## **ON MOBILE PHONE**

**ORGANIZER FOR STUDENTS** 



A Project Report by:

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Under guidance of

**Prof. Pramod Khambete** 

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## **DECLARATION**

I declare that this written submission represents my ideas in my own words and where other's ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause for disciplinary action by the institute and can also evoke penal action from the sources (which have thus not been properly cited) or from whom proper permission has not been taken when needed.

Anantha C. P. Roll No. 09633008

## APPROVAL SHEET

by	he Interaction Design Project III entitled 'Organiser for Mr. Anantha C.P., Roll No. 09633008 is approved for quirement for the Masters in Design degree in Interac	or partial fulfilment of
Si	gnature:	
Pı	roject Guide:	-
С	hairperson:	
In	iternal Examiner:	
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Last but not the least, I am grateful to my parents and friends who had me going even in the toughest phases of the project and were a constant source of inspiration.

## **ABSTRACT**



The project looks at addressing the concern of a big majority of students who don't have the habit of externalizing their daily tasks from their minds or just don't plan out their tasks for themselves. Therefore they find difficulty in completing tasks on time.

Having just TODO lists is not seen effective in curbing procrastination. Well penetrated platforms in the lives of students like the mobile phone and the pc can be used for providing solutions like blocking interruptions, know at anytime what needs to be done next, prioritizing the list of tasks, handling information overload for them, etc. and helping them to inculcate a methodical habit of completing the tasks on time.

### **OBJECTIVE**

The typical college student is juggling dozens of impending deadlines and obligations at any one time(each of them crucial). One forgotten test, for example, can shallow out an entire semester's grades. They have daily reading to be done, bigger assignments to finish, their part-time job to be taken care of, their clubs and organizations, their writing, etc. There's a lot of variance in their life, a lot on their plate already and thus in their tasks list. They end up with lots of mundane, small tasks that need to be finished, but easily fall by the wayside. This can be incredibly stressful. As they say, finding a way to balance it all is hard.

Roughly 20% of waking time is spent by an average university student in doing things important to him/her[Pareto's Principle]. This means that 80% of our day's time is wasted. No one wants to waste their time but they don't know methods which will work for them in gaining this time back.

Setting goals and working towards them may be a particularly difficult task. Some students may be very career oriented & know exactly what they want in life, while others are undecided about their major goals & have not yet found their direction. Whether a student has the habit of scheduling his/her time, all students have goals. Completely directionless students also at the back of their mind know he/she has to listen to their parents, elders, mentors, teachers having come to study in a college.

There are several tools and strategies to aid students' memory and attention; to help remember schedules, sequences, facts and concepts and to locate materials. Many such platforms are present today in the reach of graduate and postgraduate students which helps them in planning out and completing different activities throughout the day or for their immediate future. Despite the many issues surrounding poor time management, many students fail to implement a time management and scheduling program into their lives. They fail to see the advantages of such a program. While it takes time to setup and continually maintain the time management program, the most important advantage is the immediate gain of time it provides.

The project looks at aiding a student in areas like 'missed assignment', 'low attendance', 'little rest', 'lot of stress', 'lack of efficiency'. This aims at inculcating a good planning habit for the successful completion of thier (students) tasks on time.

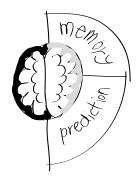
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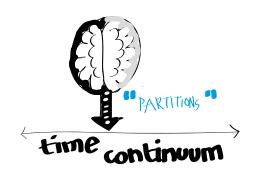


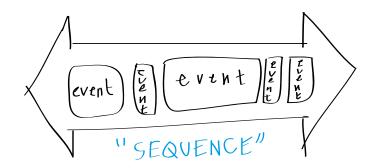
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## 1.0 LITERATURE STUDY

## UNDERSTANDING THE PROJECT DOMAIN







Various philosophers from our history have pondered over the concept of time. Time has been seen as the reference point for sequence of events.

Avicenna, a Persian philosopher, extends his understanding of time as a manifestation of human mind due to resident faculties of memory and prediction.

Henry of Ghent, Giles of Rome, 13 century philosophers, speculate that time is manifestation of our mind again, which distinguishes partitions in the time continuum.

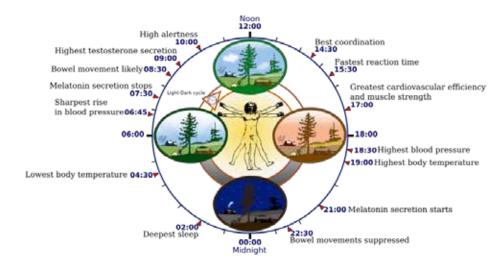
Adolf Grunbaum, a contemporary mathematician who put forward the theory of continuity, defines time as a special set of relations among instantaneous events. It is not a subject/object but a one dimensional subspace of a four dimensional spacetime.

Aristotle argues that time is not change itself but a measure of change. [8]

#### PHYSICAL TIME & PSYCHOLOGICAL TIME

Physical time is what is public to all of us unlike the Psychological time which is private and Physiological. The latter is one's awareness of the former.

Psychological time can be understood better with two scenarios where in the first, it seems to slow down extensively when we are boiling water on the stove and on the other hand the second scenario would be that our time is running out extremely fast when we are enjoying an activity.



-image from Wikipedia, referenced from"The Body Clock Guide to Better Health" by Michael Smolensky and Lynne Lamberg; Henry Holt and Company, Publishers (2000)

As everyone knows we have a "bio-clock" inside. However not all people can tell the time of day without a watch, or sing a song in correct rhythm. This is explained in circadian rhythms—our own body clock, that regulates energy levels in cells and result in body's day-night patterns.

#### **CIRCADIAN RYTHMS**

The Earth's rotation around its axis generates daily en-vironmental cycles. The most conspicuous daily environmental cycles are those of ambient temperature and illumination. The daily environmental cycle of greatest importance to organisms is the alternation of light and darkness. A civil day lasts 24.0 hours and includes a seasonally-variable interval of light (day), a variable interval of darkness (night), and two twilights (dawn and dusk). Many human populational activities exhibit daily rhythmicity in synchrony with the civil day.

Biological processes that cycle in 24-hour intervals are called daily rhythms (or, less often, nycthemeral rhythms). When a daily rhythm is endogenously generated, but still susceptible to modulation by 24-hour environmental cycles, it is called a circadian rhythm. Many behavioral processes of individual organisms exhibit daily and/or circadian rhythmicity, including locomotor activity, feeding, excretion, sensory processing, and learning capability. Rhythms of locomotor activity have been the most thoroughly-studied behavioral rhythms.

Many autonomic processes of individual organisms exhibit daily and/or circadian rhythmicity, including the control of body temperature, cardiovascular function, melatonin secretion, cortisol secretion, metabolism, and sleep. Rhythms of body temperature have been the most thoroughly-studied autonomic rhythms.

Practically every function in the human body has been shown to exhibit circadian rhythmicity. Under controlled conditions in the laboratory, the endogenous nature of the rhythmicity can be demonstrated. In ambulatory conditions, environmental factors and physical exertion can obscure or enhance the expressed rhythms. The three most commonly monitored vital signs are blood pressure (systolic and diastolic), heart rate, and body tem- perature. Because these variables exhibit daily rhythmicity, their normal values vary with the time of day.

#### **CULTURAL PERSPECTIVES OF TIME**

#### Monochronic Vs Polychronic

Monochronic cultures like to do just one thing at a time. They value a certain orderliness and sense of there being an appropriate time and place for everything. They do not value interruptions. Polychronic cultures like to do multiple things at the same time. Polychronic cultures include the French and the Americans. The Germans tend to be monochronic.

#### **Future Vs Present Vs Past Orientation**

Past-oriented societies are concerned with traditional values and ways of doing things. They tend to be conservative in management and slow to change those things that are tied to the past. Past-oriented societies include China, Britain, Japan and most Spanish-speaking Latin American countries.

Present-oriented societies include the rest of the Spanish-speaking Latin American countries. They see the past as passed and the future as uncertain. They prefer shortterm benefits.

Future-oriented societies have a great deal of optimism about the future. They think they understand it and can shape it through their actions. They view management as a matter of planning, doing and controlling (as opposed to going with the flow, letting things happen). The United States and, increasingly, Brazil, are examples of future-oriented societies.

## Quantity of Time

In some cultures, time is seen as being a limited resource which is constantly being used up. It's like having a bathtub full of water which can never be replaced, and which is running down the drain. You have to use it as it runs down the drain or it's wasted.

In other cultures, time is more plentiful, if not infinite. In old agricultural societies, time was often seen as circular, renewing itself each year.

## **Implications**

In societies where time is limited, punctuality becomes a virtue. It is insulting to waste someone's time, and the ability to do that and get away with it is an indication of superiority/status. Time is money.

In cultures where time is plentiful, like India or Latin American, there is no problem with making people wait all day, and then tell them to come back the next day. Time-plentiful cultures tend to rely on trust to do business. Time-limited cultures don't have time to develop trust and so create other mechanisms to replace trust (such as strong rule-by-law).

Everyone has their own time perspective.

Making most of "precious time" can be seen as

- Expanding our time orientation
- Capitalizing on positive experiences in the present and future
- Converting/transforming negative ones to positive
- Removing "blind devotion" to present and the future

"Our attitude towards time has profound impact on our lives" Moderate attitude towards past, present & future (ppf)-indicates healthy pattern of living. Extreme attitude towards ppf-indicate biases that lead to unhealthy pattern of living.

As Dr. Philip Zimbardo uses the metaphor of a man carry a pig, in his book— The new psychology of time that will change your life, we always tend to hold onto something so much so that we're not aware that we're actually carrying it all along.



#### THE NEED FOR EFFECTIVE TIME MANAGEMENT

Effective time management is an essential component of the independent study expected in students in higher education. Failure to manage time in order to complete and submit assignments and prepare for assessment can create problems for retention and achievement. In addition, poor time management can be a major source of stress and anxiety, creating pressure on students as well as university support services including counseling & medical practices.

student failing to submit an assignment on time (or at all) significantly underachieving due to poor use of time when completing work. Time management is seen as a 'non-academic' issue, part of a student's personal development as an independent learner, or related to an employability agenda.

To aid student success, appropriate practices to develop students as independent learners, common issues they face and effective interventions for time management problems is especially timely.

