

# ACTIM: A PSP Activity Timer

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9 December 2004

## Abstract

This document describes the assignment for the Software Engineering Project (2IP60) in the winter of 2004/'05. It is —on purpose— *not* presented as a project requirements document, because requirements capture is part of the project.

## 1 Introduction

In *Introduction to the Personal Software Process* [Hum97], Watts Humphrey lays out a detailed training plan for developing the basic disciplines of a successful software engineer. The key premise of Humphrey's approach is that even though software engineers will usually operate in teams, they must develop their skills on the basis of their personal characteristics.

Humphrey's PSP training is very much like the training of an athlete: define your goal, measure your performance, evaluate your results, and adjust your process.

One of the characteristics of an engineer concerns the way time is spent to accomplish various tasks, such as writing code for a piece of software.

The first part of [Hum97] deals with **time management**. Before you can plan your work, you need to know how you typically spend time on recurring tasks. In order to find out how you spend time, it is best to track your performance over an extended period.

## 2 Assignment

The goal of the project is to develop a software tool to aid an individual (software) engineer in time management.

The engineer records activities through the tool. Preferably this is done during the day while working, but possibly after the actual work has been done.

Basically, the tool needs to record *what* is done *when*, for *how long*, and with *what result* (to capture productivity, i.e., how much 'output' and whether a task was completed). Also see the template for a Time Recording Log in [Hum97, Table 3.1].

**Date** The date you did some activity, like writing down detailed requirements.

**Start** The time you started the activity.

Table 1: Template for Time Recording Log

Date	Start	Stop	Interruption Time	Delta Time	Activity	Comments	C	U
:								
:								
:								

**Stop** The time you stopped the activity.

**Interruption Time** Any time lost due to interruptions.

**Delta Time** The time spent on the activity, in minutes, between the start and stop times, less any interruption time.

**Activity** A descriptive name for the task.

**Comments** A more complete note on what you were doing, the type of interruption, or anything else that would be helpful when you later analyze the time data.

**C (Completed)** Check this column when you complete a task, like writing a program.

**U (Units)** The number of units in a task when complete it.

The tool should have a convenient interface, so that its use interferes minimally with the actual work being done.

The tool also needs the ability to track interruptions (e.g. an incoming phone call) and to present overviews of data consolidated over a period of time (e.g. a week or a month). Again, see [Hum97].

The tool is to be a stand-alone, platform-independent program. The recorded data needs to be retained across invocations of the program.

Future versions of the tool may have to offer extended functionality.

Detailed requirements need to be elicited from and negotiated with the customer of ACTIM.

## References

- [Hum97] Watts S. Humphrey. *Introduction to the Personal Software Process*. Addison-Wesley, 1997. Also see  
 <<http://www.win.tue.nl/~wstomv/quotes/humphrey-ppsp.html>>