

CLASS SUBJECT REMINDER APPLICATION

A MINI PROJECT REPORT

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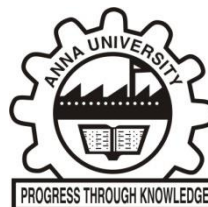
*in partial fulfilment for the requirement of award of the
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**BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING**



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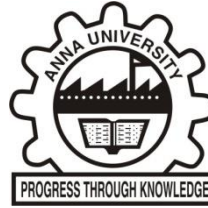
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BONAFIDE CERTIFICATE

Certified that this project report “**AUTOMATED CLASS REMINDER APPLICATION**” is the bonafide work of **DELISH KUMAR R (312420104036)** and **DIKSHIT S (312420104041)** who carried out the Mini project work under my supervision.

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We also take this opportunity to thank our respected and honorable Chairman **Dr. B. Babu Manoharan M.A., M.B.A., Ph.D.** for the guidance he offered during our tenure in this institution.

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CERTIFICATE OF EVALUATION

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The report of the project work submitted by the above students for Mini Project in COMPUTER SCIENCE AND ENGINEERING of Anna University were evaluated and confirmed to be reports of the work done by the above students and then evaluated.

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ABSTARCT

To investigate the efficacy of Reminder application text alerts sent to a mobile phone as a memory aid, a single case experimental design across behaviors was used. The participant, JA, was a 43-year-old man with significant executive dysfunction brought on by a traumatic brain injury (TBI).

JA was originally quite resistant to using any memory help, so a thorough analysis of his attitudes towards them, his cognitive challenges, and his social environment was carried out before a set of guidelines for an aid was jointly created.

Three target memory behaviors and three control memory behaviors had baseline data gathered over a six-week period, and intervention data was collected over a six-week period.

The analysis of the results used nonoverlap of all pairings (NAP) analysis that revealed no change in two of the three control behaviors and a decrease in forgetting in the three target behaviors.

An arbitrary evaluation tool (the updated Daily Memory Questionnaire) also showed progress. This research highlights the value of selecting a memory aid that fits a person's lifestyle and values and shows how powerful Reminder application is as a memory help.

The use of portable electronic aids that provide both a means of communication and continuous memory support throughout the day is now commonplace. Such aids are in keeping with current technological trends and are widely accepted. Devices include personal hand-held computers, e.g., mini notebooks and tablets, such as the iPad, mobile phones and smartphones.

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CHAPTER I

INTRODUCTION

Even if everything in our world is evolving, the timetable for classes is one of the things that hasn't undergone any changes. Yet, the majority of the personnel still uses a paper timetable. therefore, to save them from having to refer. Class Remainder is the name of the software we're making.

The use of portable electronic aids that provide both a means of communication and continuous memory support throughout the day is now common place. Such aids are in keeping with current technological trends and are widely accepted. Devices include personal hand-held computers, e.g., mini notebooks and tablets, such as the iPad, mobile phones and smartphones.

The present study describes the use of Google Calendar and a mobile phone as an electronic memory aid for a man with acquired brain injury (ABI) who found other memory strategies unacceptable on the basis that they were potentially stigmatising. Memory impairment not only affects the ability to recall past information but also the ability to remember to perform intended tasks at specific times in the future, i.e., prospective memory (PM) (Fish, Wilson, & Manley, 2010).

Everyday functioning depends heavily on PM and a deficit in this area is associated with increased disability and limited social participation, making it an important target for rehabilitation (Fleming, Shum, Strong, & Lightbody, 2005). Several studies of PM have shown that difficulties persist long after injury (e.g., Knight, Harnett, & Titov, 2005; Potvin, Rouleau, Audy, Charbonneau, & Giguere, 2011) and there is little evidence that suggests that lost memory functioning can be restored following ABI (Wilson et al., 2009).

1.1 OVERVIEW

The tendency for people to forget things easily is one of the main issues facing them in the current world.

Instead of seeing a physical time table, we are developing an application called an automated class reminder application that will automatically display the schedules when the user gives the time and data in our application. This will prevent the user from having forgotten difficulties.

The user of this Application must enter the subject session times and the name of the subject. after providing the information that will be placed in the application's database.

Our application will send a reminder depending on the information provided by the user in database.

1.2 PROBLEM STATEMENT

One of the most serious concerns confronting individuals today is their proclivity to forget things. Instead of a physical time table, we are building an application called an automated class reminder application that will automatically show the schedules when the user enters the time and data into our application. This will keep the user from forgetting about problems.

A single case experimental design across behaviours was utilised to explore the effectiveness of Google Calendar text alerts delivered to a mobile phone as a memory aid. The participant was a 43-year-old man (JA) with severe memory problems and executive difficulties caused by a traumatic brain injury (TBI). JA was initially very unwilling to use any memory aid and so a detailed assessment of his beliefs about memory aids, his cognitive difficulties and his social context was performed and a set of specifications for an aid was produced collaboratively. Six weeks of baseline data and six weeks of intervention data were collected for three target memory behaviours and three control memory behaviours. Results were analysed

using nonoverlap of all pairs (NAP) analysis which showed a reduction in forgetting in the three target behaviours and no change in two of the three control behaviours. A subjective measure (the revised Everyday Memory Questionnaire) also suggested improvement. This study illustrates that Google Calendar is a highly effective memory aid and emphasises the importance of choosing a memory aid to suit the person's life style and beliefs.