#### Existing modes of support for time management for students

Generic workshops, self-help guides and one-to-one advice sessions are some of support systems that are available today. One-to-one advice sessions offer most effective targeted interventions but is labour-intensive. Workshops on time management are a labour-effective way of reaching larger numbers of students. The most comprehensive one will offer an overview of issues and strategies, and engage students with practical activities and exercises, providing handouts and web links for students to follow for more detailed advice. Alternatively they can focus on single aspects of the topic (e.g. planning and organisation, using time efficiently, avoiding distractions and staying motivated) or on time management in particular situations (e.g. for dissertations or revision, or during an exam). Self-help guides are provided by most learning development services in paper and online formats. Like workshops, they can range in the depth of information provided from quick tips and overviews to more detailed advice on specific aspects or situations. Although online provision of support resources is increasingly standard, this may not always be either the preferred, or the best format. Modularisation of courses and a growing student demographic has exacerbated these difficulties, with module providers rarely able to co-ordinate staged deadlines for assignments in different modules.

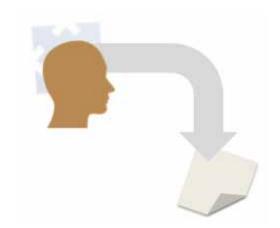
Consequently it is common (especially in year based curricula than semester based ones, for example Humanities and Social Science subjects) to find students with long unstructured periods in the year during which they do very little independent study, followed by a frantic period working on several summative assignments, all due for submission on the same day. This pattern can result in under-achieved work and late or non-submission.

University offers more in terms of experiences than just study; on campus alone, students may be involved in clubs and societies, student media and union activities, and extra-curricular activities within their departments. The recent economic climate has made students more aware of the need for 'added value' in the post-degree job market and, as a result, more are undertaking voluntary and part-time paid work or placements. Some students have caring or financial commitments which must be balanced with study time, or are involved in off-campus activities.

Failure to develop effective study practices in areas such as academic writing, reading, research or note-making can also impact negatively on time management. Much time can be wasted in over-reading, re-writing or re-reading notes, or an inability to structure written work. A lack of academic confidence is often at the root of such difficulties, sometimes made worse by the low marks awarded to poorly completed work.

Distraction from study is especially common because both academic work and leisure activities are accomplished through the same technological devices (i.e. computers, PDAs). Students seek support with avoiding distractions and maintaining their motivation, especially when completing lengthy projects like dissertations and major research projects.

Some students may present with more serious barriers to time management. These include habitual and persistent procrastination, perfectionism and videogame addiction. This kind of difficulty requires a more co-ordinated approach, with learning developers working in tandem with other support providers who may include counsellors, medical services, Hall wardens or personal and academic tutors.



If I'm a I cannot take additional work no-no on on to myself without having time/task to compromise on something/ planning some other task ..into the daily tasks I do, has to go in anyway Time I invest Returns I get May/may not be Interesting, important,

Do what I am doing with maximum efficiency/ whenever I need/want it If I'm a planner of my time/tasks

relaxed manner

I can use some tools/strategies and get onto other things without any nagging loose ends

useful

Time Management according to Experts/ **Consultants** 

GETTING EFFECTIVE, GETTING THINGS DONE

David Allen [2] tells us in his book, Getting Things Done, "Get whatever you need to do, out of your head, out onto a paper/any medium.

Externalising our daily tasks from our mind gives us the flexibility to overview and prioritize with clarity and also checks the chances of any of it getting unnoticed. A person who is no-no on planning cannot expect to take any additional tasks onto his/ hands as there would be some degree of compromising that will take place for them. On the other hand, a good planner can see to it that he/she gets to smooth sail all their tasks plus additional ones without having to compromise on any. They would be engaging some tools/strategies and don't get such efficiency by chance.

## A gist of David's book:

#### 1. Write EVERYTHING Down, in the same place.

The first part is simple: get things out of your head. Write them, leave yourself messages, text yourself, do whatever works; the simple point is get your thoughts, ideas, reminders, and tasks out of your unreliable brain, and onto something that doesn't know how to forget.

The second part of this is creating what's called a "ubiquitous capture tool." This means that no matter where you are or what you're doing, you have a place to record your thoughts and tasks. For many people, this is simply a small notebook (Moleskines are all the rage right now), but it can be anything. I use my cell phone, because it's the only thing near me 24 hours a day. Make sure you have something always accessible and easy to use. You should ideally have as few inboxes as possible; personally, I try to have 3- one for email, one for physical things (papers, mail, and such), and one for my task-writing.

#### 2. Schedule like mad, and stick to it.

Keeping a calendar of what I have to do, and when and where I have to do it, has made my life much simpler. Any place you have to be, put it immediately into your calendar. If you want to study at a certain time, or do a particular task, put it in your calendar. There's something subconscious about seeing your time allotted to doing a particular thing that makes you much more inclined to do it, and it makes figuring out how much time you actually have much easier. Again, your calendar should travel everywhere with you, and be easy to access and use.

#### 3. Review, review, review.

Writing things down isn't going to do you any good if you never look at what you write. Have a task-management system- there are a ton out there- that works for you. That's a different system for anyone, and I won't push any one on you, but having one is crucial. Again, maybe it's a piece of paper with crossed out tasks or checkboxes, or maybe it's something super high-tech that uses words like AJAX and has multiple mobile versions. Make sure you review your lists every day, and that you keep up to date.

Make sure you build a system, use it completely, and trust it as well. No exact system works for two people, so there's some experimenting involved, but that's half the fun.

**Stephen R. Covey** [3] talks to us about *Seven Habits of Highly Effective People* in his book titled the same;

Some portals of effective time management including Andrew Schwartz's management training programs [4], showcase the following:

Habit 1: Be Proactive

Habit 2: Begin with the End in Mind

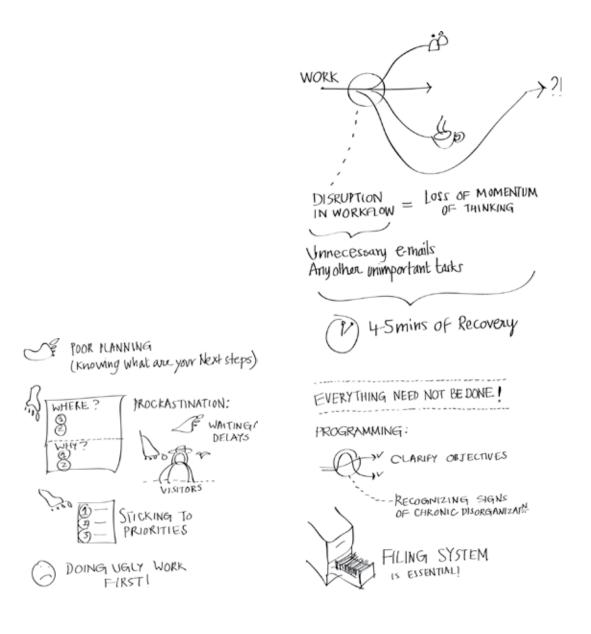
Habit 3: Put First Things First

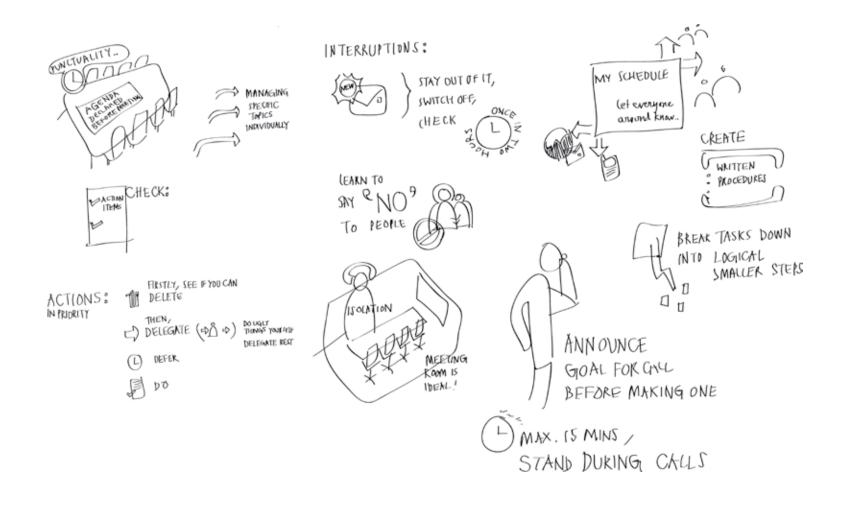
Habit 4: Think Win-Win

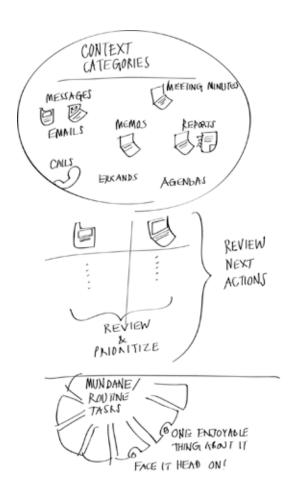
Habit 5: Seek First to Understand, then to be understood

Habit 6: Synergize

Habit 7: Sharpen the Saw







SET GOALS:

SPECIFIC/DEFINANCE GOALS (ACADEMIC/PERSONAL)

J. WRITE IT DOWN

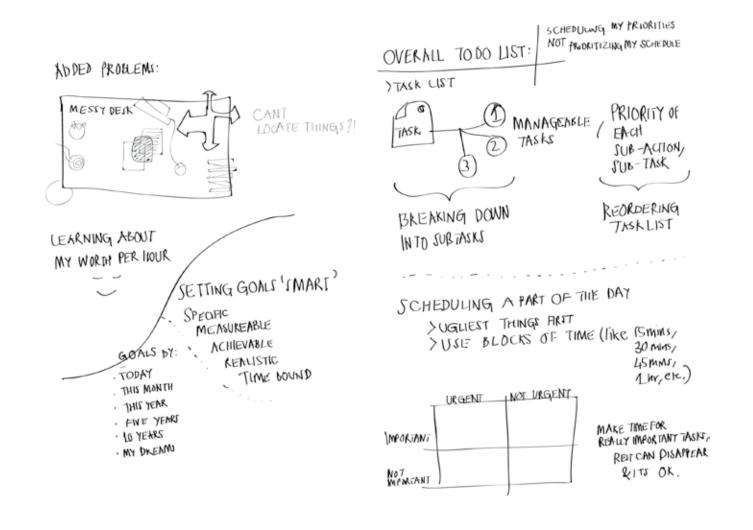
FOCUS ON NEXT ACTIONS MICKO MOVEMENTS

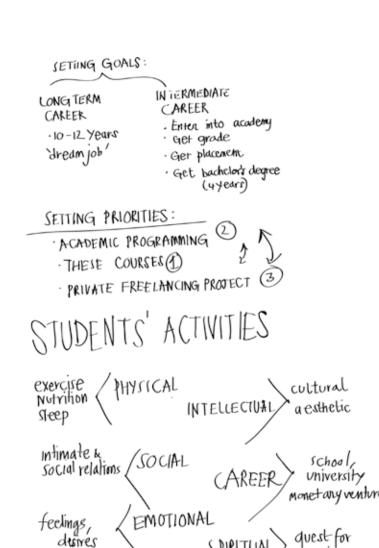
3, PROTECT NEXT ACTION

Lo "MAT DE/SOMEDAY" FILE

5. 2 MINUTE RULE = DO IT! >2 MIN, DELEGATE IT, DETERIT. SCHEDULE IT.

