer to that, refer to "The SumTime Story" which appears a bit later on.

Period = Colon

In the Totalizer dialog, times are usually entered as "minutes : seconds", for example: "5:46" or some other numbers. For the benefit of keypad users I have treated a period as if it were a colon, that is, "5.46" will come out as 5 minutes, 46 seconds — the same as if the period had been a colon. It is NOT treated as a decimal point. As far as Totalizer is concerned, "." is a colon.

After you've entered a time into one of the Totalizer track boxes you can press [Tab] to advance to the next box. You can also just click in another track box. Either way, the time you just entered will be formatted and, if the associated checkbox is ON, the total will be updated.

[Return] = [Enter] = [Tab]

Also for the benefit of keypad users, I have made Totalizer think that [Enter] is a [Tab]. You can thus enter all the times without ever leaving the keypad. And, as long as I was at it I went ahead and treated [Return] as [Tab] also.

Most Un-Mac-like!!!

I have departed from Apple's User Interface Guidelines in several respects. It seemed like the right thing to do at the time. (Isn't that what they all say?) In SumTime, [Tab] works as it should and transfers you between the various edit text boxes. The default Add button works as it should when [Return] or [Enter] is pressed, however... the Add button also moves the insertion point (where the typed text will show up) to the left-most edit text box. This will either be Hours or Minutes. I decided on this behavior because it made data entry more consistent and spared you one more [Tab] press for each time entered. If you don't like it, let me know... though you never tried SumTime without this feature so you have no way to appreciate what it was like without it.

The SumTime Story

SumTime grew out of my desire to add up the play times of various CD tracks so as to see what would fit on a cassette tape. I hate it when a song has to be interrupted to flip the tape over or reverse direction. Equally annoying is a long blank space at the end of a tape, usually on the second side. Finding the right combination of tracks which would just fit and avoid long silences and interruptions is arduous at best when using trial-and-error. Computers are supposed to save us from such menial tasks. Thus was born SumTime.

The original SumTime just added minutes and seconds. Period. Even so, it was a pretty handy utility. Every now and again I would find that the combination I had added went over the limit and I'd have to re-add a bunch of times. That's when I added the ability to subtract as well as add.

For times longer than the typical CD (video tapes, for instance) I needed to be able to add hours and minutes instead of minutes and seconds. Someone less meticulous would have just called the minutes "hours" and the seconds "minutes" and be done with it, but not I! So a second dialog was born. And just to round things out I added yet another

to add hours, minutes and seconds.

Still, a great deal of adding and subtracting was going on and it took a long time to try many combinations of tracks. This gave rise to Totalizer which was a stand-alone application for a while. It was just a huge dialog into which I could enter the track times (for up to 20 tracks) and then turn each time on or off using a checkbox. Those tracks whose boxes were checked contributed to a displayed total. Great improvement, much faster turn-around in finding an optimum set of CD tracks. But each track could only be counted once. Suppose a better total could be found by including some tracks twice in the same total? What I needed was the ability to add in one or more tracks twice. The quick fix was to throw in SumTime so I combined SumTime and Totalizer into one application.

Secret Features!!

Not obvious at first glance are the things that you can do if you press the [Option] key. In SumTime, while adding hours, minutes and seconds or some combination thereof, pressing [Option] will change the default button from "Add" to "Subtract" so that pressing [Return] or [Enter] while holding [Option] will subtract the time currently entered in the SumTime dialog. Note, however, that the sum will never go below zero. Keypad users (gee, I pamper those people!) can use plus ("+") to add and minus to subtract.

In the Totalizer dialog, holding [Option] while clicking a checkbox will disable the checkbox, effectively leaving it "locked" either ON or OFF. If it is ON when you Option-click it then it will stay on and not respond to further clicks only to another option-click. "OK." you say. "why would I want to do that?" Well. I'm glad you asked. There may be times when, in planning your music program, you definitely want, say, tracks 5 and $\overline{7}$ included in whatever combination of tracks you finally settle on. So, you simply turn ON checkboxes 5 and 7 and then option-click them to prevent turning them off. Given that the tracks are labeled only by number rather than title, this feature obviates the need to memorize what each track is in order to prevent excluding your favorite tracks from the result.

Note that I have allowed the entry of periods in place of colons in Totalizer. This is primarily for the benefit of keypad users. It is still, however, interpreted as a colon! It is NOT used to enter a decimal fraction!! Also, if no period or colon is entered then the value entered is considered entirely Seconds. Yes, values of more than 60 seconds may be entered. After you tab out of the field, it will be formatted to minutes and seconds. Some example entries and the resulting formatted times are as follows:

"1:23" = 01:23"1.23" = DELIDEL 01:23 "123" = 02:03 "12:3" = 12:03"12.3" = 12:03

DEL

You get the idea, I hope!

Help Me Out Here!

Please let me know what you think about SumTime, what features you use and what you'd like to see added. To date I've had exactly zero (0), zilch feedback from anyone. For all I know it doesn't even run on any machine but mine! SumTime will doubtless evolve as I use it and discover additional things it should do. Most recently, (version 3.6) I've added a button to the Totalizer dialog to read in the track lengths from a connected CD ROM player. This buton only appears if you have a CD ROM drive connected. Click on the button and then select the CD ROM drive that contains an audio CD by using the normal Get File dialog. The times will be read and inserted into the Totalizer dialog to save you from having to learn the track times some other way and type them in. It works OK with my Apple CD SC drive but I have no idea if it will work with others. If you use this feature let me know if it works with other brand drives.

SumTime could be made to go on and play the combination of tracks selected in Totalizer (assuming your CD ROM drive has audio capabilities as Apple's does), though Apple's "CD Remote" DA would be better for that because it allows you to alter the play order.

I have a plain old Mac II with a truckload of INIT's and CDEV's and running System 6.0.7 and SumTime works fine on my system. I have tried it on only a few other machines. I don't think I've included any system-dependant code but I really don't know. I just recently became aware of a bug that caused an "unexpected guit" upon first starting. That's fixed but I had to find out about it by trying Sumtime on someone else's machine myself. If there are bugs I cannot fix 'em if I don't know about 'em. Talk to me!! Please send bug reports, comments and suggestions to WarrenPM on American OnLine or write me at

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