

# Technical Disclosure Commons

---

Defensive Publications Series

---

December 06, 2017

## Task-focused user interface

Christopher Farrar

Follow this and additional works at: [http://www.tdcommons.org/dpubs\\_series](http://www.tdcommons.org/dpubs_series)

---

### Recommended Citation

Farrar, Christopher, "Task-focused user interface", Technical Disclosure Commons, (December 06, 2017)  
[http://www.tdcommons.org/dpubs\\_series/869](http://www.tdcommons.org/dpubs_series/869)



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

## **Task-focused user interface**

### **ABSTRACT**

Computer or mobile device users that try focusing on a single task often become distracted or interrupted by other applications, notifications or tasks. Also, users may distract themselves while working on a project by thinking about a task from another project. When users are distracted or interrupted, they switch context from one task to another, which may impact the quality of the tasks they are trying to complete and also increases the time needed for task completion.

The described techniques provide a task-focused user interface that, with express user permission and consent, temporarily restricts the user to a single task or application and limits the use of other applications and mutes notifications. With user consent and permission, when this task-focused user interface is enabled for a period of predetermined time, applications and notifications that are unrelated to the task are muted, meaning they will not be accessible, appear, or be delivered.

### **KEYWORDS**

- Task management
- User interface
- Productivity
- Multitask
- Do not disturb (DND)
- Notification suppression
- Notification muting

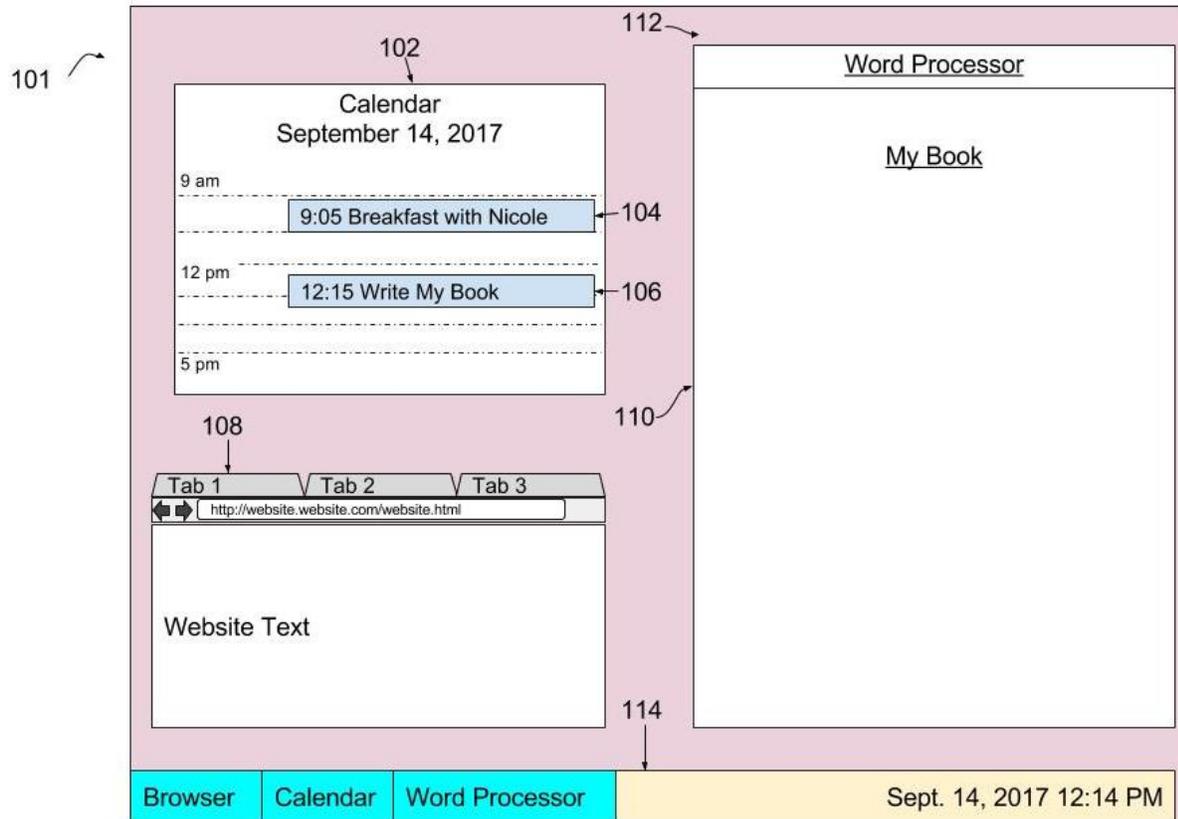
## BACKGROUND

The modern business world requires professionals to complete a vast number of tasks in a short amount of time, which leads professionals to try and rapidly switch among tasks or complete multiple tasks simultaneously (“multitask”). Multitasking versus focusing on completing a single task may impact the quality of tasks and the time it takes to complete tasks, Multitasking is compounded by the capabilities of personal computers and mobile devices (e.g., smartphones, tablets, wearables, etc.) to interrupt users through providing additional tasks in the form of responding to notifications and alerts from other applications (e.g., emails, chat messages, alarms, etc.). Personal computers and mobile devices enable access to many user applications simultaneously (e.g., web browsers), which may distract the users of these devices.