KEEP STUFF IN VISIBLE PLACE





feelings, dusires

## PERSONAL ORGANIZER

The electronic form of personal organizer or daily planner comes in handy to manage daily appointments, tasks to be done for the day, contacts information and financial management, etc. For example, Personal Digital Assistant (PDA), Personal Information Manager (PIM), Appointment Planner, Simple Contact Management, School Homework Planner, Personal Finance Manager and so on. All of these are designed for helping students or others people to organize and manage their personal life quickly and easily. Below are examples of other planning tools

day planner

personal planner

book/binder

portable

Diary, calendar, address book

blank paper/notes

personal analog assistant



## PROBLEMS OF EXISTING PRODUCTS

The tools available today for scheduling and keeping track of the day's activities need to be rethought upon in terms of their functioning. Traditional methods of penning down whats to be done, sharing and collaborating further on what's to be done have not been translated digitally satisfactorily. An example to the previous statement would be is to see that no such program, application or device exists that seems to be commonly popular in the selected segment of users.

With currently available are systems spread across a number of applications and services which is difficult for one to coordinate and is not boiling down effective curbing of procrastination.

## Some tools that exist for capuring all tasks in one place:

Evernote Ubernote Moleskine Notebook Catch

## Tools for scheduling:

Google Calendar Yahoo Calendar Mozilla Sunbird 30Boxes

## **Tools for reviewing:**

Remember The Milk Toodledo Nozbe Vitalist

A tool which does a bit of all of the above is yet to become a household name with students chiterring chattering about its obvious game changing strategies. There are tools like Convofy that are just entering mainstream, which talk about powerful professional networking by using context as the base for all the functioning of the platform but them too are not targeted for student community.

software system			meetings	planning
organized				planning
	productivity	project/task	notes	
multi-level	outliner		keyboard	shortcuts
	W	eekly calendar		
		allocate		
hiera		appointments		
	schedule	reminde	ers passw	ord/encryption
filters				



















Date:

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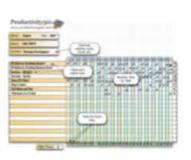












## **FUN WAY OF ORGANIZING?**

Looking at some of the examples, the project deserved a direction which would make the activity of organising not "FIT IN" but rather become something to look forward to as a fun activity. This would eventually serve to having an effective day not missing out on important much needed recollections and other information kept updated to the user.

Clocky is a clock for people who have trouble getting out of bed. When the snooze bar is pressed, Clocky rolls off the table and finds a hiding spot, a new one every day.



## **Augmented Mirror**

Cybertecture - MIRROR

Project by David Bouchard and Pattie Maes in collaboration with Sajid Sadi, Enrico Costanza

"an intuitive interface to give users insight into their daily activity patterns"

Using a display embedded in a mirror, data from wearable sensors can be visualized into a familiar routine context, including several applications.



# Tocky & Clocky unaway clocks

## Done: Reflective Personal Project Management System

Project management is often an art. But in an objective way, it is also about memory. We often know exactly how to get our work done, and in a single sitting we can map out the process and steps. However, and time goes on, we often get lost track of this, and thus retrace and reinvent what we had already decided.

"Done" is a chat-based ReflectOn for allowing a person to reflect on this initial process and map their instantaneous actions to their long terms goals. By connecting these domains of thought, "Done" helps the user get more done, while gaining a deeper insight into the process inherent to their work.



## 2.0 FIELD STUDY AND OBSERVATIONS

## FIELD STUDY

The system shall be intended for University students as the pressure of tasks and deliverable become substantially greater compared to their time of schooling. But also it can be used by children class 5 onwards (10 years, Concrete Operational Stage as suggested by Piaget [8])

In this age group, we can see that the schools they go to have their curriculum and instruction of discourses designed around the capacity of a child for that age. The student is expected to behave so and is exposed to various interactions. A system to work with the time available for a person in a day can give an edge to a child if can be amalgamated in a habit sort of act on a daily basis and is introduced earlier in their age.

Field study was initiated to observe users in their native environment by means of traditional or intrusive contextual inquiry. Since target user group can be percieved as homogeneous and certain specific problem areas are being targeted, questionnaire method has been applied for capturing data. Students are the only considered stake holders in my study. This was to get a sense of the crisis of time management that exists in the lives of university students today. Do the victims, so as to say, of time crunch and procrastination do anything about these woes? Have they any stragegy with helps them sail through such situtations? The following is the first questionnaire that was incorporated for the initial study with 2 Professors, 1 Ph.D Student and 10 PG Students.

## FIRST QUESTIONNAIRE

- 1. Do you face any problem with managing your time?
- 2. When was the last time you had such an incidence? Since when has this been an
- 3. What are the tools that you use to manage your time an how frequently do you go back to it?
- 4. If you think certain tool is good/bad, why is it so?
- 5. If you follow a certain strategy to keep yourself more aware of your time or the

- 7. When was the last task you managed to complete well in time? Do you have any idea how much time it would take? Do you think/say to yourself before or while doing the task?
- 8. Have you ever used a mobile phone to help you plan out your time or finish tasks?
- 9. When was the last time you used such a system? Which application and phone was it? What was the problems you faced with the system of managing your time with it?
- 10. By having you tasks organised, prioritized and having it set up well in advance for the day, do you feel it would be helpful to you? If yes, what is stopping you from adopting such a system?

The new questionnaire in the following is sought for bringing in contextuality in the study.

The first questionnaire was created as a start and lacks depth of contextual inquiry. What a user reveals upon such an inquiry by the designer is just the tip of the ice berg and what he actually needs lies hidden beneath. Sufficient depth has to be reached, hence new questionnaire was adopted for bringing in much required **contextuality** in the study.

#### **NEW QUESTIONNAIRE:**

1. Do you face any problem with managing your time?

If so, why?

Why do you think you have this problem?

By doing what can your situation/this situation be otherwise?

When was the last time you faced such a pinch?

By doing what can you have avoided the above?

Why didn't you notice this earlier?

What is stopping you from doing the above and letting you be productive?

2. What does productivity mean to you?

How much productivity do you think exists in your tasks?

Can you rate it on the scale of 1 - 10?

If so, why?

3. What does time mean to you?

By taking more time can you increase your productivity?

4. How much of quality matters to you in your work?

Do you have any stops in increasing the quality of work in your day?

If they are, what will it take to surpass such obstacles?

What ate the steps?

Why aren't you taking those steps?

If you get more time, do you think you will improve in terms of your quality of work?

5. What are the tools you use to help you manage your tasks?

If you think certail tool is good/bad, why is it so?

6. Do you follow any strategy to help yourself keep more aware of your time/tasks left to be done?

For example, do you say anything to yourself before you start a task/any activity?

Do you prioritize, 'I'll do this first and then I can finish that.'?

7. By organising your tasks, prioritizing it & having it set up for the say well in advance, do you feel it would make a difference to your productivity that day?

If yes, what is stopping you from obtaining such a system?

- 8. Can you rate your current practice of the following aspects of time management from 1 to 5? (5 implies you're very happy with the results you are producing in that area)
  - a. Day to day planning (action lists, prioritizing)
  - b. Planning projects, complex tasks, executing them (establishing aims & goals, steps to achieving them)
  - c. Managing the balance b/w work & private/personal/home time
  - d. Being fim (saying no politely, resisting interruptions)
  - e. Delegating (letting go, handing over, allocating tasks, following up)
  - f. Delegating (letting go, handing over, allocating tasks, following up)
  - h. Decision making & finishing tasks
  - i. communication (dealing with recieved communication)
- 9. What are your daily tasks that get to happen parallely?

What are the instances in your morning that you'd need to multitask? (afternoon, evening/night, in your work, in your personal time of the day, weekend?)

10. Which are the tasks that you mostly tend to push ahead?

'for example: I can do this tomorrow, I can take care of that later'

- 11. Which was the last task you happened to procrastinate on? You had set that task for what time? You pushed it to when? Did you finish it finally? What was the impact/ was there any impact? If you had not pushed it, would it have made a difference? Is procrastination a problem to you? What do you feel/think is a way for you to beat procrastination for your last task?
- 12. Does certain tasks of your day tend to trigger newer smaller tasks?

  'for example: For you to go buy sabji from the market, you realise you need to arrange oney from your friend. You call your friend, he's not reachable. So your sabji task is held up, so your dinner plans got changed.'

  'example 2: For calling your professor, you need to get Skype installed on your system and report summary has to be completed and reviewed for discussion to happen which takes twenty mins prior requirement of time.'
- 13. Do you feel setting accomplishments by the hour and pursuing the tasks helps?
- 14. Have you broken down any of your tasks into sub-tasks ever in your mind or paper?
- 15. Have you figured out any time you can finish a certain task because you are going anyways today for some other work? Which was the last such event in your life? Have you done a smaller part of a main task along with another smaller one?
- 16. Would you like getting real-time feedback of how many hours left for current task going on suppose you have have planned your day?
- 17. If you push a certain task to tomorrow, would you like to see unfinished task updated shown to you everyday from your plan?
- 18. If you're writing down your tasks, do you write keywords just enough for you to understand? Would you be okay if others saw your list of tasks? Do you find any stops in posting your list of tasks on a social platform?