After entering the information that will be stored in the program's database, the user of this application must input the subject session times and the subject's name.

Our application will send a reminder based on the information entered by the user into the database.

1.3 EXISTING SYSTEM

Google Calendar is an online calendar and appointment scheduling app that helps you manage your work, personal life and everything in between. You can add tasks, events, reminders and goals from Google Calendar, Gmail or

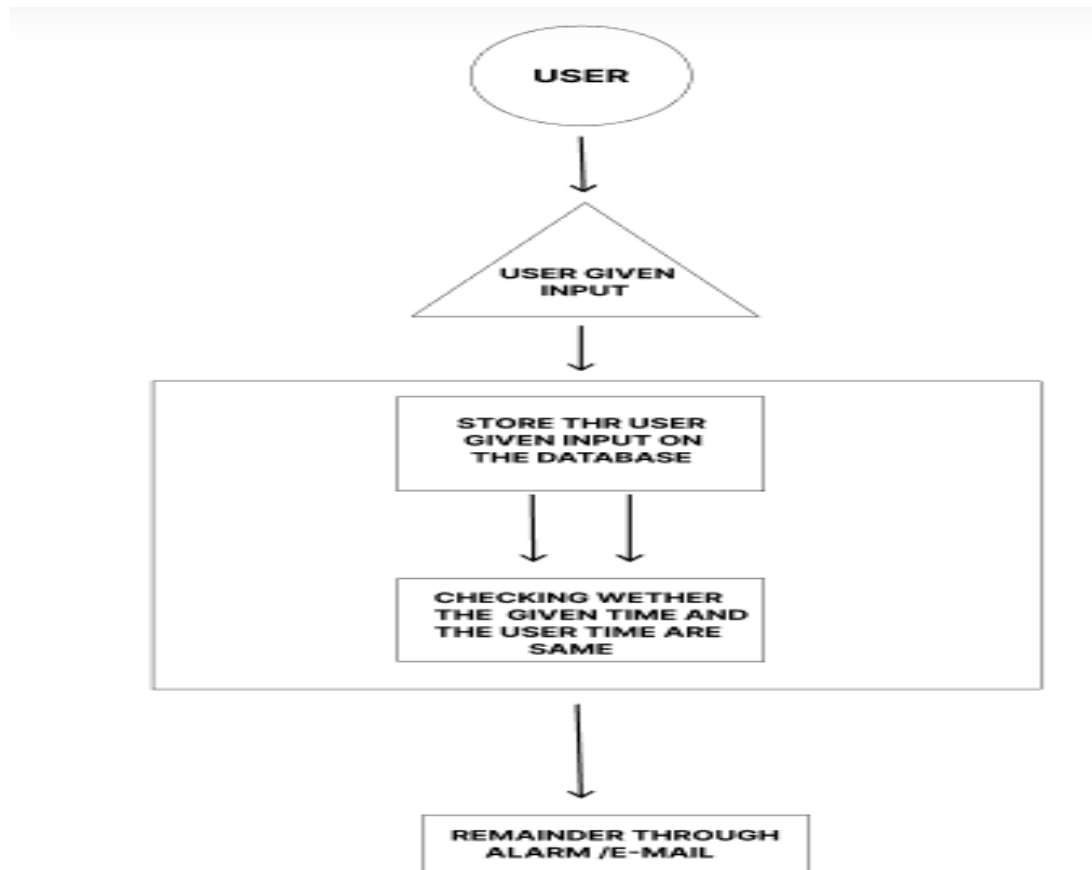
the Google Tasks app. You can also sync your calendar with other apps and devices.

To use Google Calendar, you need to have a Google account and log in with it. You can access Google Calendar on your computer or mobile device. You can customize your calendar's look and feel, choose which dates to see, subscribe to other calendars, create events and tasks, invite people or groups to events, add attachments or video conferencing to events and more. You can also set up daily agenda emails, use appointment slots and sync your calendar with other apps. To make a Google Calendar, you need to follow these steps:

- On your computer, open Google Calendar.
- On the left, next to "Other calendars," click Add other calendars Create new calendar.
- Add a name and description for your calendar.
- Click Create calendar.

If you want to share your calendar with others, you can do so by clicking on it in the left bar, then selecting Share with specific people.

Fig 1.3.1 Reminder Application working procedure



1.4 PROPOSED SYSTEM

PYTHON: We are utilising the high-level, all-purpose programming language Python to create our project. Code readability is prioritised in its

design philosophy, which makes heavy use of indentation. Python uses garbage collection and has dynamic typing. It supports a variety of programming paradigms, including procedural, object-oriented, and functional programming as well as structured programming (especially this).

Due to its extensive standard library, it is frequently referred to as a "batteries included" language. Python was created by Guido van Rossum in the late 1980s to replace the ABC programming language, and it was originally made available as Python 0.9.0 in 1991.

In 2000, Python 2.0 was made available. The 2008 release of Python 3.0 was a significant update that was only partially backwards compatible with previous iterations. The final Python 2 release was Python 2.7.18, which was made available in 2020. Python consistently ranks as one of the most popular programming languages.

