＊親愛的董，第六頁分隔線下面是我自己找的資料跟學的東西，就不用看～愛妳唷 ❤

Daily reminder- An everyday reminder for students who constantly forget to bring things

Students constantly forget to bring things such as textbook and daily necessities(wallet, glasses), which may cause the problem below:

1. Deduction(Forget to bring assignment/group work/extracurricular activities stuff)
2. Inefficiency - wasting time（ how much time）to go home and search things
3. Stereotype from others- disorganized/forgetful/ oblivious
4. Irritation - bad mood (Arguments, conflicts and nagging in the home)

Target Population: Students range from junior high school to college/university who use calendar app(google calendar) or schedule application(digital syllabus) （No broad population / narrow down ）

Competitive analysis(EXISTING SOLUTIONS): conducted a competitive analysis

reminder app-

1. Any.do: to do list app
2. Evernote: Evernote is more than just a note taking app and is also capable of serving up reminders if you need it to.
3. Google Allo-Google Allo is a messaging app. However, it also comes with Google Assistant. Google Assistant acts as a chat bot within the app. You can access it on its own or invoke it during any non-incognito chat. The chat bot can do virtually anything. All you have to do is ask Google Assistant to remind you to do something and then give it a time to do so. It will then message you like any of your friends would to remind you. It's strangely intuitive and you can have it remind you to do virtually anything.
4. Just Reminder- just reminder is an app that just does reminders. You simply open the app, add whatever you have to do, add the time and date, and then you're done. The app organizes your reminders by date. You can also have them repeat hourly, daily, monthly, or even by the minute.
5. Fantastical 2 combines your calendar and reminders into one easy to use and beautiful app. Can sync, auditory command.
6. Due has one main goal, to remind you when you need to be doing something.
7. Clear-Just keep hitting enter between items to create multiple tasks inside the same list.
8. Siri, Amazon Echo(Alexa, music streamer), Google Now

Automatic syncs your vehicle with Amazon Echo(auditory command to set reminder!)

Brain training app-

1. Peak: attention
2. **Fit Brains Trainer: focus, problem solving, memory**
3. **Cognito-** adaptability

https://www.theguardian.com/technology/2016/mar/23/brain-training-apps-five-of-the-best

Sharpen Memory:

Did you forget where you parked your car? Or do you lose your keys on a daily basis?