If yes, what are the stops? Why do you feel so?

19. What is the amount of buffer you tend to keep for your task? Example: I can do this in two hours, but I will keep three hours for this incase I don't finish it by then

## **EXPERIMENTS**

#### My assumption:

We tend to procrastinate because we can afford to. The task deadlines thought out by person if it stays within the domain of one's own boundary, he feels it comfortable to break, reschedule, push ahead, etc. When the domain of task deadlines are not self initiated and comes from an external source, it should make a difference. The idea of Public Commitment had to be ascertained if it works in the scenario of university students.

EXPERIMENT 1: I manage your time, you manage mine

With three PG students an experiment was initiated where all three of them were keeping a tab on each other's time. There were three checkpoints created through the day when they would check up on each other for the progress and following of what they had taken on doing for their day. The checking up has been decided to be done face to face, on the phone call or SMS, email. This was done for a week.

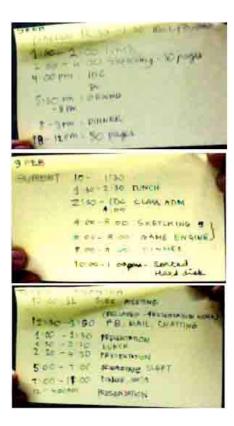
#### EXPERIMENT 2: I manage multiple people's time

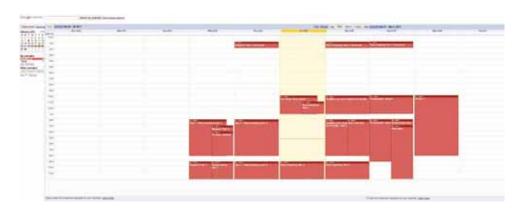
To get a feel of what it is to manage other's time, two PG students volunteered in an experiment was initiated where both their schedule was kept a tab on by a third person. There were three checkpoints created through the day when they would be checked upon for the progress and following of what they had taken on doing for their day. This was done for a week.

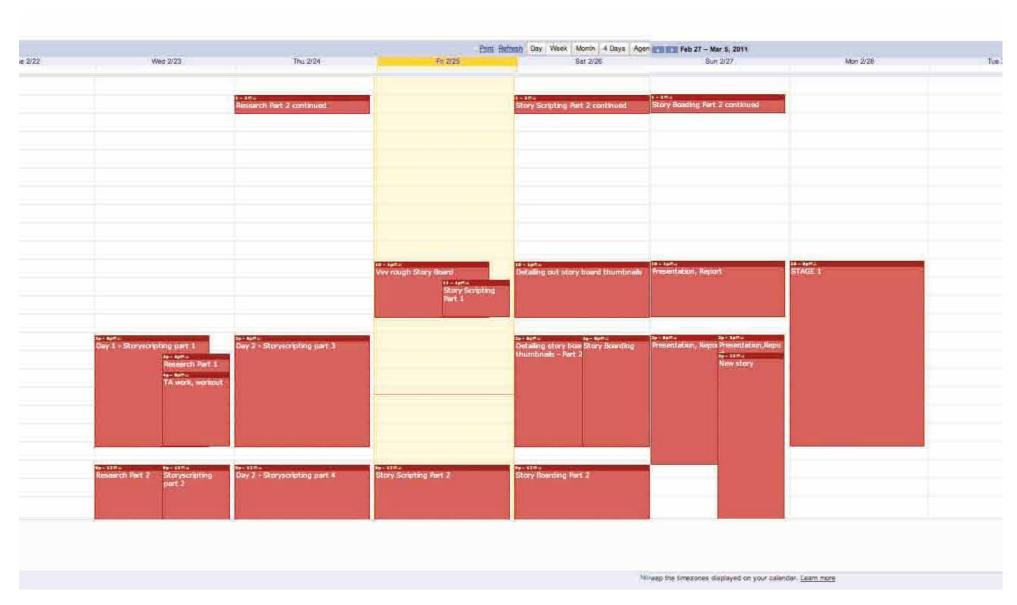
#### Conclusion:

The notable insights arising from both these experiments was that, what was at stake if a person were to lax had to be increased. After first three days, a stake was introduced that such a person will have to give in to a treat for the other two. This did have an impact on the first day. But later on, rigour of the other two demanding the defaulter reduced and ideally the stake should have went up, which didn't.

I noted that on a public platform, if a commitment is made, it is bound to loose its effect if the person committing is not constantly monitored and more the monitoring, more real is the commitment exhibited.





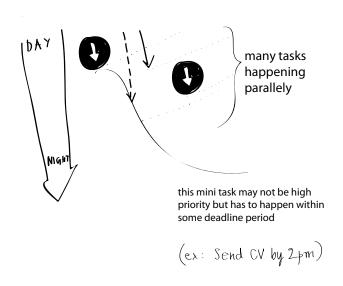


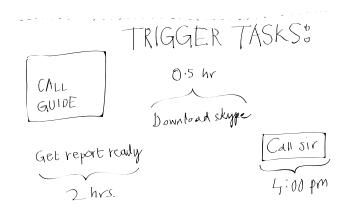
## **OBSERVATIONS/INSIGHTS**

## **Triggered Tasks**

A tasks of our day seem to be multilayered. Each has its own parts, different start/ end points in a timeline and many of them overlap each other. An example would be that why we multitask. An example would be sending a resume to an address amidst editing a project report needed for the afternoon meeting.

Can a system help us make sense out of these connections that exist in tasks. For having to do one, I need to finish another; and having done one, I can now get on with this and similar.





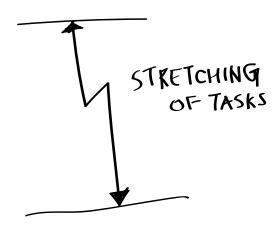
how each task demands/triggers off other precedent/successive tasks (time consuming)

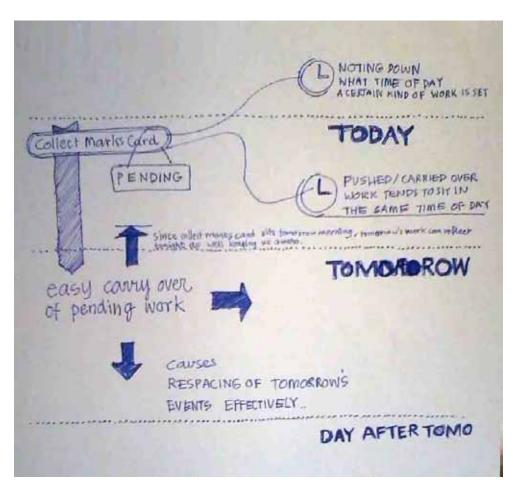
CAN THIS RELATION BE CAPTURED AND THE USER SUPPORTED IN ORGANISING?

# **Accessing information on time**

Can the format in which time is accessed by a user be changed to a more visual and tactile form? Visual in the form of charts, tables, tabs and Tactile in the form of draggable form elements like unfixed buttons, inputs, etc.

Sincle a great deal of our day doesn't exactly go as one can expect to plan it in considering a students scenario of doing three four assignments. Can smooth carry overs be made in the planning tool?





# **3.0 THE PROBLEM**

## THE PROBLEM

- 1. Majority of students donot now what to do when. They(a majority of students) have a problem getting out of the habit of constantly having to re-evaluate what to do next.
- 2. They do not exercise the act of setting goals and setting realistic ones. eg. saving Rs.100, finishing 20 pages. Goals being realistic in terms of budget, schedule, resources available.
- 3. Students are unaware of breaking the above goals down into smaller more manageable activities so that their bigger task itself is not stalled. They have no clue(a majority of them) that if any of the above tasks turn out to be unrealistic, they can pen down resources to be gathered-possible from whom? where? how long procedure? is it feasible in my current scenario? and get things moving for themselves. Doing all this in their mind can be daunting for many.
- 4. They do not have a planning behaviour, i.e, thinking about activities in terms of importance, urgency, efficiency (getting done poorly/good), effectiveness (getting an important work done over unimportant ones)
- 5. They do not work with between now and expected date of completion. They do not set a date for their goals, nor go into setting milestones for achieving these goals.
- 6. They lack the sense of identifying periods of high workload and fail to know when/when not to take on more work.
- 7. They do not ongoingly see their current deviation from the set path for completion of any planned goal.

## **SOLUTION**

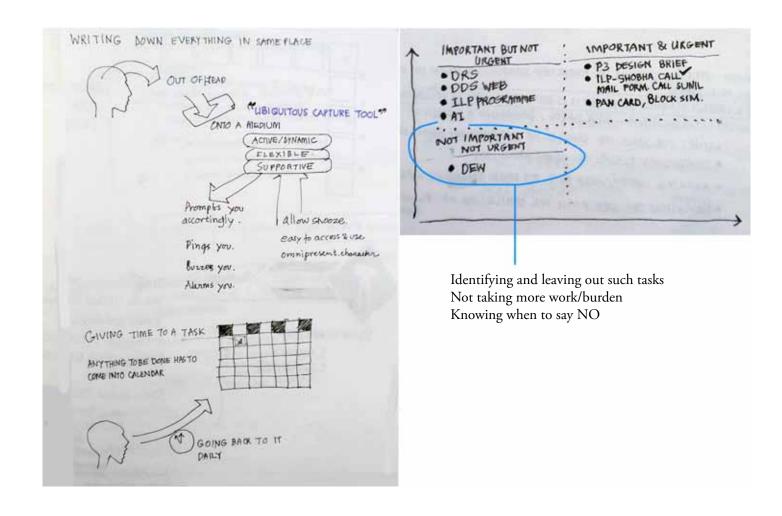


- 1. A system to help you get things out of our head, everything to be done & focus on one task intentionally (prompted by system, set by you) can be sought after. It will look at creating a focussed environment, lesser or no distractions, saving on time of getting back to what you were doing.
- 2. System should look at guiding you to get rid of your previous pattern of working, changing the way you deal with your time and tasks by continuous. System ought to give you lucid feedback on whats to be done and what all has been finished.
- 3. System should look at helping a student remember what to do by means of contextual visuals, sounds, vibrations becoming all the more meaningful than textually heavy to-do lists.
- 4. Devices monitoring to inform you to rest, stretch, break.
- 5. System will look at assisting you in breaking down a bigger task into smaller ones so that milestones can be achieved with inch by inch in the beginning and can scale up later onwards. System will aid you in setting measurable milestones for your abstract goals as well.