JA was a 43-year-old Pakistani male who had lived in the UK since the age of 2 years. He was referred to our out-patient brain injury rehabilitation service following a TBI 6 months earlier as a result of an assault. JA had a Glasgow Coma Scale score of 4/15 on admission to hospital indicating that he had suffered a severe TBI. At the time of the study JA was living part-time in the family home with his wife and three children (visiting in the evenings) and part-time in a shared house with two other people (non-family members). JA had not been able to return to work following the

incident, but this remained one of his goals. JA complained of severe everyday memory problems including difficulties recalling people, events, where he had put things, conversations and appointments. He had missed important doctor and hospital appointments and constantly relied on his family to remember information for him. JA also had mild expressive dysphasia and had minor difficulties writing. Results of neuropsychological assessments (Table 1) show that JA had severe verbal and visual memory difficulties and reduced speed of information processing as well as impaired executive functioning. Given JA's education (JA attended school until the age of 16) and employment background (JA worked in a family run local convenience store) his premorbid IQ was considered to be within the average range. Although showing insight and acknowledging his difficulties, JA was resistant to any memory compensation that he felt would expose his memory difficulty to others (e.g., a written diary, calendar or post-it notes).

CHAPTER 2

2.1 LITERATURE REVIEW

Memory impairment not only affects the ability to recall past information but also the ability to remember to perform intended tasks at specific times in the future, i.e., prospective memory (PM) (**Fish, Wilson, & Manley, 2010**). Everyday functioning depends heavily on PM and a deficit in this area is associated with increased disability and limited social participation, making it an important target for rehabilitation (Fleming, Shum, Strong, & Light body, 2005). Several studies of PM have shown that difficulties persist long after injury (e.g., **Knight, Hartnett, & Titov, 2005; Potvin, Rouleau, Aude, Charbonneau, & Higuera, 2011**) and there is little evidence that suggests that lost memory functioning can be restored following ABI (**Wilson et al., 2009**).

In a review of the literature relating to PM functioning in closed head injury, Shum, Levin, and Chan (2011) identified seven studies using either a remedial/ restoration or compensatory approach to treat PM impairments. Studies suggested that both approaches produced promising findings in terms of improvements in PM behaviour, although studies lacked long-term follow up. However, rehabilitation of memory functioning generally after

ABI has tended to focus on compensatory approaches rather than techniques that aim to restore/retrain memory function. Cicerone et al. (2005) recommends that external compensatory strategies including assistive technology, should be a practice guideline in the treatment of people with moderate to severe memory problems and, in clinical practice, external aids have been reported to be the most widely used compensatory strategy (**Evans, Wilson, Needham, & Brentnall, 2003**).

Paper-based aids, such as notebooks, calendars, lists and diaries, have been shown to be effective methods of compensating for memory difficulties and improving independence (e.g., **McKerracher, Powell, & Oyebode, 2005; Sohlberg & Mateer, 1989**). The disadvantage of paper-based aids is that they are passive reminders requiring individuals themselves to initiate using or checking them which, in itself, is a memory task (**Wilson Emslie, Quirk, & Evans, 1999**). One way of overcoming this difficulty is through the use of electronic memory aids as they often include a cueing device that attracts the individual's attention to the task as well as having the facility to store information (**Kapur, Glisky, & Wilson, 2004**).

The most thoroughly investigated electronic aid for compensating for PM difficulties is Neuropager, a portable pager that provides audio/vibration

alerts (**Hersch & Treadgold**, 1994). Eight studies have explored the use of NeuroPage (**Emslie, Wilson, Quirk, Evans, & Watson**, 2007; **Evans, Emslie, & Wilson**, 1998; **Fish, Manly, Emslie, Evans & Wilson**, 2008; **Wilson et al.**, 1999; 2009; **Wilson, Emslie, Quirk, & Evans**, 2001; **Wilson, Emslie, Quirk, Evans, & Watson**, 2005; **Wilson, Evans, Emslie, & Malinek**, 1997) and all have reported a significant improvement in achievement of target behaviours with NeuroPage relative to baseline. NeuroPage also reduces the amount of prompting needed from carers and helps increase independence (**Evans et al.**, 1998; **Wilson et al.**, 1999). In a follow-up study, **Martin-Saez, Deakins, Winson, Watson, and Wilson** (2011) explored changes in the use of NeuroPage 10 years after the original cohort study of 40 (**Wilson et al.**, 2003). In the 2011 cohort, users were given the opportunity to use their mobile phone to receive messages and 17 of 40 chose to do so.

The authors comment that for one person, using mobile alerts “normalised” the use of NeuroPage and improved acceptance.

The most frequent message sent each week remained similar to the original cohort, i.e., medication reminders. However, new uses emerged such as reminders relating to mood management. The authors also note that slightly fewer health authorities are referring to NeuroPage and one could speculate that this could be related to the set-up fee and rental costs. The fact that reminders are externally programmed means that Neuropage does not require a great deal of learning to be used effectively (**Kapur et al.**, 2004), but it may not be a financially viable option for all.

Personal digital assistants (PDAs) are an alternative that involve a one off cost as they do not connect to a cellular network and so there is no rental plan.

A number of studies have demonstrated the effectiveness of PDAs as memory aids for people with ABI (**DePompei et al.**, 2008;

Gentry, Wallace, Kvarfordt, & Lynch, 2008;

Gillette & DePompei, 2008; **Thone-Otto & Walther**, 2003;

Waldon, Grimson, Carton, & Blanco-Campal, 2012;

Wright, Rogers, Hall, Wilson, Evans, & Emslie, 2001;

Wright, Rogers, Hall, Wilson, Evans, Emslie, & Bartram, 2001) and there is evidence that participants continue to use PDAs for up to four years post-introduction (**Kim, Burke, Dowds, Boone, & Park, 2000**).

