

Executive Summary: Billables

Billables is a time management application aimed primarily at attorneys and other billable hour professions that require frequent, rigorous, and accurate time keeping. Billables saves user information in settings (name, billable hour rate, and email address). Billables lets users create Clients (consisting of a name and an optional picture). Within each Client profile, users can create Matters corresponding to different tasks performed on behalf of the client.

The core of the application is centered around the timer feature. When the user wants to start working, he or she presses start, which starts a timer. The timer continues to function even if the application enters a background state or the screen locks. When the user completes his or her task, he or she can press stop. The time spent on the task is automatically calculated. The user then has a chance to enter a description of the task (either verbally or by text), as well as perform adjustments to the time spent. The user can then either save the task onto his/her phone and/or email the details of the matter to an email address designated in Settings.

Billables also allows the user to view a graph of the hours he or she has billed in the past week. The graph is color coded (red, yellow, green) to enable users to determine whether they have met their billing targets with a quick glance.

Billables fits into the App Store landscape by reducing the amount of work needed to properly bill clients. Instead of having to manually calculate time spent on a client matter (e.g. calculating the elapsed time between 12:33 p.m. and 2:15 p.m., that is, 1.7 hours), Billables automatically performs this conversion when a user stops a timer. Billables also harnesses the power of iOS's dictation capability by allowing users to verbally describe their task and have it transcribed into a text field. Billables gives users the ability to know their weekly billings in an easy to read graph format, as opposed to have to look at a spreadsheet. Finally, Billables makes it easy to export details of a task via a simple email.

Broadly speaking, the application creates Client and Matter objects (which implement the NSCodering and NSObject protocols) and saves them to a file in the application's document folder. The user settings are saved using NSUserDefaults and accessed via a singleton. The timer function of the application uses the Singleton pattern and works by utilizing NSNotificationCenter to watch for the application entering/exiting from/to a background state. When a timer is started, an NSDate object is saved to NSUserDefaults. When the application returns from a background state, a new NSDate object is created and compared against the original NSDate object. This allows the application to calculate how much time has elapsed while the application was in a background state. The Timer Singleton communicates with the view controller via the delegate pattern. The application uses the 3rd party "Charts" framework for its graphing functions. Integration with the Charts framework was achieved by using Cocoapods.

The application is not for private company use.