# 4.0 CONCEPTS & IDEATION

#### TAKING EVERYTHING OUT OF YOUR HEAD

If something is on a hard platform like paper/a device, the scheduling of it is possible. Similarly, stuff brought out from our heads can be taken down, suppose, as a list or captured in many different ways (record it, photograph it, etc.) and be accessed everyday to check if it needs to be done then, next or soon. Having to do all this in our mind needs a certain kind of presonality and some deal of experience/practice which can be easily by-passed by the following suggestion. A ubiquitous capture tool is proposed which will do the job of capturing all that needs to get done and any other information that may be important to be recalled, etc.

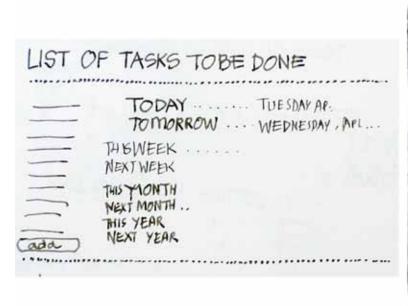


#### TAKING EVERYTHING OUT OF HEAD

Dealing with scenarios of working with assignment due dates; scheduling work that needs to be done in chunks so as to not crunch the night before the assignment is due. Using a to-do list to capture the above, the device needs the user to fill in the assignment due dates(for example) as soon as he/she finds out about it.

This is only possible if you have your device with you always as in case of mobile phone.



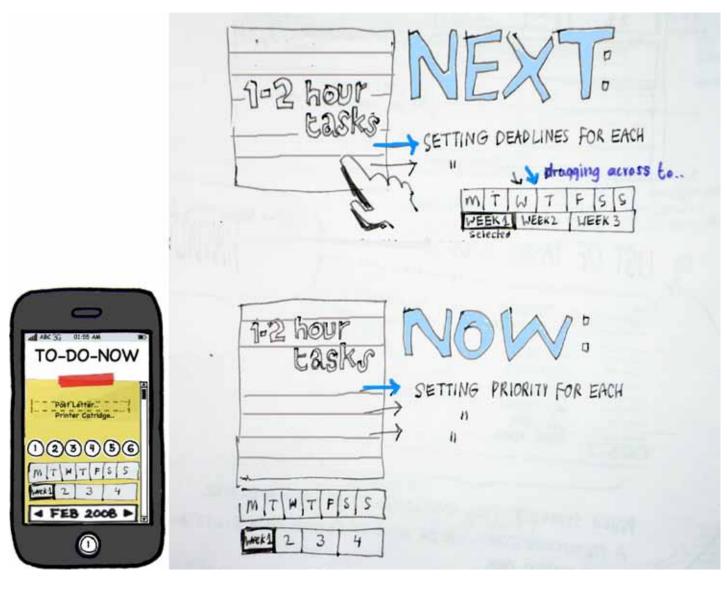






### **ASSIGNING VALUES TO TASKS**

Working with tasks, assigning deadlines to them, prioritizing them amongst each other. This could be done by having picker panes and either drag dropping the task or the value in the pane to the task. This is sought after as an alternative interaction mode to dropdown selection or turning a scrollwheel, etc.



#### **BREAKING DOWN TASKS**

For perplexing tasks, breaking them down into smaller, more manageable ones is an effective technique to get started right away with something big. It allows for moving/conquering portion by portion. If any tasks turn out to be unrealistic, penning down resources to be gathered - possibly from whom? where? how long procedure? is it feasible in my scenario? can help in intiating the first few steps for action. These first few steps go a long way in getting things done as this phase is the reason many a tasks get stalled and available time gets wasted on.

Doing all these in our minds is quite a daunting task for a person who has no prior exposure to such an activity. For newbies, such a situation which demands the bigger task to be broken down into specific/measurable ones become a prime channel for subscribing to procrastination like mentioned earlier.

VAGUE GOALS. DECIDING WHAT TO DO NEXT.



"DOES THIS TASK REQUIRE MORE THAN & GETS ADDED IN PROJECTS LIST ONE ACTION ??" "WHAT IS THE FIRST OF THESE ACTIONS?" CAN YOU DO THIS WITHIN TWO MINUTES, IF YES DO IT RIGHNOW." MAKE A NOTE TO FINISH BY THIS DATE ON CALENDAR."

Delegation of work .. is not relevant in students Grenario

#### AVAILABILITY OF SLOTS ACROSS A DAY

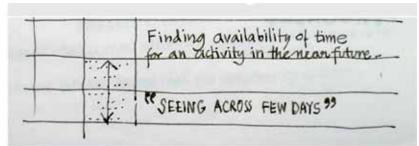
Seeing your tasks across in the day visually and getting to identify the slots available for us for rescheduling a previous pending task, or a task which need more time than considered earlier, or could be adding a new task altogether in today's schedule. The icons could be shown from the keywords entered as tasks in to the device.

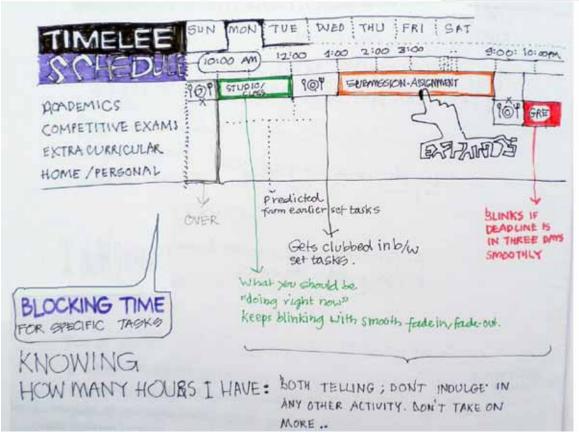
Plotting day's tasks across in a segregated manner for that much needed visibility (i.e., most important tasks visible at the top followed by meal-times and finally everthing else). It is clearly visible in the example shown below that during the day, I'm able to sit for work only for five hours that too with a gap of two hours. Important Tasks >> Cannot negotiate tasks >> Negotiable/flexible Tasks >> 12pm 6pm

#### **WEEKLY TO-DO LIST**

Spending five minutes everyday on seeing the tasks in store for us the current week will give us the edge of beating "Oh no! How could I have missed this!". This also gives us a chance to look ahead and identify "UGLY" tasks, the ones we tend to push for later, to take them head on and finish it first and feel relieved having covered the uglier part.

1. Easy switching between textual entry method to Task template choosing platform

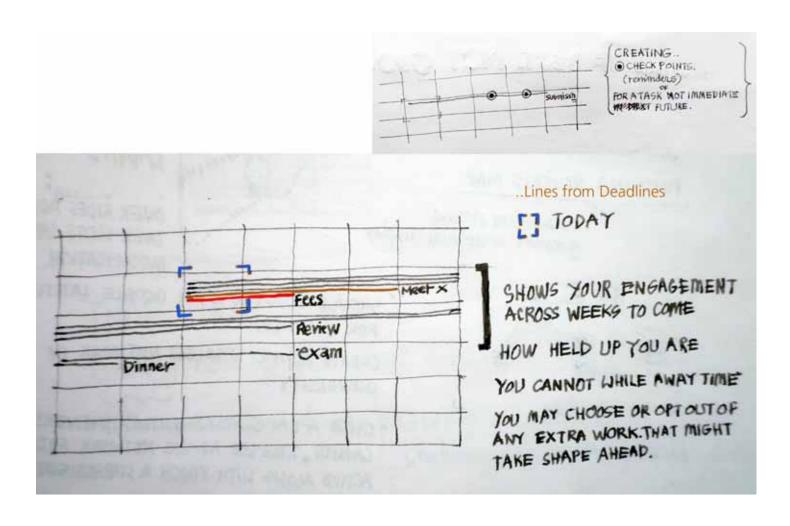




(WORKING BACKWORDS FROM DEAD UNES)

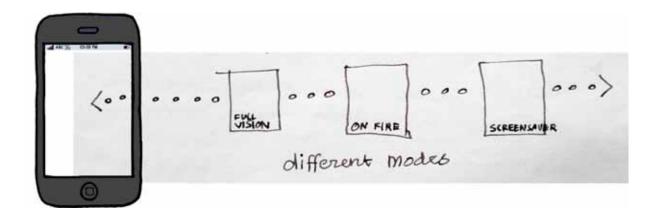
#### SEEING A TASK's FOOTPRINTS ACROSS A MONTH

Seeing NOW to THEN of a task gives us a idea of how we can finish a task in smaller portions. Seeing all the lines from future tasks crawling into today breaks the myth we have that "my evening is pretty much empty". This is not intended to eat into our precious evenings but it allows us to see that if I were to finish this task now, I can be free when the actual deadline arrives. Also these lines can be used to keep ourselves reminders. Add sort of checkpoints, for example, I should finish chapter 3 by this weekend and 4 by the next. I will be ready for my exam coming up soon then.



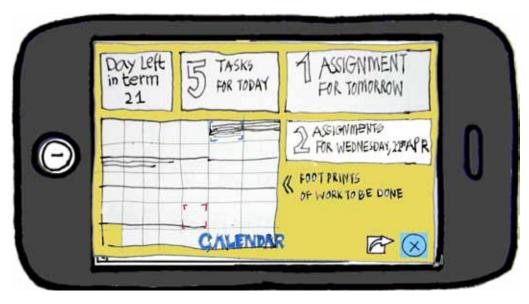
### **MODES OF TIMELEE**

If I am not able to concentrate confused about what to do, pending tasks can disappear in 'shared adjacent screen', only TO-DO-NOW tasks (tasks on fire, deadlines reached/to be reached shortly, etc.) appear in clarity. Nothing else.



#### **BIRD's EYE VIEW**

Knowing/seeing across weeks, month.



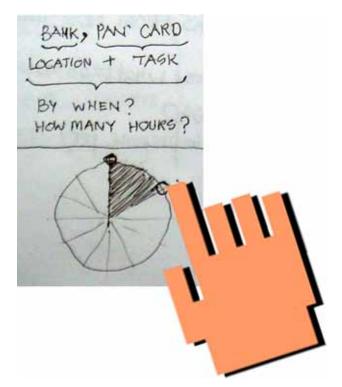
#### **CLOCK FORMAT**

Since from childhood, we are taugh in and out of school, the way to read a clock and make sense out of time around it, all our current modes of working with time somehow end up in digits. Hence, can we aid a user to set time data on a clock itself?