However, cheaper models may have limited function whereas higher specification models have superfluous keys that can be confusing for people with ABI (**Kapur et al., 2004**). Furthermore, unlike mobile or smartphones, PDAs do not allow internet surfing or access to social media or mobile calls, amenities which are increasingly viewed as a conventional part of everyday life.

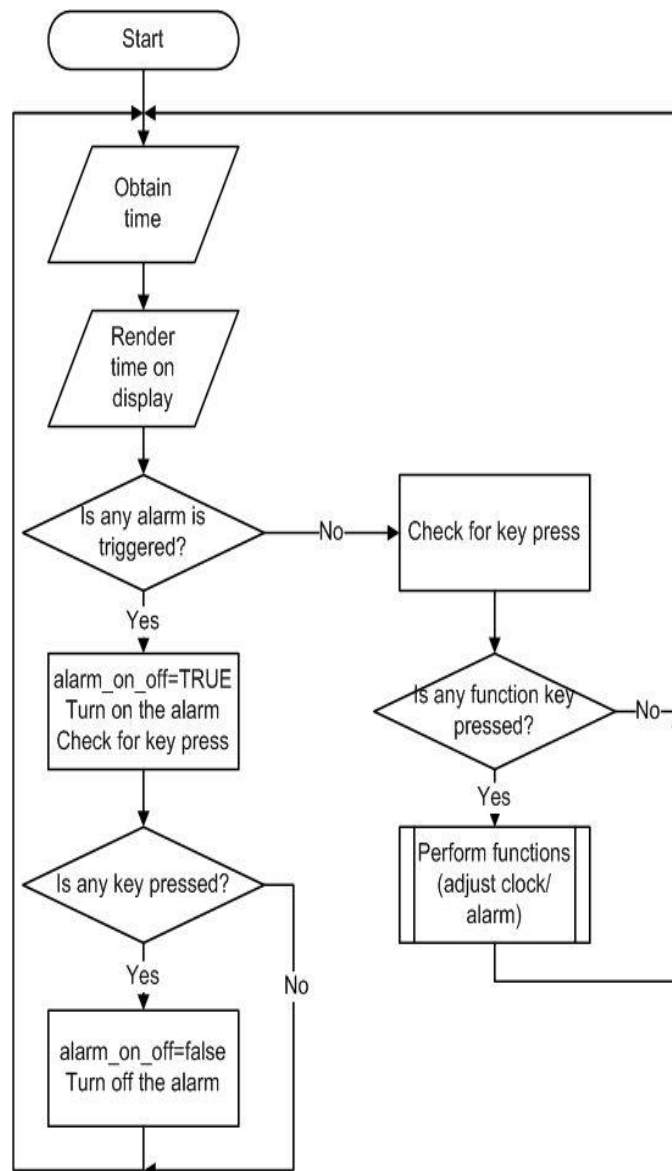
CHAPTER 3

SYSTEM ARCHITECTURE

In this chapter, the System Architecture for the Automated class subject reminder is represented and the modules are explained.

3.1 SYSTEM ARCHITECTURE DIAGRAM

In fig 3.1 The automatic class remaining application is described in the flowchart below.



3.2 SYSTEM ARCHITECTURE DESCRIPTION

The first stage in any process involving system architecture is to get things going. The second stage, which comes after the first, is to get the user's input on the time so that we may render it as a display of time being observed. The word "render" refers to the process of displaying user-provided input. The method checks to see if the input was successfully entered before checking the alarm for any trigger movement. By hitting the appropriate key, the command to "turn the alarm on" is transmitted if there is any movement. Once the alert has been shown, any key presses must cause the alarming process to halt.

If no key has been touched, a procedure is dispatched to see whether any function keys have been pushed. Following that, the procedure is assigned to carry out the task, which is to change the clock alarm. The method has moved on to the second stage, "obtain of time," after completing all the steps. These are all the system architecture which is being explained in the flow chart.

CHAPTER 4

SYSTEM DESIGN

In this chapter, the various UML diagrams for the Employee CLASS REMINDER APPLICATION is represented and the various functionalities are explained.

4.1 UNIFIED MODELING LANGUAGE

Unified Modeling language (UML) is a standardized modeling language enabling developers to specify, visualize, construct and document artifacts of a software system. Thus, UML makes these artifacts scalable, secure and robust in execution. It uses graphic notation to create visual models of software systems. UML is designed to enable users to develop an expressive, ready to use visual modeling language. In addition, it supports high-level development concepts such as frameworks, patterns and collaborations. Some of the UML diagrams are discussed.