Also, users may distract themselves while working on a project by thinking about a task from another project (e.g., a task from another project that they forgot to complete), These types of interruptions and switching user context rapidly among tasks result in a loss of focus, speed, and quality.

## DESCRIPTION

The described techniques provide a task-focused user interface that restricts the user to a single task or application by (with user express consent and permission) limiting use of other applications (e.g., web browsers) and muting notifications (e.g., from chats, emails, etc.).



**Fig. 1: Example user interface**

Fig. 1 illustrates an example user interface of a computer or mobile device operating system depicting multiple applications (101). A calendar application (102) contains appointments “Breakfast with Nicole” (104) and “Write My Book” (106). A web browser application (108) is also seen, with three tabs open. In addition, a word processor (112) is open to document entitled “My Book” (110). At the bottom portion of the display screen is a control or task management bar (114), which shows the applications that are running as well as the system’s date and time.

In Fig. 1, the calendar application (102) contains an appointment “Write My Book” (106), which is due to start at 12:15 PM. The system’s time, as shown in the control bar (114) is 12:14 PM.



**Fig. 2: Task-based user interface**

Fig. 2 illustrates an example task-focused user interface, per this disclosure. In this example, at 12:15 PM, the user interface automatically switches from what is shown in Fig. 1 to the user interface shown in Fig. 2. The user interface (201) displays a word processing application (202) corresponding to the time 12:15 PM (204) of the calendar appointment “Write My Book” of Fig. 1. A lock icon (206) indicates that (with user permission and consent) the word processor application (202) is locked in focus. Other applications are unavailable (e.g., as shown by greying out in Fig. 2), which prevents the user from opening these other applications to minimize distractions and context switches. Further, notifications, alarms, and other alerts from either the operating system or other applications are also muted, e.g., not delivered during the predetermined scheduled calendar time, so as not to distract the user. The user is effectively restricted to one task within one application, working on writing the book in the word processor.

For example, a user schedules “Write My Book” between 12:15 PM and 1:15 PM on September 14, 2017. At 12:15 PM, the user opens a word processing application to begin or to resume writing the book for one hour. For this hour (with express user permission and consent) the user will only have access to and receive notifications from the word processor. Emails, chats, alerts, and notifications from other applications are temporarily muted and inaccessible. The user is thus forced to focus on the word processor. If the user thinks of another task they want to complete during the hour they scheduled to write the book, the user will be forced to complete the document before returning to any other task. The task-focused based user interface may take directives from a user’s calendar. In some implementations, the task-based user interface takes directives from an employee or work calendar, or another application or task management system that connects a task with a date and time.

The calendar or task entries contain the time at which the task is to be completed, the name of the task, and the resources or artifacts needed to reference or to use to complete the task, e.g., word processors, presentations, documents, software coding terminal, etc. A combination of artifacts is also possible, such as presentation software and a reference document. For the duration of the calendar or time entry, the user is restricted to the one task and the limited resources and artifacts, Word processing, software coding, or presentations are just some example contexts of using the described techniques. The user may also schedule “check email” at a designated date and time on their calendar, upon which the techniques will (with user express consent and permission) restrict the user to using their email application, and mute all other notifications and alerts for the predetermined set calendar time designated for this task.

In another example of this technique, during the restricted session the user is provided a notepad application in addition to a restricted application. The notepad enables the user to write

down things pertinent to the task at hand or pertinent to other tasks the user happens to think of while the user interface is focused on the task at hand. The notepad may automatically add notes that reference other tasks to those other tasks to be addressed later after completing the current session for the task at hand, When the user calendars a time to work on the other tasks the notepad will appear in the user interface along with the notes taken earlier during the prior unrelated task session,

In another example scenario, if a meeting is scheduled on a user's calendar, the interface is configured such that the user can only access on their device pre-designated meeting artifacts during the time period of the scheduled meeting. For example, the user can only access an agenda and presentation relevant to the meeting, and access to other applications is restricted and all other notifications and alerts muted during the meeting. This may be helpful, e.g., for users that tend to tune out of meetings and work on unrelated activities.

In another example scenario, during the restricted session, a user's mobile devices are also in a restricted mode such that all notifications, alerts, text messages, and phone calls are muted (with user express consent and permission) while the user is in the task session. This is configurable by the user. For example, the user is enabled to completely mute all device activity or just certain activity (e.g., phone calls). This may be helpful, e.g., for users that have a mobile phone on hand at all times and receive regular phone calls or text messages.

If the user needs to exit the task-based user interface in case of emergency or if a more urgent and important task arises, the user is provided an option to enter a special password to exit the task-focused user interface. These exits may be tracked with user permission and consent to help the user manage their time more effectively and to highlight trends.

The described techniques could be implemented in various contexts, for example in Customer Relationship Management (CRM) type systems or computer or mobile device operating systems.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user's social network, social actions or activities, profession, a user's preferences, or a user's current location), and if the user is sent content or communications from a server, In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user, or a user's geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

## CONCLUSION

The described techniques provide a task-focused based user interface, which (with user express consent and permission) effectively locks a user to one application and associated limited artifacts for a predetermined time corresponding to a calendar or other time input in order to minimize distractions and increase productivity. During this time the task-focused based user interface is enabled, within the user interface other applications are inaccessible and notifications and alerts are muted or hidden.