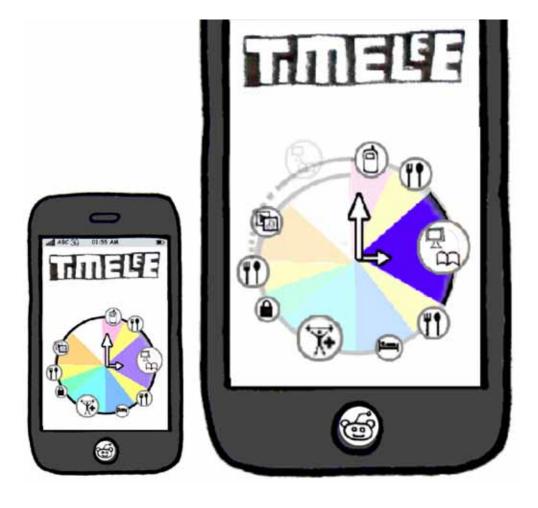
Can we make a person see his tasks on a clock itself?? Can we make him set deadlines on it, alarms on it. move filled slots from one edge to the other around the day?

**CAPTURING TIME DATA FOR TASKS** 

An easy dragging interface, an alternative for drop down is sought after for scheduling a task, i.e., capturing the start/end/period/duration of a task.

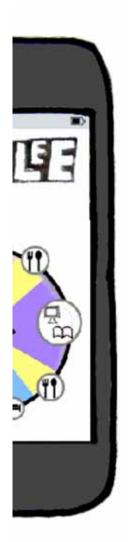


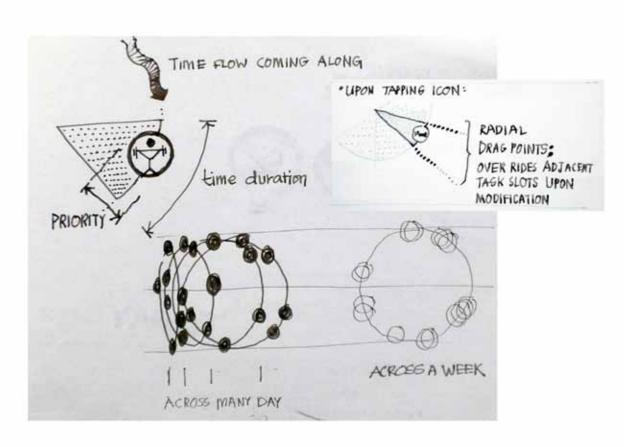
The tasks can be shown on an alpha/colour basis for showcasing importance/urgency. The hour hand of the clock points to the task you should be doing now. Also, "what next?" is anwered having scheduled this in the day. The clock screen can be a screensaver for TIMELEE. keeping a user abreast of his schedule and to-do's



### **CLOCK INTERFACE**

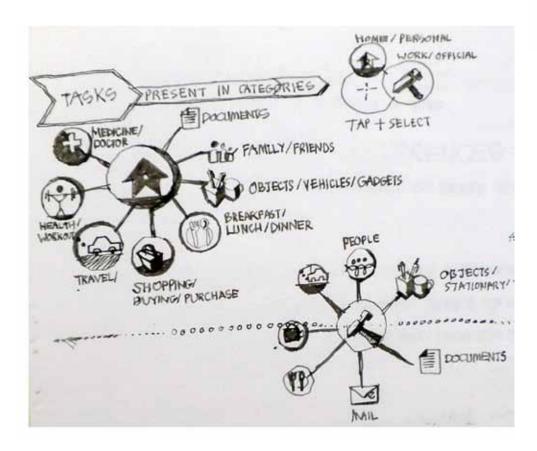
The tasks can be manipulated on the clock itself. Any portion of it clashing with another can get split and flow beyond the other set task, thereby giving you a signal that you need to reschedule your day, tweak it and set things in place, TAKE CONTROL.

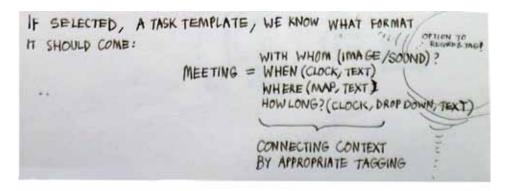




#### TASK TEMPLATES

The tasks can be categorised into templates by which quick adding of tasks is possible for users. The main categories once selected can give rise to sub-categories sufficiently replacing majority of the task labels having to be typed.





HOW LONG (CLOCK DISPOSINITEXT) LIBRARY : WHEN (CLOCK, TEXT) WHERE (MAP, TEXT) LAST DATE (IF ISSUED, CLOCK, TEXT) BOOKS ISSUED (TAGGED BY UNIV. THE UP BACKEND CLOUD) (IMAGE, TEXT)



#### **TIMETRACKING**

Making a note of an individual's time usage across a week can give extensive details on his/her prime working time, other patterns. Guide and help come out of known pitfalls like working late.

This hour by hour tracking of what you're doing across 7 days will break the myth to you of your expected hours spent in sleep, study, work, travel, etc. and reveal the actual numbers.





### MAPPING TASKS ABOUT LOCATION

- 1. Pinching the clock, we can come to Location based view of tasks for the selected period. (eg. for the day, week, etc.)
- 2. Tasks are represented by 'Task Icons' from tasks template. On selecting a category, further detail of task can be looked at.

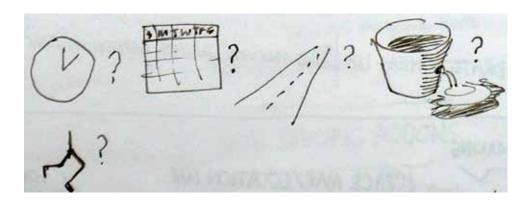


This has many advantages but the project leaves this feature out to be detailed further on, not in this time frame.

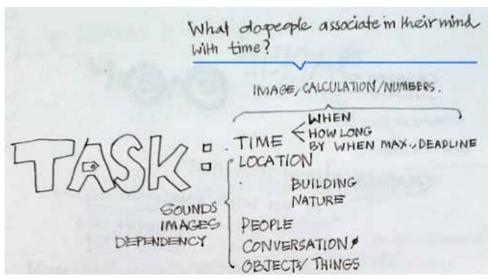
#### **RECALLING TASKS**

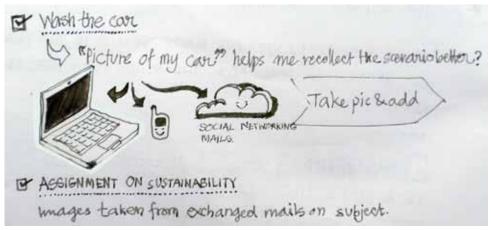
What do people percieve time as??

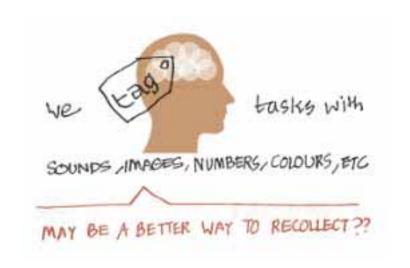
Is it a visual/Image? a road, running water? Sound? example, sound of running water?



This got me thinking into the notion that we remember tasks not just by how it written textually or heard and understood in language but across many dimensions. You might remember the Dentist's appointment by the pain you had in your molar. You might recollect to pick your clothes you had given for wash, if you get the smell of detergent.







### LOOKING AT TASKS IN A NEW WAY

Making note of how context can help a person relate to and assimilate information better, TIMELEE looks at bringing up more cues for the user, be it visual, auditory, time based, location concerning, importance, or dependance, etc. to replace textually heavy TO-DO LISTS. Our brain tends to tag information in certain way. By using this way of presentation, it might fuel the recalling experience and eventually help get things done.

Looking at introducing TO-DO ALBUMS.





## **FEATURES**

The final list of features to be included into Timelee has been considered on the basis of usefulness of each feature. The task map feature has been dropped because of the exhaustive need of detailing it deserves for making it apt for students. It is also realised that taskmap feature is more applicable for working population and business professionals than compared to students as students are bounded by a single premises unlike them. The features included in testing were considered on the basis that they were new features which are not seen in time management/productivity applications for students available today.

#### 1. TO-DO LIST

What, start when, finish by when Seeing from future System fills in for you (..birthdays, classes)

### 2. TO-DO ALBUM,

Integrating Desktop, Phone and Camera Contextualizing and tagging flexibility with user System's inbuilt icons are prompted Prioritizing, assigning checkpoints/reminders

### 3. TASK SHARING

Know who's on what? Firefighting

## 4. TIME TRACKING, SELF-AWARE ASSISTANT

## 5. FOCUS HERE!

'Blocking Applications' Mode

## 6. DO THIS NOW!

Screensaver

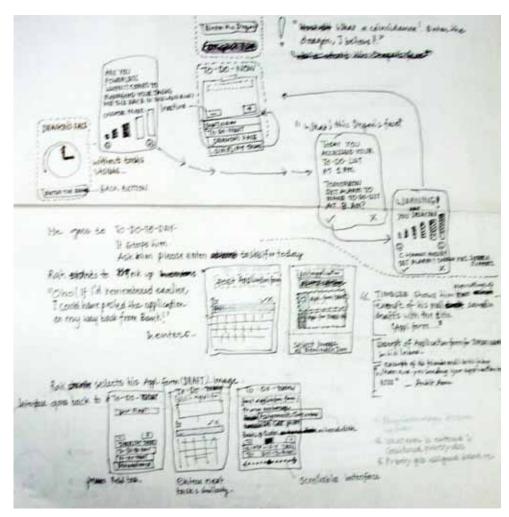
## 7. TIMELEE DOCK

'Capture Everything' 'Quickly getting there' (anti-procrastination movement!)