4.2 Use Case Diagram

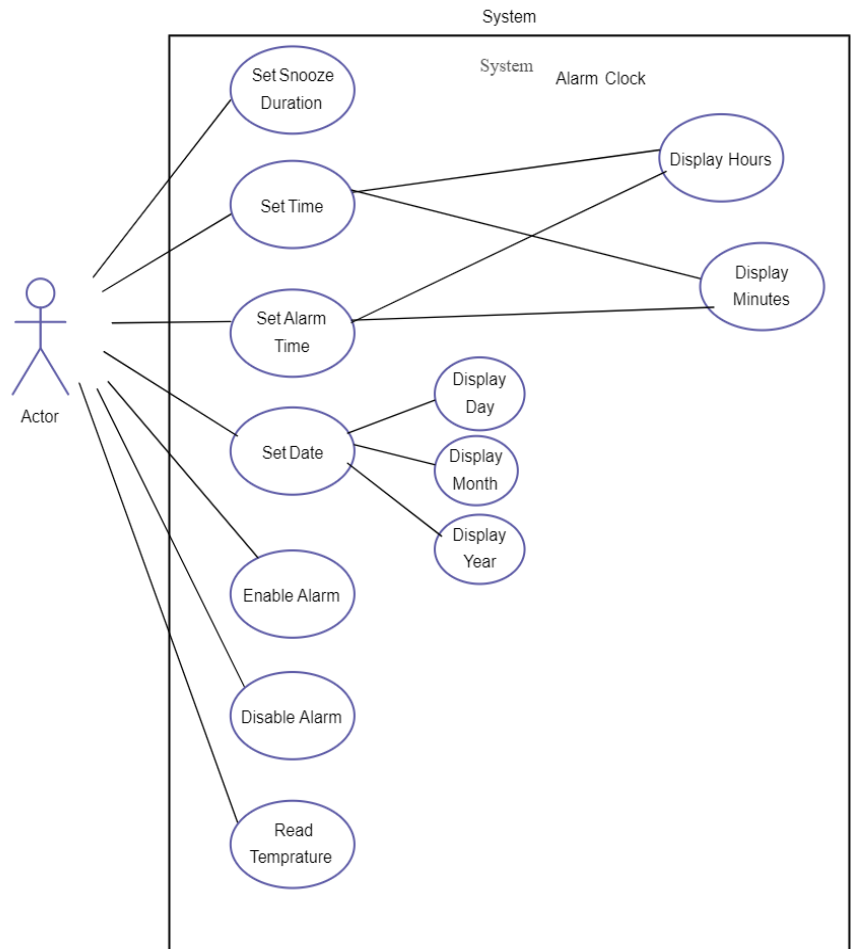
Use case diagrams are considered for high level requirement analysis of a system. So when the requirements of

a system are analyzed the functionalities are captured in use cases. So it can be said that uses cases are nothing but the system functionalities written in an organized manner.

Now the second things which are relevant to the use cases are the actors.

Actors can be defined as something that interacts with the system. The actors can be human user , some internal applications or may be some external applications.

Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements.



It shows that the functionalities are to be represented as a use case in the representation. Each and every use case is a function in which the user or the server can have the access on it.

The names of the use cases are given in such a way that the functionalities are preformed, because the main purpose of the functionalities is to identify the requirements.

To add some extra notes that should be clarified to the user, the notes kind of structure is added to the use case diagram.

Only the main relationships between the actors and the functionalities are shown because all the representation may

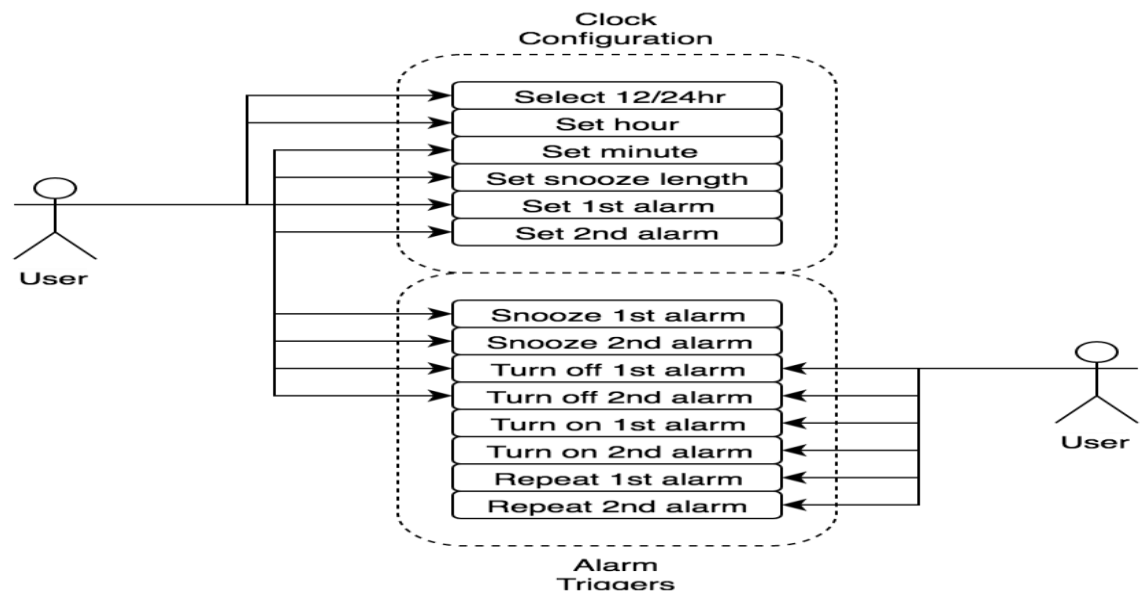
collapse the diagram.

4.3 Class Diagram

It shows that class diagram is basically a graphical representation of the static view of the system and represents different aspects of the application.

So a collection of class diagrams represent the whole system.