1.**My Personal Memory Trainer for Android**

2. Lu**mosity for iPhone**

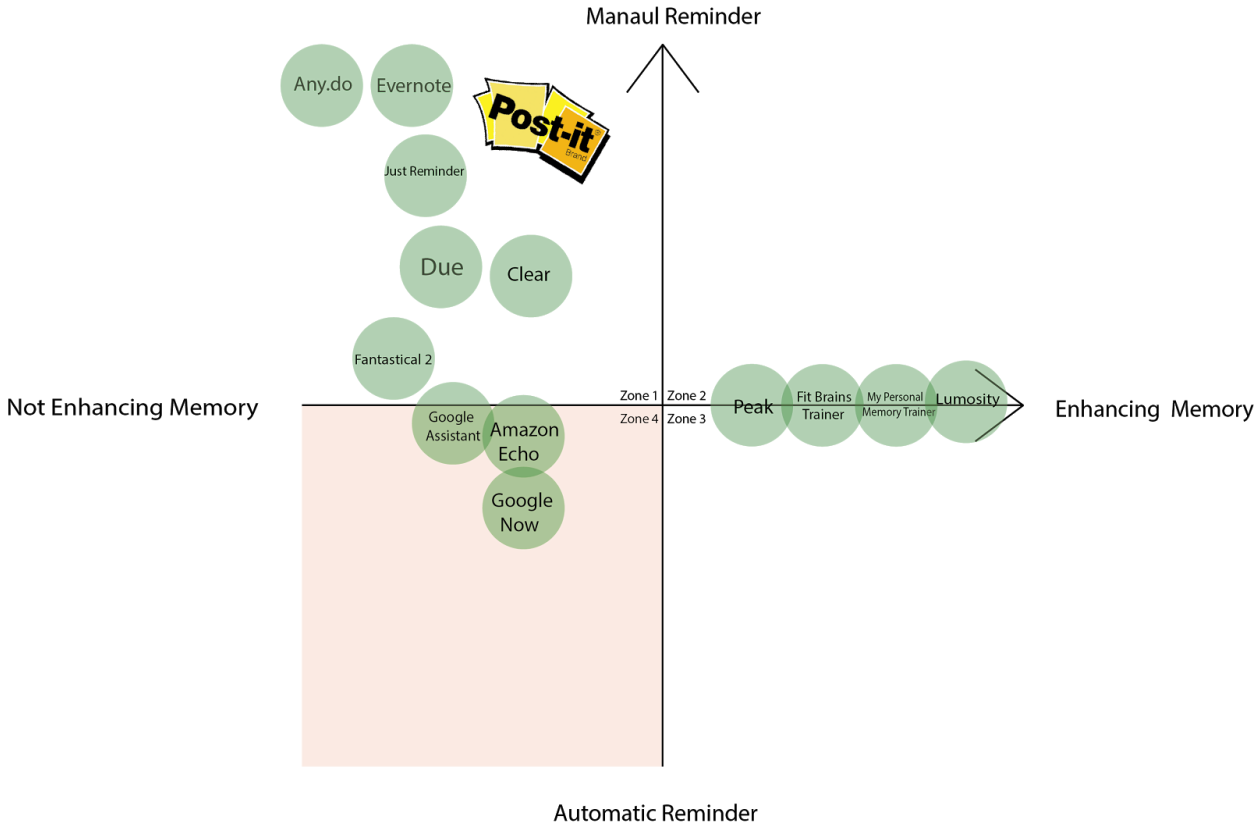
3. **Music Game for iPhone**

http://www.huffingtonpost.com/2013/11/06/best-apps-for-memory_n_4175170.html

Zen:

1. Personal zen: She suggests using the app right before a stressful event, but 10 minutes a day will help build more enduring positive effects.

2. **Brain Trainer Special**
3. **Happify**- Train your brain to be happier? Yep, research shows that some activities help build your ability to conquer negative thoughts, show gratitude, cope with stress, and empathize —



The two matrix(parameter) indicate the solution is either creating reminder or enhancing memory.

Zone 1 indicate the reminder apps and sticky note(Post-it) which have to be manually set up and won't enhance memory. And the memory enhancing apps locate in the middle of zone 2 and zone 3 reveals that setting up is not needed.
From the distribution on the diagram, I assume zone 4 which is marked pink is the most potential zone which could develop automatic reminder function similar as Google Now without considering enhancing memory.

Moreover, the other solution, enhancing memory, seems to be too complicated because memory development is a long term practice and students are reluctant to spend more time on enhancing memory due to their busy life. Therefore, develop techniques (daily reminder app) to assist students(sight, sound, touch(haptics), hearing, spatial location, and gestures)seems to be a more feasible way.

短期記憶(工作記憶)好不好/專注力提高：“The basis of this claim was a wealth of evidence that processing speed and the accuracy of performance are highly correlated across individuals.------->the focus of attention,they are less susceptible to proactive interference”

PRIMARY RESEARCH HIGHLIGHT(USERS)

What if the necessities is more than five things?
Usability

SECONDARY RESEARCH HIGHLIGHT: KEY FINDINGS

1. “Memory like a sieve?”

Bad short-term memory is chronic and has been deemed as an innocuous foible. Students are too busy to deliberate thoroughly and are not good at multitasking.
https://books.google.com.tw/books?id=nVQPAAAAQBAJ&pg=PT69&lpg=PT69&dq=don+norman+memory&source=bl&ots=eTm5T7P-Tp&sig=KU-meupwJrzzkq53u7IAl6QRID0&hl=zh-TW&sa=X&ved=0ahUKEwjH2Kuhm8fXAhVDUbwKHTueB1g4ChDoAQhjMAk#v=onepage&q=don%20norman%20memory&f=false

Don Norman indicated that short-term or working memory”retains the most recent experiences or material the is currently being thought about. Information is retained automatically and retrieved without effort; but the amount of information that can be retained this way is severely limited. Something like five to seven items is the limit of STM, with the number going to ten or twelve if the material is continually repeated, what psychologists call “rehearsing”. ”
.”..because the numbers written on the paper serve this function(knowledge in the world). But if distractions occur ……”
“The capacity of STM is surprisingly difficult to measure,because how much can be retained depends upon the familiarity of the material. Retention, moreover, seems to be of meaningful items and is affected by both time and the number of items. The number of items is more important than time, with each new item decreasing the likelihood of remembering all of the preceding items. The length or complexity of the item has little impact- simply the number of items. What are the design implications? Don’t count on much being retained in STM. could be mitigated(minimizes interference) by several techniques: sight, sound, touch(haptics), hearing, spatial location, and gestures.

