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# A Survey on Smart Computer Usage Control System

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**ABSTRACT:** The Smart Computer Usage Control System is designed to help users maintain better control over their computer use. The web application allows users to set a time limit for specific applications, and automatically exits the designated application once the predetermined time limit is reached. Users can customize the time limit for each application to promote responsible and healthy computer usage habits. This system helps users reduce distractions and improve productivity by preventing excessive or unnecessary computer use.

**KEYWORDS:** Smart Computer Usage Control System, Computer use, time limit, specific applications, exit, predetermined time limit, healthy computer usage habits, responsible, reduce distractions, improve productivity, excessive, unnecessary.

## I. INTRODUCTION

Computers are now a necessary tool for both personal and professional tasks as a result of their expanded use. However, excessive use of computers and software can be harmful to our work and health. A smart computer usage control system that enables users to establish time limits for specific applications is suggested as a solution to these problems. When the time limit has expired, this system will immediately terminate the selected application. The implementation of this method is examined in this essay, along with its advantages and benefits for controlling computer usage.

## II. LITERATURE SURVEY

### A. The Effects of Excessive Computer Usage On Productivity and Health[1]

This work is based on the automatic recording of application focus data in natural situation from a wide representative panel of 661 households with 1,434 users at home over 19 months. To process these large-scale data, we build a two-level classification of PC applications describing the whole PC use. At the household level, we worked on computer usage temporality: we observed two strategies of PC usage reflecting a tension between synchronous and asynchronous usage profiles. At the individual level, we found out that software preferences and usage intensity are rather independent; therefore, we distinguished five specific profiles of users reflecting strong routine behaviours of computer usage at home. These observations tend to show the strength of routine behaviours in computer usage. Author Keywords Computer usage, user generated events, user profiles, representative panel. Online Recommendation of Electronic Goods

### B. Computer usage and task-switching during resident's working day[2]

Author : Marie Mean, Antoine Garnier , Nathalie Wenger, Julien Castioni

**Abstract:-** Background Recent implementation of electronic health records (EHR) has dramatically changed medical ward organization. While residents in general internal medicine use EHR systems half of their working time, whether computer usage impacts residents' workflow remains uncertain. We aimed to observe the frequency of task-switches occurring during resident's work and to assess whether computer usage was associated with task-switching. Methods In a large Swiss academic university hospital, we conducted, between May 26 and July 24, 2015 a time-motion study to assess how residents in general internal medicine organize their working day. Results We observed 49 day and 17 evening shifts of 36 residents, amounting to 697 working hours. During day shifts, residents spent 5.4 hours using a computer (mean total working time: 11.6 hours per day). On average, residents switched 15 times per hour from a task to another. Task-switching peaked between 8:00–9:00 and 16:00–17:00. Task-switching was not associated with resident's characteristics and no association was found between task-switching and extra hours. Computer usage occurred more frequently at the beginning or ends of day shifts and was associated with decreased overall task-switching. Conclusion Task-switching occurs very frequently during resident's working day. Despite the fact that

residents used a computer half of their working time, computer usage was associated with decreased task-switching. Whether frequent task-switches and computer usage impact the quality of patient care and resident's work must be evaluated in further studies.

### C. Internet Use and Its Impact on Individual Physical Health [3]

Internet use has seriously affected individual health in potential and subtle ways. Past research on the subject mainly concentrated on the mental health caused by addictive use, e.g., impulse control disorders and obsessive-compulsive disorder. With the constant development of cyber technology, Internet has been an indispensable element of living and working, which can provide more convenient and efficient support and help. At the same time, the effects of Internet use more than Internet addiction on individual health cannot be ignored in living and working. This paper aims to identify the most common physical complaints associated with Internet use, and further investigate the association between the frequency of Internet use and individual physical health. Five hundred and thirteen participants completed the questionnaires by online or offline manner, which covers demographic questions and questions concerning Internet use and physical complaints. The most common complaints were involving dry eyes, decreased vision, and cervical pain. The positive Pearson correlation coefficient were found between the level of physical complaints and the frequency of Internet use, place of residence and education. Especially, the higher amount of time for the Internet use is strongly associated with a higher level of physical complaints.

### III. PROBLEM STATEMENT

Computers and the internet are now more widely accessible, which has led to an increase in their use for both personal and professional duties. However, overusing computers and software can have a negative impact on our work, social interactions, and health. Online gaming, social media, and other non-productive apps used excessively can cause addiction, lack of sleep, anxiety, and decreased productivity. Various software programmes exist to track how each specific application is used on a computer.

