

SMARTPHONES ADDICTION CONTROL USING PRIORITY BASED SCHEDULING

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Abstract - Nowadays, there is large population which is suffering from smart phone addiction, especially in college and school students. So now the smart phone addiction can be seen differently from the Internet addiction. In this project we have tried to control the addiction of the people. Firstly we are doing the analysis in the users phone, then we find whether the user is addicted to certain apps or not, then we generate the report, then using our app we lock the application to which the user is addicted and try to give him different tasks instead of using the apps and help user utilize his time in productive ways.

Key Words: 1. Internet addiction: A.1 Smart phone addiction

i) A.1.1 Correlation analysis

2. Priority Based Scheduling

i. B.1 Rate Monotonic Scheduling

ii. B.2 Deadline-Monotonic Algorithm

1.INTRODUCTION

There is large population which is suffering from smart phone addiction, especially in college and school students. So now the smart phone addiction can be seen differently from the Internet addiction. In this project we have tried to control the addiction of the people. Firstly we are doing the analysis in the users phone, then we find whether the user is addicted to certain apps or not, then we generate the report, then using our app we lock the application to which the user is addicted and try to give him different tasks instead of using the apps and help user utilize his time in productive ways. Smartphone addiction includes mobile game addiction, search addiction, and app addiction.

1.1 Software Requirement

- 1) Back End : SQL Lite
SQL Lite is a relational database management system contained in a C programming library. SQLite is a popular choice as embedded database software for local/client storage

in application software such as web browsers. It is arguably the most widely deployed database engine, as it is used today by several widespread browsers, operating systems, and embedded systems (such as mobile phones), among others. SQLite has bindings to many programming languages.

- 2) Operating System :-Android (4.0,4.4,5.0,6.0)
Android 4.0.1 (Ice Cream Sandwich)
Android 4.4 KitKat
Android 5.0 "Lollipop"
Android 6.0 "Marshmallow"
- 3) Front end :-
JAVA JDK 1.8, Eclipse, Android SDK.

For developing this system we will required and Eclipse IDE and implementation language will be Android. For backend we are going to use MySQL.

Above mention software are easily available on internet. So that we can get them easily.

1.2 Hardware Requirement

- 1) Android Phone.
- 2) RAM : 512 MB
- 3) Processor Speed : 500-800 MHZ
- 4) Processor : Intel P-IV system
- 5) Hard Disk : 20 GB

For the application we need a android phone having minimum Random Access Memory of 512 MB upto the latest RAM memory of the latest smartphone. Its processor speed required is minimum of 500-800 MHZ. And the Intel processor should be having processor IV system or the latest processor.

1.3 CHARACTERISTICS OF SMARTPHONE ADDICTION

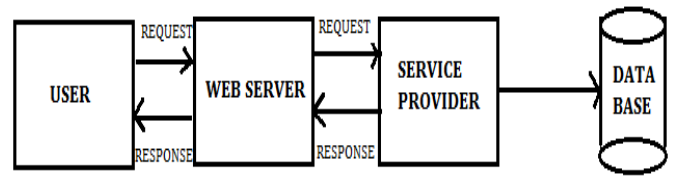
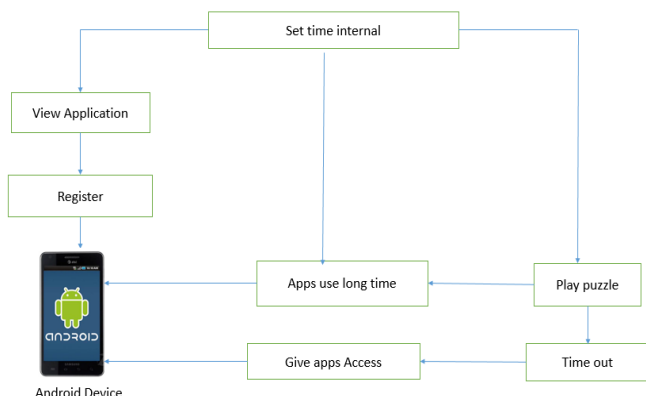
1. When you check your phone to see the current temperature instead of opening a window, and/or

when you check your phone to see the current time instead of looking at the watch that's right on your wrist.

2. When you have to consciously say to your spouse "Let's put our phones away" while watching TV because it's more common that they're out than away.
3. If you are answering emails in a dimly lit reception area while waiting for your massage therapist to destress you, you may have a problem.
4. When your kids have to text you their carry-out orders because you've lost the ability to retain information that is not received on your phone.
5. When you hope you hit a bunch of red lights on the way home so you can comment on a Facebook post.
6. When one of your daughter's first drawings of you has a BlackBerry in your hand.
7. When you wake up, you grab your phone and check it before you get up to pee.
8. When you drop a phone on your face because you're dozing off.
9. When you choose your clothing based on the best Pockets to hold your phone.
10. When you are staring at photos you took on your phone while the actual moment is taking place right in front of you.