According to the chapter of “What do estimates of working memory capacity tell us?”(https://books.google.com.tw/books?id=I4CtrmoyeOQC&pg=PA2&lpg=PA2&dq=don+norman+memory&source=bl&ots=hAWw9h3Rjj&sig=uMzOYTiDN6kWjiWpMTKpDOsB_ug&hl=zh-TW&sa=X&ved=0ahUKEwjH2Kuhm8fXAhVDUbwKHTueB1g4ChDoAQhIMAU#v=onepage&q&f=false),
“Working memory can be viewed as the collection of mental processes that preserve a limited amount of information in an especially accessible form, long enough for it to be of use in ongoing cognitive tasks. ”
“Premise 1: working memory is not just general processing efficiency.
The theoretical hypothesis is that individuals with a better working memory are able to reactivate information more quickly before it can decay from working memory, and therefore that the speed of processing may be the key factor distinguishing between people with better or poorer working memory.The basis of this claim was a wealth of evidence that processing speed and the accuracy of performance are highly correlated across individuals.”

"Finally, we have explored other means to draw inferences about the attentional demands of verbal working memory.We have relied upon proactive interference, the tendency for retrieval to suffer interference from previous, similar material. The logic is that, if the materials to be remembered are held within the focus of attention, they are less susceptible to proactive interference than if the materials to be remembered are held at least partly in some other portion of memory, where they can be confused with previous materials…….when the list was short enough to fit within the focus of attention most of the time(three and four items long), there was no effect of proactive interference. However, when the list was longer(six and eight items long), there was an effect of proactive interference, as shown in Table 3.11. The results suggest that three and often four items were held in the focus of attention." which is "that the core working-memory capacity limit is related to the scope of attention." "the portion of working memory that is based on the focus of attention is closely related to the conscious mind. We hope that explorations of this aspect of working memory will lead to a more satisfying understanding of the phenomenological aspect of cognitive psychology, a bridge between behavioral results and our personal understanding of ourselves as human beings."

Table 3.11 Response times for different proactive interference conditions and set sizes, after Cowan, Johnson and Saults (2005)

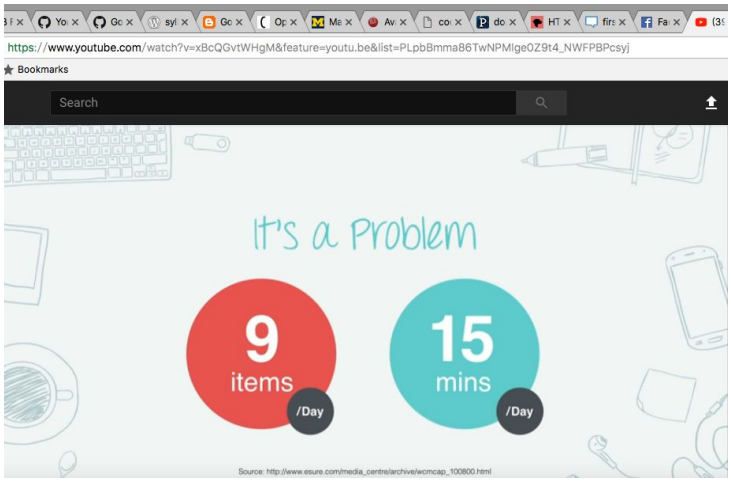
	Proactive interference condition (milliseconds)		
List length	**Low**	**High**	**Difference**
Three items	851	853	2, n.s.
Four items	906	923	17, n.s.
Six items	940	994	54*
Eight items	965	1058	93*

* $p < 0.05$, Tukey Test; n.s. = not significant

Donald Norman(p.141):預期性記憶：提醒，怎麼在適當的時候想起這件事？ 有東西提醒。沒有那麼重要。

http://www.sharritt.com/CISHCIExam/norman.html#3
Knowledge in the Head and in the World (Memory)

2. 剛起床的記憶:people tend to overlook
3. Donald Norman: Iteration(口訣) five items



By days

PAIN POINTS

USERFLOW

STORYBOARD

Usability testing

Low fidelity wireframe:

1. Digital syllabus: 學校平台的課表 --->是直接sync online syllabus還是google calendar?

Has not ubiquitous yet but some universities have already launched personal schedule application to sync with Google calendar. (see below link)
*http://blog.tomverhoeff.nl/tag/syllabus/
Launch of my timetable(university)- a real-time feed to Google Calendar, Outlook or mobile phone.