The name of the class diagram should be meaningful to describe the aspect of the system.

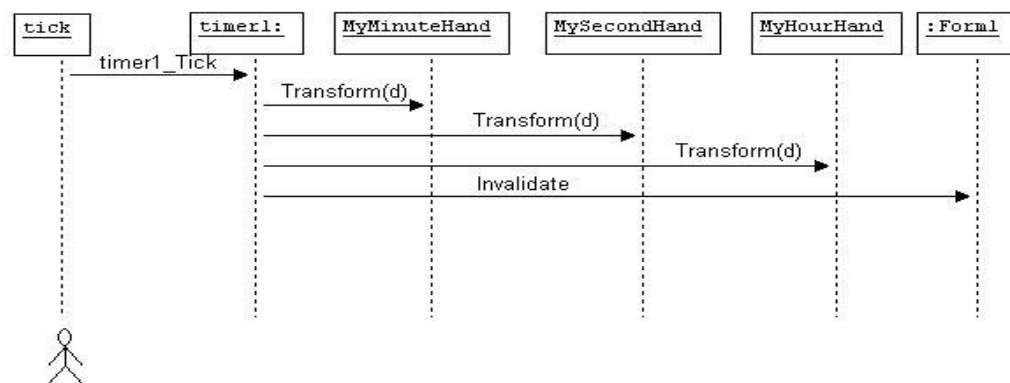


Each element and their relationships should be identified in advance responsibility(attributes and methods)of each class

should be clearly identified.

4.4 Sequence Diagram

It shows that UML sequence diagrams model the flow of logic within the system in a visual manner, enabling to both document and validate the logic, and are commonly used for both analysis and design purposes.

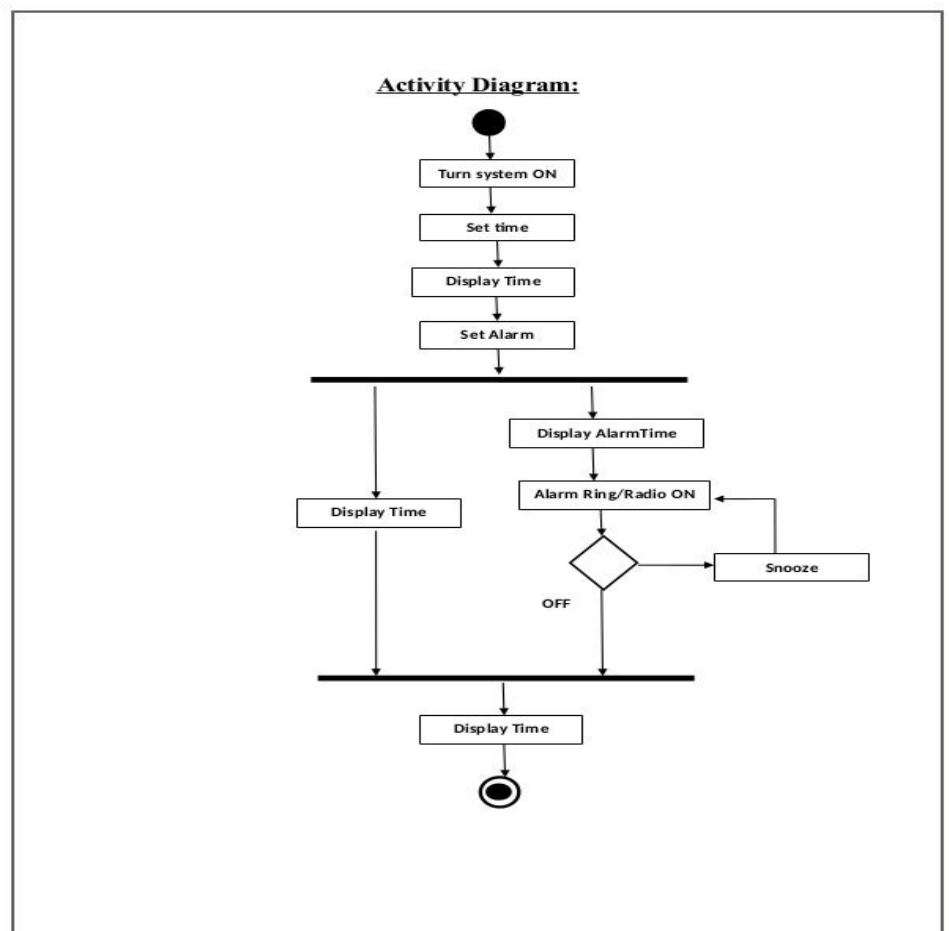


It shows that UML sequence diagrams model the flow of logic within the system in a visual manner, enabling to both document and validate the logic, and are commonly used for both analysis and design purposes.

4.5 Activity Diagram

It shows that activity is a particular operation of the system. Activity diagram is suitable for modeling the activity flow of the system.

Activity diagrams are not only used for visualizing dynamic nature of a system but they are also used to construct the executable system by using forward and reverse engineering techniques.



The only missing thing in activity diagram is the message part. An application can have multiple systems.

Activity diagram also captures these systems and describes the flow from one system to another.

This specific usage is not available in other diagrams. These systems can be database, external queues, or any other system.

Activity diagram is suitable for modeling the activity flow of the system. It does not show any message flow from one activity to another. Activity diagram is sometime considered as the flow chart.