To solve this problem, a smart computer usage control system is suggested. With the help of this system, users can specify a time limit for individual applications, and when the limit is met, the application will shut down on its own. The system will offer a flexible and useful method for controlling computer use, encouraging productive and healthy computer utilisation habits. The suggested method can aid users in improving their time management abilities, allowing them to balance computer use with other obligations and activities. This essay will examine the system's implementation while highlighting its advantages and benefits for controlling computer utilisation.

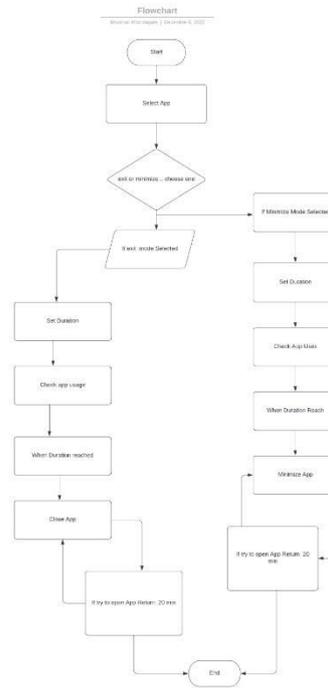
### IV. PROPOSED METHODOLOGY

**Gathering and analysing requirements:** In this stage, we will determine the system's requirements as well as its possible risks and advantages. This will entail studying current software programmes and solutions, speaking with prospective users, and examining market norms.

**System Design and Development:** Using programming languages and tools, we will design the system architecture, produce thorough specifications, and develop the system at this point. A user-friendly interface for setting time limits, keeping track of application utilisation, and sending notifications will be created during this step.

**Testing and deployment:** In order to find and fix bugs and enhance the user experience, we will test the system's usability and functionality at this point. Deploying the system will also be part of this phase; this may entail producing an installer and end-user instructions.

The skills of project managers, user experience designers, and software developers are necessary for the implementation of this approach. The methodology will make sure the system is user-friendly, dependable, secure, and fulfils their needs. The suggested method can encourage productive and healthy computer usage habits, allowing users to balance computer use with other obligations and activities.



### V. PROJECT PURPOSE

To address the issue of excessive computer use that is pervasive in today's culture, a smart computer usage control system is being developed. Many people waste too much time on unproductive apps like social media and online games, which can have a bad impact on their productivity, social interactions, and health. We aim to encourage productive and healthy computer usage practises by creating a system that enables users to set time limits for specific apps. This will enable users to balance their computer use with other activities and obligations by helping them build effective time management skills..

The system will be an adaptable and user-friendly solution that is simple to implement and can be tailored to the user's preferences. When the time limit has been met, the system will send notifications to the user and keep track of how the application is being used. The project's goal is to offer users cutting-edge and practical solutions that encourage productive and healthy computer usage behaviours and help them strike a better equilibrium between their computer use and other facets of their lives.

### VI. FUTURE ENHANCEMENT

The smart computer usage control system project could benefit from a number of possible future improvements. Utilizing machine learning algorithms that can analyse user behaviour and modify time limits for specific apps based on usage patterns is one option. This might offer a more individualised and practical method of controlling computer utilisation. Another improvement might involve integrating the system with wearable tech or other sensors to track the user's physical and mental health in real-time and adjust time restrictions as necessary.

The system could also be enhanced to offer features like the ability to monitor goal progress, make suggestions for other things to do, or let users completely restrict access to certain applications. The creation of a mobile application that can sync with the system and offer on-the-go access to usage data and time limit settings is another possible improvement. Future improvements could increase the system's effectiveness and user-friendliness, offering a useful method for controlling computer use and encouraging productive and healthy computer utilisation habits.

### VII. CONCLUSION

In conclusion, the creation of a smart computer usage management system that enables users to establish time restrictions for specific apps can be beneficial for both social and individual well-being. Users who use the system effectively can combine computer use with other obligations and activities by learning effective time management

techniques. The system can motivate users to take a break and participate in other activities by sending notifications when the time limit has been met. This can improve users' productivity, health, and social interactions.

The system may be an intuitive and adaptable option that is simple to implement and set up to the user's preferences. The initiative has the potential to both address the issue of excessive computer use and encourage productive and healthy computer usage practises. For parents, educators, and employers who are applications, the system can be a useful instrument. Overall, the endeavour can help create a creative and practical solution that encourages a good balance between using computers and other aspects of life.

#### VIII. ACKNOWLEDGMENT

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