List 課程/時間/地點/課本textbook/體育課用品Extra curriculum activity stuff//考試時間/due date
*Population/percentage of students who use these.

2. What you need to bring every day

列出小圖例給使用者點選。(manually select/ high impact items first then low impact items)
Data(smart search) program用戶(男女生)最需要帶什麼東西/ 每天大概帶幾樣東西
(男女生/先資料庫預測，再機器學習)

High impact items(necessary) (input) 小圖例（另外增加 I still need...）
Pencil box / Wallet /Key / cell phone /Glasses/ personal pill/ umbrella

Low impact items(optional)
Water bottle / Sanitary pad / Eye drop / Lip balm /Makeup bag /Cell phone cable /Earphone/

3. Sync with apps (hope to function as google NOW)

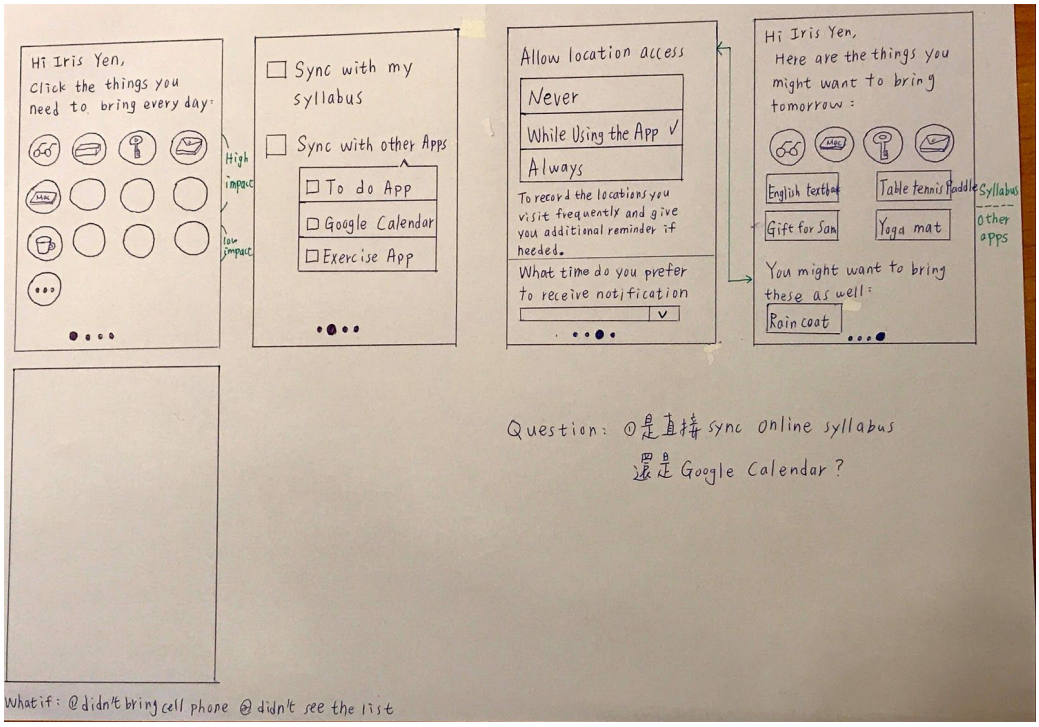
Calendar: google calendar, icloud calendar, microsoft calendar(birthday)
To do app(exercise:yoga mat) -->machine learning
Population/percentage of students who use these. Event/birthday/meeting things to bring.
--->You might want to bring this/ No need

http://appcrawlr.com/ios-apps/best-apps-sync-with-reminders
Apps that sync with reminders, icloud, google calendar, manage events and tasks

4. Geolocation:

google maps(分析行為) ---> iOS reminders(remind me at a location)--->加強machine learning(一台可以上網、可以定位地點、可以偵測我們體感活動的裝置，其實可以用來分析我們的行動，並當下「提供最好的建議」)
＊太久沒去學校-->提醒！ / 常去哪些地方

----> What if still forget to bring stuffs. Morning didn't bring , afternoon remind（回家後Notification: u wanna put it to the bag/ priority change)---> audio/image notificaiton



Could there be more?

