An Evaluation of Popular Time Wasting Algorithms

Saadat Mateen, *Nonmember, IEEE,* and Syed Anas Imtiaz, *Nonmember, IEEE*

***Abstract*—This paper evaluates and compares five time wasting algorithms which have become popular among today's studentkind: idling, sleeping, strolling, movie-watching, and web surfing. In order to assess both the strengths and weaknesses of these algorithms, a set of carefully selected real-life benchmarks is used. The amount of time wasted, alongwith the quality time enjoyed while wasting it simultaneously, are calculated and analyzed, and recommendations for improving the performance of the mentioned algorithms are also offered.**

***Index Terms*—time wasting, algorithm, procrastination, dawdle, delay, dally, drag, idling, put off, lazy, dilly-dally, bum around, sleeping, movie-watching, strolling, web surfing.**

I. Introduction

TIME wasting has been one of the most time consuming activities of mankind ever since time itself started. Over the centuries, different algorithms for efficient wasting of time have been devised and implemented, and have been passed down to junior generations by time-wasting experts of their eras. Studentkind, in particular, have been extremely creative in inventing novel approaches to solve the problem of time wasting, and thus have achieved a cult status among time wasters from all walks of life.

Recent studies have shown that a majority of studentkind favors five certain algorithms over the rest: idling, sleeping, strolling, movie-watching, and web surfing. In this paper, we evaluate each of these five algorithms and present their pros and cons. It should also be noted that some of these algorithms may qualify for being meaningful activities in themselves; however, we chose not to extend this study into that domain, because the definition of a time wasting algorithm (see next section) rules such studies out. (The reader may observe that the creativity of studentkind shines outstandingly as they convert legitimate activities into time wasters.)

The outline of this paper is as follows. First, in Section 2, fundamental definitions are provided, and various benchmark parameters are laid down that are used for evaluation of the five algorithms. In Section 3, a brief review of each of the algorithms is presented. Section 4 describes the experiments and their results, and is followed by Section 5, which presents some recommendations. Section 6 concludes the paper.

S. Mateen is with the Department of Slacker Computing, Ivy University, and is involved in the research for the development of novel methods for wasting time. He is the SOLE author of this paper. (e-mail: nastaliq@gmail.com)

S. A. Imtiaz is with the Electrical Engineering Department, Royal School of Procrastination, and is working on the development of gadgets that aids humans in wasting time. He is NOT the co-author of this paper but loves to see his name in it. (e-mail: anasimtiaz@gmail.com)

II. Definitions and Benchmarks

We begin by defining a *time wasting algorithm*, A.

Definition 1: $A = \{N | N \neq$ required N at time $t\}$

Informally, a time wasting algorithm is an algorithm which is run when it is not required to run. In the rest of the paper, we shall use the words *algorithm* and *activity* interchangeably.

We also define another quantity, critical time (t_c).

Definition 2: Critical time is the point in time when the algorithm finishes.

Since all time wasting algorithms are recursive (that is, they never end), their stopping criteria is almost always the critical time.

A number of different benchmarks for evaluation of each of the algorithms were selected, and they are described below.

A. Amount of Time Wasted (t_w)

The most important parameter for any time wasting algorithm is the amount of time, t_w , that it lets the user waste. However, t_w also depends on the diligence of the users themselves, and is, therefore, a rather subjective parameter. We have thus kept tw fixed during the experiments, using it as a common ground for evaluation of other parameters.

B. Amount of Generated Entertainment (e)

A time wasting algorithm is practically useless if it does not provide its user with a way of having fun. Formally,

$$e = A(t_w) \tag{1}$$

where t_w is the amount of time wasted using a time wasting algorithm A, and e is the generated amount of entertainment.

It might be argued that one is not wasting any time if one is having fun, but studies have shown that time wasting for its own sake should not be void of joy. Also, by Definition 1, any activity that should not be engaged in at a given time is a time wasting activity, regardless of the amount of joy it holds for its participants.

C. Amount of Guilt Induced (g)

A time wasting algorithm which induces the least amount of guilt for its user is highly favorable, since the amount of guilt can greatly reduce the entertainment achieved. Thus,

$$e' = e - g \tag{2}$$

where e' is the actual amount of entertainment. Time wasting algorithms keep evolving to reduce g, though most users rely on their own stubbornness to ignore any amount of g induced while wasting time.