Although the diagrams looks like a flow chart but it is not. It shows different flow like parallel, branched, concurrent and single

CHAPTER 5

SYSTEM IMPLEMENTATION

In this chapter, the System Implementation for the Automated class subject reminder is represented and the modules are explained.

5.1 IMPLEMENTATION OF CLASS SUBJECT REMINDER

APPLICATION

Python is utilized to implement the class subject reminder project, and standard packages like the playsound, datetime, and smtp modules are used.

5.2 MODULES

5.2.1 smtplib module in python: To notify the user through email, we are utilising Python's smtp module. SMTP stands for Simple Mail Transfer Protocol.

- SMTP is a set of communication guidelines that allow software to transmit an electronic mail over the internet is called **Simple Mail Transfer Protocol**.
- It is a program used for sending messages to other computer users based on e-mail addresses.

- It provides a mail exchange between users on the same or different computers, and it also supports:
 - It can send a single message to one or more recipients.
 - Sending message can include text, voice, video or graphics.
 - It can also send the messages on networks outside the internet.
- The main purpose of SMTP is used to set up communication rules between servers. The servers have a way of identifying themselves and announcing what kind of communication they are trying to perform. They also have a way of handling the errors such as incorrect email address. For example, if the recipient address is wrong, then receiving server reply with an error message of some kind.

5.2.2 playsound module in python: utilising the playsound module in Python to play an alert to remind the subject. The user's prefixed phone ringtone is utilised as the alarm sound, but the user may also manually choose the ringtone.

For additional information about the playsound module, see the next paragraph.

we will see how to play sound in Python using some of the most popular audio libraries. We will learn about the various methods for playing sound.

Method 1: Using playsound module

Run the following command to install the packages:

pip install playsound

The playsound module contains only a single function named playsound().

It requires one argument: the path to the file with the sound we have to play. It can be a local file, or a URL.

There's an optional second argument, block, which is set to True by default. We can set it to False for making the function run asynchronously.

It works with both WAV and MP3 files.

Method 2: Using pydub module

Run the following commands to install the packages:

```
sudo apt-get install ffmpeg libavcodec-extra
```

```
pip install pydub
```

Note: You can open WAV files with python. For opening mp3, you'll need ffmpeg or libav.

This module uses the `from_wav()` method for playing wav file and `from_mp3()` method for playing an mp3 file. The `play()` method is used to play the wav and mp3 file.

5.2.3 datetime module in python: Using the datetime module in Python, we can establish the time specifications for our class reminder programme. Dates can be set in a variety of time formats, including 12-hour and 24-hour formats.

The datetime module in Python is a module that supplies classes to work with date and time. You can import it using `import datetime`. It has a class named `datetime` that can contain information from both date and time objects.

For example, you can create a datetime object like this:

```
from datetime import datetime
# datetime(year, month, day, hour, minute, second, microsecond)
dt = datetime(2023, 3, 9, 5, 24, 40)
print(dt)
```

5.2.4 gTTS module in python :

There are several APIs available to convert text to speech in Python. One of such APIs is the Google Text to Speech API commonly known as the gTTS API. gTTS is a very easy to use tool which converts the text entered, into audio which can be saved as a mp3 file.

The gTTS API supports several languages including English, Hindi, Tamil, French, German and many more. The speech can be delivered in any one of the two available audio speeds, fast or slow. However, as of the latest update, it is not possible to change the voice of the generated audio.

```

# Import the required module for text
# to speech conversion
from gtts import gTTS

# This module is imported so that we can
# play the converted audio
import os

# The text that you want to convert to audio
mytext = 'Welcome to geeksforgeeks!'

# Language in which you want to convert
language = 'en'

# Passing the text and language to the engine,
# here we have marked slow=False. Which tells
# the module that the converted audio should
# have a high speed
myobj = gTTS(text=mytext, lang=language, slow=False)

# Saving the converted audio in a mp3 file named
# welcome
myobj.save("welcome.mp3")

# Playing the converted file
os.system("mpg321 welcome.mp3")

```

Features

Customizable speech-specific sentence tokenizer that allows for unlimited lengths of text to be read, all while keeping proper intonation, abbreviations, decimals and more;

Customizable text pre-processors which can, for example, provide pronunciation corrections;

CHAPTER 6

PROGRAM AND OUTPUT

6.1 SAMPLE CODE

```
def gmail(a,b,c,sub,mail):

    import smtplib

    from email.mime.multipart import MIMEMultipart

    from email.mime.text import MIMEText

    mail_content="Now Time Is : "+str(a)+" : "+str(b)+" : "+str(c)+" and Subject
= "+sub

    #The mail addresses and password

    sender_address = 'delishsasir@outlook.com'

    sender_pass = 'delishsasi12'

    receiver_address = mail

    #Setup the MIME

    message = MIMEMultipart()

    message['From'] = sender_address

    message['To'] = receiver_address

    message['Subject'] = 'A mail from Class Remainder' #The subject line

    #The body and the attachments for the mail

    message.attach(MIMEText(mail_content, 'plain'))

    #Create SMTP session for sending the mail
```

```

session = smtplib.SMTP('smtp.outlook.com', 587) #use gmail with port

session.starttls() #enable security

session.login(sender_address, sender_pass) #login with mail_id and password

text = message.as_string()

session.sendmail(sender_address, receiver_address, text)

session.quit()

print('Mail Sent')