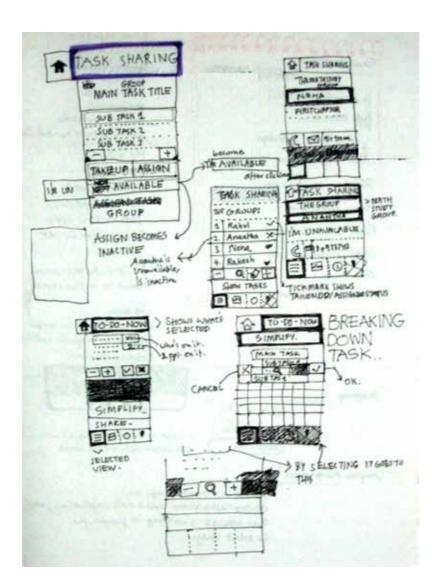
### 8. FULL VISION

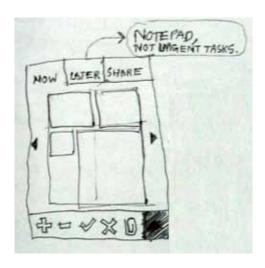
Screensaver

# **6.0 EXPLORATIONS**

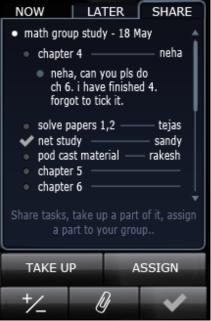


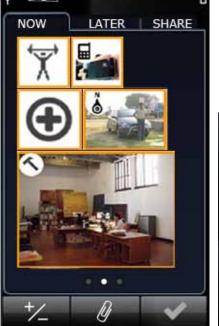
64 Organizer for Students on Mobile Phone

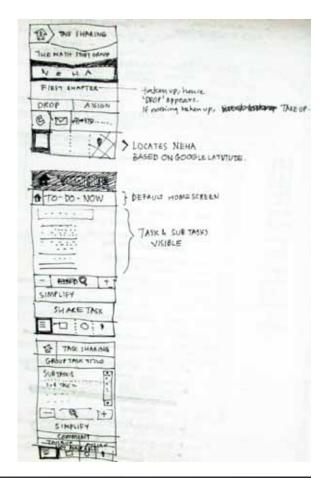




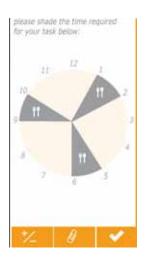




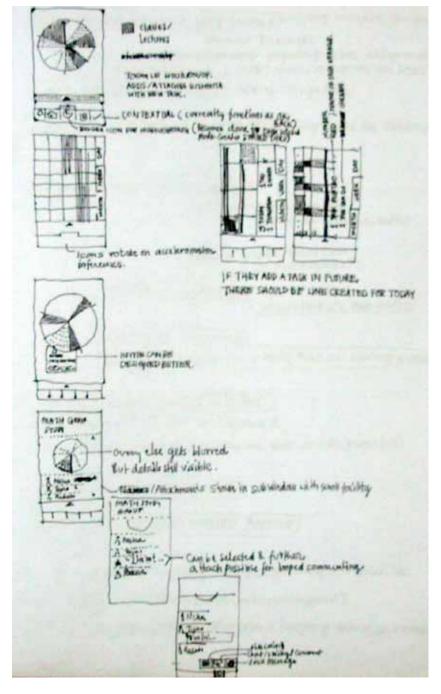








**URGENT & IMPORTANT** URGENT but not so important Important but not so urgent Not so urgent & not so important





# 7.0 PROPOSED SOLUTION

## **TIMELEE**

Consists of two platforms; the **mobile phone** and the **personal computer.** As student-life nowadays is inseparable from information being fed to them and handled by them on a computer/the internet, an organising tool needs its footprints reaching out to these facets of students.

Mobile phone is the most nearest(always with them wherever they go) and dearest gadget of a student nowadays. Earlier it used to be the television and PC. But now slicker and smarter phones have found their way into the heart of students allowing them any-time access to unwinding with friends online (telephonic) and having capacity of satiating their media hunger too.

Why smartphones? They have become affordable nowadays. Developers and student community are a major chunk of App downloaders and users of today.



# **TO-DO ALBUM in addition to TO-DO LIST**

### If we can tag/attach elements to our tasks, can it be a better way to remember?

Suppose you are meeting your Dentist this week. You are updated with the next appointment with your Dentist next week and at the back of your mind, you're thinking to yourself "I hope I don't miss it in the coming week or else I'll not be able to see him for a month." Now an approach what Timelee can ask you to consider is take a snapshot of your dentist in Timelee. It keeps it in the Timelee clipboard. You walk out of the cabin and add a task setting the date and time for next week. You can tag the task with a picture of your dentist. Next time when you get a reminder, you will see your Dentist's snap in place of the text for example "Appointment with Dr. Jeet".



-initial sketch

# **UBIQUITOUS CAPTURE TOOL**

Capturing all your tasks

NOW IMPORTANT/MUST DO AT LIESURE/CAN DO **HOBBY TASKS JUST A THOUGHT** MAYBE SOMETIME

The interface is similar in both the DOCK & MOBILE PHONE Applications as they are modelled around keeping STICKY NOTES in mind.

The Writing Pad area in the interface is for adding tasks. This is achieved by tapping. There is '+' symbol calling for action which gets you into organising without any further delay. This is the area dedicated for Must do tasks. The **Orange Board is** for may be sometime later tasks or just a thought entries.

Five buttons do the following functions (from left to right):

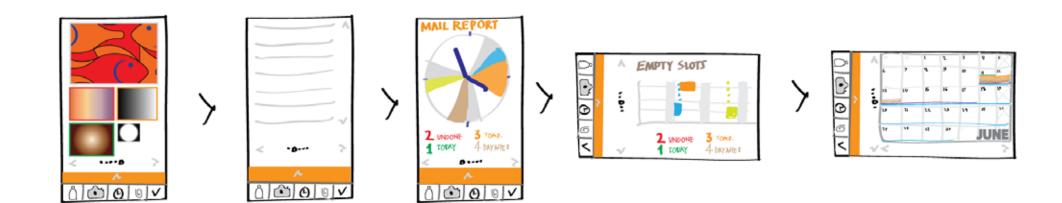
- 1. Contact tag a task with a person for task sharing
- 2. Capture tag a task with an image using capture tool for additional/quicker recalling support feature. (explained further)
- 3. Clock Setting date, time, duration, reminders
- 4. Contact tag a task with a file for sharing/creating shortcut
- 5. Done changes a task from normal text to strikethrough text showcasing that it is done/completed.



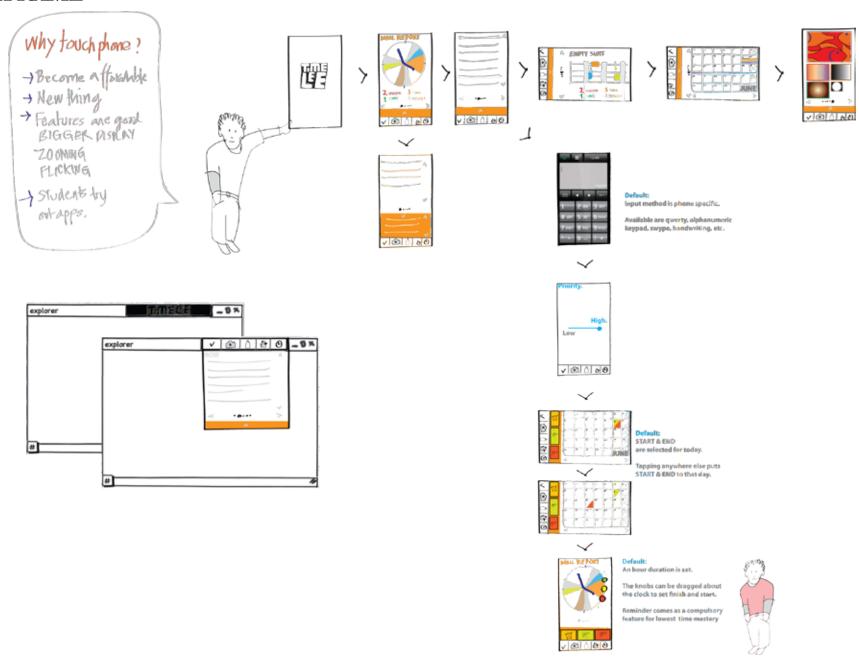
# Various modes of Timelee

By flipping the screen of Timelee screen, you can iterate between:

- 1. LIST MODE
- 2. ALBUM MODE
- 3. CLOCK MODE
- 4. DAY MODE
- 5. WEEK MODE (not present in the image below)
- 6. MONTH MODE



# **WIREFRAME**



### **Screenshots**







## **Screenshots**









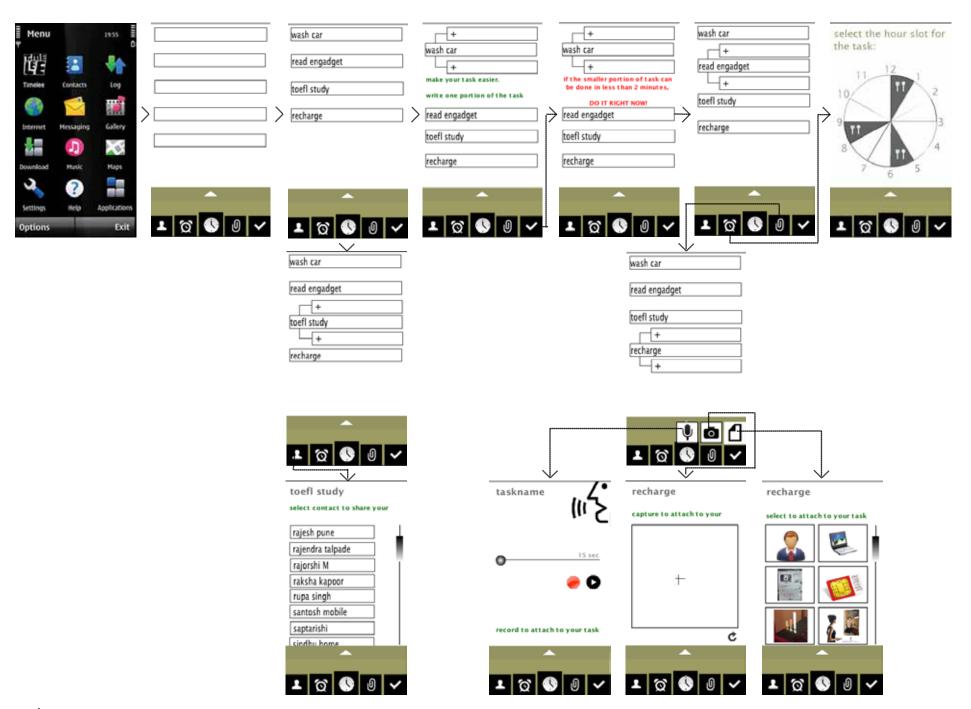


### 8.0 PROTOTYPE & TESTING

A prototype of Timelee has been tried out on Nokia Express Music 5800. My intention is to test the design solution which I am providing not to get exact quantitative data for each of the task for which a more robust level prototype is needed. My design solutions may require quite a few a iterations, capturing required changes for those iterations is primary intention of my testing. The prototype is tested in real life environment where the testing environment was not completely controlled like the one usability lab offers.