The characteristics of the smartphones is been shown according to the survey. The survey mainly shows that the most probably teenagers are addicted towards the smartphones.

2. SYSTEM ARCHITECTURE



Above diagram shows that the Architecture of E-service Provider. It contain user, webserver, service Provider and database. Firstly user send the request to webserver then webserver gives a response to the user according to their request. Then webserver sends the request to service provider then service provider sends the response to webserver. At last service provider store all data in database.

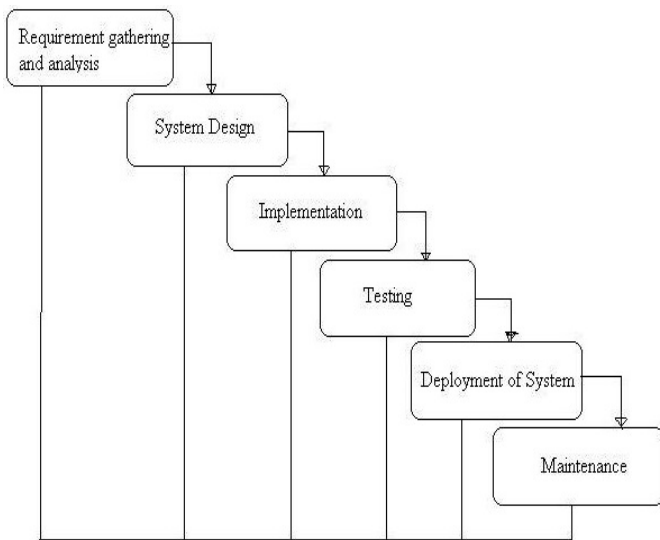
This app will help you maintain a controlled digital lifestyle. It will monitor phone and app usage. With visually appealing characters, graphs and statistics, the app will guide you on how you can control phone usage. We will find whether the user is addicted to certain apps or not, then we generate the report, then using our app we lock the application to which the user is addicted and try to give him different tasks instead of using the apps and help user utilize his time in productive ways.

1. Non Intrusive notifications: Using a highly advanced algorithm, the app calculates an addiction score in real time and maintains a detailed history of your scores.

2. Phone Management Tools: The app also provides you phone management tools such as blocking notifications, disabling the internet, rejecting phone calls and sending auto text messages. You can unplug when you need to or you can control your habits by scheduling these tools to run on a given day at a given time. For instance, say you want to spend family time every Sunday from 3 PM to 6 PM, for this time of period our app will lock the application.

3. Parental Control: For the younger smartphone users, this application can be used as a great parental control device. By installing it on your child's smartphone you can monitor his / her phone usage, schedule internet hours, etc.

3. WATERFALL MODEL

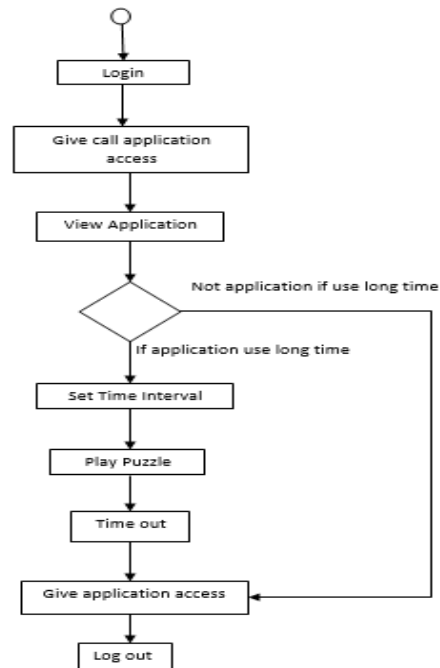


The Waterfall Model was first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed fully before the next phase can begin. This type of model is basically used for the for the project which is small and there are no uncertain requirements. At the end of each phase, a review takes place to determine if the project is on the right path and whether or not to continue or discard the project. In this model the testing starts only after the development is complete. In waterfall model phases do not overlap.

3. ALGORITHM TO BE USED

Priority Based Scheduling(PBS): A priority number (integer) is associated with each process. The CPU is allocated to the process with the highest priority (smallest integer highest priority).

1. Preemptive
2. Non preemptive



SJF is a priority scheduling where priority is the predicted next CPU burst time. Problem Starvation low priority processes may never execute. Solution Aging as time progresses increase the priority of the process

4. ADVANTAGES

1. This model is simple and easy to understand and use.
2. It is easy to manage due to the rigidity of the model each phase has specific deliverable and a review process.
3. In this model phases are processed and completed one at a time. Phases do not overlap.
4. Waterfall model works well for smaller projects where requirements are very well understood.

5 .DISADVANTAGE

1. The usage of calling on smartphone cannot be controlled.

6. CONCLUSIONS

Through use of our *application* we are able to control the addiction of smartphones in people of all age groups and utilizing their time by giving them different tasks according to their age groups, which can be helpful in utilizing their time in productive way and with the help of this we control the users addiction of smartphone.

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