D. Reasonable Excuse Factor (REF)

REF is the ability of a time wasting activity to be presented as an excuse for not engaging in the required activity. Theoretically,

$$REF \propto 1/g \tag{3}$$

i.e., lesser the amount of guilt induced, higher the REF. However, our experiments (Section 4) show that this theoretical concept does not always hold true.

III. The Algorithms

In this section, we describe the five algorithms that are compared in the next section. It should be noted that all of these algorithms are very self explanatory and we do not feel a need to explicitly define and state them.

A. Idling

Perhaps the most fundamental algorithm for time wasting is doing nothing, or idling. Over the years, a significant decrease in the practical application of idling has been observed, which is not surprising, considering the lack of creativity and less t_w (as we show in the next section).

B. Sleeping

Sleeping has always come naturally to the sloths among us, and they are rightfully credited for the widespread use of this activity as a time wasting algorithm. It is, like idling, one of the fundamental time wasters.

C. Strolling

Strolling is the alternative algorithm to sleeping for those who find it hard to lock themselves in their bedrooms. It is often accompanied with eating icecreams or french fries, but can be performed without them. Most students like to run this algorithm in teams.

D. Movie-watching

This algorithm has evolved from sneaking out of one's home for attending the late night show in the local theater to the convenience of one's bedroom, thanks to the advancements in technology. Moreover, the choice of watching movie clips on handheld devices such as mobile phones has immensely increased the usage of this algorithm.

E. Web Surfing

Web surfing is the most recent in the mentioned algorithms, but studies show an exponential growth in its application. Just like movie-watching, web surfing has also benefited from the increase in handheld device usage, and some researchers even predict that this algorithm will join the most fundamental ones in near future.

TABLE I
Results obtained after testing the five algorithms

A	e	g	$e'(e-g)$	REF
Idling	2	7	-5	1
Sleeping	7	1	6	1.5
Strolling	6	3	3	1.5
Movie-watching	9	1.5	7.5	1
Web Surfing	9	2	7	1.5

IV. Experiments and Results

We conducted test experiments for each of the five algorithms in five consecutive days. Test activities used as required Ns to be neglected (see Defintion 1) included writing a report that a professor demanded, revising lecture notes, installing productive software, updating a blog called Ulta Seedha, and doing the laundry.

As explained in Section 2, the amount of time wasted (t_w) was kept fixed, and was assigned the value of 120 minutes. e, g, e', and REF were measured on a scale of 1 to 10, with 10 being the highest.

Table 1 summarizes the results. Please note that the amount of guilt induced was measured during t_w, and not afterwards.

It can be observed that both movie-watching and web surfing showed similar behavior, with web surfing ranking higher as a reasonable excuse. Indeed, a student can always tell others that she tried to search the worldwide web for hours before finding something useful. Sleeping also performed in a satisfactory manner with the least amount of guilt due to the sub-conscious nature of the algorithm. Movie-watching also showed a closer amount of g to sleeping, since there is very little room for guilt when enjoying an on-screen action sequence or romance. Unsurprisingly, idling shows the highest g, and consequently, the least e'. This was inevitable because the mind is set free to think of the consequences while running the idling algorithm. Strolling may perform well for some users, and improvements may be suggested for reducing its g.

All of these algorithms performed poorly for REF, with the slight exception of web surfing. We recommend that the interested reader explore the algorithm of baby-sitting if a higher REF is desired. However, baby-sitting is widely avoided due to its very low e' —even lower than idling.

V. Recommendations

We now present some recommendations based on our observations during the experiments.

1) Movie-watching and web surfing may be combined together to enhance the time wasting experience. Wesbites such as YouTube may prove to be highly useful in this regard.
2) To reduce the g for strolling, listening to music while running the algorithm is highly encouraged. The interested reader may consult the user manual of Apple's iPod or similar portable music players.
3) Web surfing may also be enhanced by contributing to meaningless message boards. This may reduce the g.

4) A significant increase in the REF for sleeping may be made by catching a virus, but a certified physician should be consulted beforehand.

VI. Conclusions and Future Work

In this paper, we presented a comparative analysis for five popular time wasting activities. We showed that fundamental activities such as idling are now being replaced by more recent developments in the area of time wasting algorithms. We also provided some recommendations for improving the current performance of these algorithms.

Readers may observe that we have not included a recently emerged and heavily implemented time wasting algorithm of gaming. We believe that this algorithm deserves a separate paper of its own, and we intend to work on it in the near future. Also, TV-watching was not included in favor of movie-watching, and research may be carried out to assess its merits and demerits.

References

This paper does not cite any references because, ironically, we think that they are a waste of time.