The goal behind TASK1 is for capturing their practical goals and task planning. TASK2 looks to see if users are able to understand the concept of related tasks. TASK3 aims at seeing if a reminder is completely obsolete in a person's daily life. TASK4 introduces the concept of task sharing and looks at seeing if the set task (containing an adoption from other tools like google calender) is compatible with a user's mental model. TASK 5 introduces the idea of attaching image to your task. A quick glance of an image will be enough for us to recollect than having to read words/text in say a to-do list.

The user testing was carried out with a prototype and a handout with instructions as follows:

Users: Pre-University (+1, +2) and University Students

#### Name:

#### Organisation/Occupation/Programme:

For entering the tasks, keep it short a maximum of three words just like how you write in the sticky notes.

#### **TASK 1:**

Please enter four tasks on your mind right now or the tasks you need to do for the day.

# Please press done button to move on the next task TASK 2:

Consider that you need to wash your car today. Select first task. If the text input box takes you into another screen, click on the tick mark to get back to this screen.

Please enter a prerequisite task that you need to do in order to get on with washing your car. Ex: finish drinking my tea, then I'll go wash my car.

Please enter a task that you can do having finished with washing your car. Ex: finish washing car, then I can go pickup mommy.

#### **TASK 3:**

Consider that you need to read engadget (a web magazine on technology) today. Select second task. If the text input box takes you into another screen, click on the tick mark to get back to this screen.

Please put an alarm/reminder to your task. Also keep an alarm in your phone(not the phone with the prototype). Call me back during the day to inform me that you got reminded of reading engadget by having set the alarm. You can send me an SMS as an alternative.

#### **TASK 4:**

Consider that you need to sit with your friend Rupa for preparing for toefl (group study task) today.

Select third task. If the text input box takes you into another screen, click on the tick mark to get back to this screen.

Please click on the contact button. In the next screen, select the contact to share this task. By adding the person, you are sending an update to their device/timelee as well.

#### **TASK 5:**

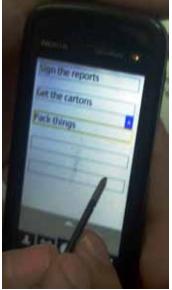
Consider that you need to recharge your phone today. Select fourth task. If the text input box takes you into another screen, click on the tick mark to get back to this screen.

Attach an image to help you remember your task.

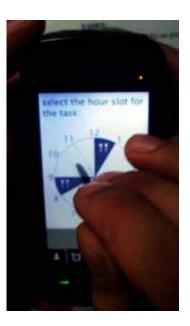
#### Comments/Feedback:

- 1.Please tell me a couple of positive and negative points about the application(features):
- 2.Please tell me a couple of positive and negative points about the interface in specific:









### USER 1 (Design Student)

### **Comments:**

#### Features:

- The positive signs (+) are not communicating to describe the task before & after.
- Touchscreen writing is not so comfortable for me.

#### Interface:

- Multiple clicking should be allowed to be shown in the clock.
- Sim image is easy to conect with the recharge task and is understood by all.
- The graphics of buttons can be incorporated with some text. It will reduce ambiguity as in the case of 'attach file button' and 'attach button'

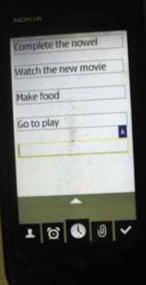
### **Testing Feedback:**

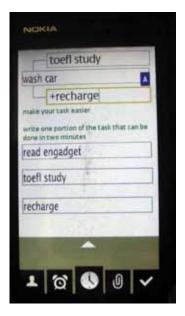
User did not comprehend the Task4 properly as he selected and attached the contact of a "Rajorshi M" in place of "Rupa Singh" as instructed in the handout.

This shows either that user recruited was in a hurry, the handout and instructions need to be tweaked for clarity, lucidity and may be need to be shortened in case the text has become too much in the whole procedure.

The tasks need to be refined for capturing the features of tagging images. As from user's feedback it can be seen that the logic behind is lost and the only data collected from this instance is that idea of adding an image is translated in the interface flow but the intent of it still is not coveyed by the inherent design of the feature.







### USER 2 (+2 pass Student)

#### **Comments:** Features:

- It is a function that might come up very handy if your phone is compatible
- It may help you save a lot of your time & manage your time

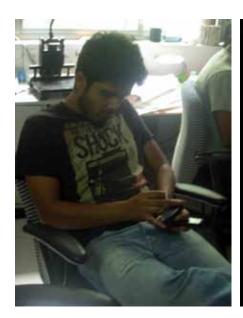
#### Interface:

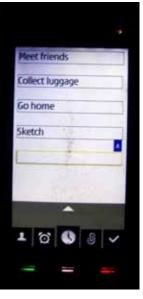
- If it works for both touch and non-touch phones, it might turn out to be a very handy thing
- Interface needs to be improved. It has to be made faster.

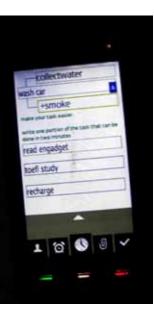
## **Testing Feedback:**

User did not comprehend the Task2 properly as he entered the given default tasks in lieu of the task mentioned.

This shows that the handout and instructions need to be tweaked for clarity, lucidity and may be need to be shortened in case the text has become too much in the whole procedure.







## USER 3 (Animator)

### **Comments:**

#### Features:

• I liked the reminder thing and would like to have such a feature on my phone (low end phone, reminder function absent in his handset).

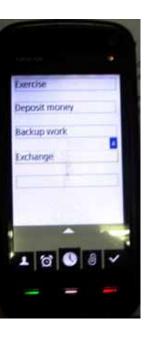
#### Interface:

• Interface was intuitive. I could figure out the relevant icons properly.

## **Testing Feedback:**

User mentioned he has never used reminder. He uses only the alarm function. He also added that such user testing nullifies the pupose of testing as the environment is controlled (the prototype function were limited and default tasks were used).







USER 4 (Design Student)

#### **Comments:** Features:

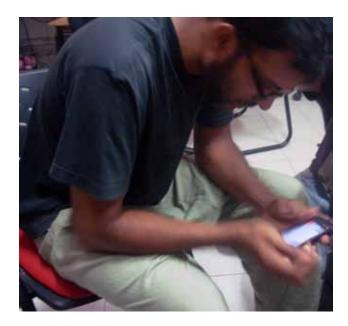
- I liked the idea of get a popping image in place of text (right into face) for remembering tasks.
- I did not understand why there were two slots for wash car task above and below.

#### Interface:

- Interface can be made more colourful
- The icons time and alarm needs to improved as I got confused between the two
- May be a different colour could be used for the above.

## **Testing Feedback:**

User did not comprehend the Task 2 properly as she couldnt figure out why there was a plus symbol on both above and below the 'Wash car' task. This shows that the system of showing connected task needs to be tweaked. And the newer solution needs further feedback from users.







## USER 5 (Design Student)

### **Comments:**

#### Features:

- I liked the clock feature. I want to be able to go into an hour upon selecting it. If i could zoom into it and then work with my tasks, there is nothing like it.
- I donot like touchscreen.

#### Interface:

- Done button should be green
- The whole interface can be built around the clock.
- For people who dont refer to exact hours, can sun be shown, etc.

## **Testing Feedback:**

User gave extensive feedback on how the clock feature is good for somebody like him because it give me my day's hours in visual format. He also adds that keeping reminder in the clock format is a good idea. He further asked if he can move tasks around and go into any of them, name a part of it, change its colour.





USER 6 (Engg Student)

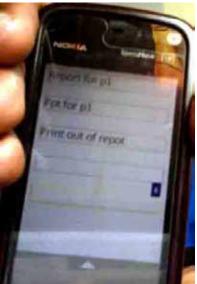
### **Comments:** Features:

- Interactivity and integrity of software is good.
- Phone user experience may ruin the experience
- The self actuating (sending an SMS to a person added on a task) is a nice feature.

### Interface:

- Simple, easy to understand.
- It is too plain and boring also. If it could have a better graphical look, I would like to use it then.
- The icons, buttons and options need to be labelled.







## USER 7 (Design Student)

#### **Comments:**

#### Features:

- Setting timer is visual and has slots for food breaks
- Many a times we do not follow a logic. In urgent situations, it doesnt have a RED mode when I want to just follow my intuitions.

#### Interface:

• Simple screens, not distracting

### 9.0 CONCLUSION

By initial testing of the product with university students shows us the a raw level of effectiveness of each of the feature intended and to resolve each of the above issues a hi-fidelity prototype should be made use of with a pc dock application as well.

The system aims at being present for them(students) on all surfaces of their daily digital platforms and reaches out to them with valuable information that they can use. Further, looking at gaps in PC like blocking applications at times, can be a very considerable reality check to chronic procrastinators. Time-tracking can be very useful by considering working with the system for a week and taking back a treasure of knowledge for yourself to break your previous patterns of ineffectiveness, etc.

Doing your planning work out of your head, out onto omnipresent media like mobile phone and PC (well, now onwards, we can go to extent of considering this) can be a positive move bringing the potential of technology and injecting it in the domain of personal productivity.

The feature of showcasing connected tasks graphically can be explored further to become the other strong leg of Timelee. Another addition that can be welcomed is dealing with the week when one is down in his productivity due to lack of motivation annul scenario like "I just don't know what to do now. Nothing seems to be working for me at this moment".

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