```

```

import datetime

from playsound import playsound

alarm_hour = int(input("hour : "))

alarm_min = int(input("mins : "))

alarm_am = input("am/pm : ")

sub=input("enter subject name : ")

mail=input("enter your mail id : ")

```

```

if( alarm_am=="pm"):

    alarm_hour+=12

```

```

# Import the required module for text

# to speech conversion

from gtts import gTTS

```

```

from playsound import playsound

# This module is imported so that we can
# play the converted audio

import os

# The text that you want to convert to audio

mytext = sub

# Language in which you want to convert

language = 'en'

# Passing the text and language to the engine,
# here we have marked slow=False. Which tells
# the module that the converted audio should
# have a high speed

myobj = gTTS(text=mytext, lang=language, slow=False)

# Saving the converted audio in a mp3 file named
# welcome

myobj.save("welcome.mp3")

while True:

    if alarm_hour==datetime.datetime.now().hour and
alarm_min==datetime.datetime.now().minute:

```

```
print("NOW SUBJECT IS :",sub)

for i in range(0,10):

    playsound("welcome.mp3")

    gmail(alarm_hour,alarm_min,alarm_am,sub,mail)

    break
```

6.2 OUTPUT

```
hour : 3
mins : 46
am/pm : pm
enter subject name : software testing
Playing..
Mail Sent
```

A mail from Class Remainder



delishsasir@outlook.com <delishsasir@outlook.com>

03:46 PM

To: delishsasir@outlook.com

Now Time Is : 15 : 46 : pm and Subject = software testing

CHAPTER 7

FUTURE SCOPE AND CONCLUSION

7.1 FUTURE SCOPE

The future generation is the process' primary beneficiary. Students and teachers may completely utilise this programme, which will aid in the improvement of the kids' knowledge, unlike utilising a real time table.

The phrase "betterment" is used to inform both students and professors of the upcoming start time for their next lesson.

This approach aids in improving educational goals while also benefiting those who retain less information. We think the alarm application that has been discovered will play a crucial and important part in the next generation.

7.2 CONCLUSION

It serve as both an introduction and the primary goals for developing the application known as the calendar.

The conception and intended design of the calendar are discussed in the introduction.

The second part discusses the approaches and means by which the user may use the calendar.

The method procedure, which will instruct the user on how to use the calendar, explains the steps in detail.

A few stages like "add," "date," "day," "subject," and "time" are some of the often-used terms in the class automated time table.

This serves as a reminder to the students and even the faculty about their next schedule, which includes their upcoming period and subject.

This is how the calendar method's procedure is applied, and this is how the user may make use of the resources.

This how the class time table can be used by the students of both college and schools

A cleverly made timetable makes the students' and teachers' jobs much easier and stress-free.

It also helps students to stay focused on one particular subject at a particular time.

Therefore, a timetable is the most important thing for the students as well as teachers. And so, it needs to be crafted with care.

The timetable management feature of the school management system allows you to create optimal timetables without wasting much time and energy.

Apart from that, it reduces human error and is an eco-friendlier alternative to manually created physical timetables

These are some of the techniques through which the class remainder application is being made in a way which is user friendly.

The class will be revolutionary application to the Future generation in which there is no doubt or debate about it.

CHAPTER 8

RESULT

It serve as both an introduction and the primary goals for developing the application known as the calendar. The conception and intended design of the calendar are discussed in the introduction. The second part discusses the approaches and means by which the user may use the calendar. The method procedure, which will instruct the user on how to use the calendar, explains the steps in detail. A few stages like "add," "date," "day," "subject," and "time" are some of the often-used terms in the class automated time table. This serves as a reminder to the students and even the faculty about their next schedule, which includes their upcoming period and subject. This is how the calendar method's procedure is applied, and this is how the user may make use of the resources. This how the class time table can be used by the students of both college and schools The total number of target events was 38 in baseline and 22 in the intervention phase; the total number of control events was 42 (including all control events) in the baseline and 35 in the intervention. Tate et al. (2008) suggest that the effectiveness of a treatment should be demonstrated both statistically and visually for single case experimental design (SCED) studies. NAP analysis was therefore utilized. In order to calculate NAP, all target behaviors (i.e., all appointments, days attending the rehabilitation service and days attending the Mosque) were collated to create a total events score for each week. The number of times these events were forgotten was then calculated as a percentage of total events. NAP analysis was used to determine performance change between baseline (phase A) and intervention (phase B) which is shown in the plot of events in Figure 1.

NAP analysis revealed there was a 90% improvement in performance between baseline and intervention for the number of target events forgotten – $\text{Total non-overlap/Total possible pairs} \times 100 \frac{1}{4} \text{ NAP\%}$ ($32.5/36 \frac{1}{4} 0.90 \times 100 \frac{1}{4} 90\%$). There was also a 100% change in performance for target events that JA would have forgotten if he had not been reminded – $\text{Total non-overlap/Total possible pairs} \times 100 \frac{1}{4} \text{ NAP\%}$ ($36/36 \frac{1}{4} 1 \times 100 \frac{1}{4} 100\%$) as shown in Figure 2. At week 11 during the intervention (Phase B) there is a sudden increase in forgetting events to 33% (see Figure 1) because JA's phone was mislaid and he was not able to receive any text message reminders. Once it was found, JA did not forget any other events for the remainder of the intervention phase.

CHAPTER 9

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