1. 過度依賴（不做長久記憶、關鍵字、左腦比右腦發達）
2. 反而記性變好了？對人的記性有益？

---

digital syllabus 課表

*http://blog.tomverhoeff.nl/tag/syllabus/

Launch of my timetable(university)- a real-time feed to Google Calendar, Outlook or mobile phone.
http://www.scientia.com/

*https://students.googleblog.com/2010/09/student-tip-use-google-docs-and.html

Use Google Docs and Calendar to Import Class Syllabi

*https://support.nmbu.no/study-systems/sync-syllabus-from-timeedit-to-your-own-calendar/

https://shift.newco.co/sync-your-calendars-using-microsoft-flow-and-yes-google-calendar-works-too-a28be5a604dd

https://calendarsyncplus.codeplex.com/

1.
http://www.techlearning.com/news/0002/defining-digital-curriculum/62269
Defining digital curriculum 課程
How do you define the phrase digital curriculum?
"To me, it is any digital media that teachers and students use for learning. We have brand new textbooks that have digital components, as well as a variety of other digital media that we are aggregating into one system for everyone to access. Students and teachers will be able to use this system, along with Google Apps for Education, to share and access materials and student work."
— David Andrade, CIO, Bridgeport Public Schools, CT

***How to transition from a print to digital curriculum**
https://edtechmagazine.com/k12/article/2013/07/how-transition-print-digital-curriculum

"Electronic textbooks can help students access learning materials anytime, anywhere. It helps them better understand content," says Evan Abbey, project manager for online learning for Iowa Area Education Agencies, which provides professional development for teachers statewide. "But you must also change the way they learn — from being consumers of information to being producers of knowledge."
2.
https://developer.apple.com/education/
Building apps for education
Learn how to use the latest features on Apple platforms to build and optimize your apps for the classroom.
3. teach students the elements of app design using Swift, a popular programming language used worldwide. Students will learn to code and design fully functional apps, which Apple officials say will help them gain critical job skills in software development and information technology.

Google Now(太常跳出通知？):your personal assistant looks out for the information, recalls your related queries, or send a command to other resources (like phone apps) to collect info.Google Now 基本上不需要設定，因為 Google 會自動根據你的行動、你的習慣、你的郵件內容、你的搜尋結果等等各種個人資料，而產生主動、自動的服務，產生真正屬於你個人的專屬內容。Google Now會基於使用者過往的的搜尋習慣來預測其所可能需要的資訊。
http://www.playpcesor.com/2015/04/google-now-23.html

Compare with Siri, Alexa, Google Now

ML:Machine learning is an important part of these personal assistants as they collect and refine the information on the basis of your previous involvement with them. Later, this set of data is utilized to render results that are tailored to your preferences.
Every time you execute a search, the algorithms at the backend keep a watch at how you respond to the results.
Paypal is using ML for protection against money laundering. distinguish between legitimate or illegitimate transactions taking place between the buyers and sellers.
https://becominghuman.ai/9-applications-of-machine-learning-from-day-to-day-life-112a47a429d0

ML:Neural networks and deep learning are two success stories in modern artificial intelligence. They've led to major advances in image recognition, automatic text generation, and even in self-driving cars.
https://elitedatascience.com/machine-learning-projects-for-beginners#gladiator

ML
https://theuxblog.com/blog/machine-learning-ux

The future of User experience will be driven by data. Data certainly has the ability to make human lives better by crafting meaningful interactions through predictive systems.

ML
http://hciresearch4.hcii.cs.cmu.edu/M-HCI/2016/AmericanEagle/stylebot.html#step4
Using machine learning algorithm, the system will know the user's preference over time and adapt the outfits to user's preference.

User Scenario

1. Before leaving home, confirm with the sensor. Then go get the stuffs that forgot to pack in the backpack.
2. The APP would automatically pop up (setup)a list with things to bring for today before leaving home to school/at midnight.
3. Forgot to bring my umbrella again! Annoying.

IoT(Smart Home)

Screen(Low fidelity wireframes)
1.User setup
2. Pop up
3. 核對

Reference:

Google serves up information before you even know you need it. So what can Google Now do for you? The list is ever-expanding.

*de-clutter their life with...

we analyzed our problem space research to prioritize features for this tool:

if only because a positive mood quickly dismisses as trivial and irrelevant minor difficulties that can trigger a state of irritability when in a negative mood.

https://www.jnd.org/dn.mss/positive_computing_.html

Lots of psychological research supports the observation that we remember best and weigh most highly the ending of an experience. (Next highest is the start - of least importance is the middle.) End well, and in one's memory, the total experience was great. Difficulties are often unavoidable in the performance of complex tasks, but design for fun and pleasure with a positive and uplifting ending and all will be forgiven. Memory triumphs reality. After all, an experience exists only at its moment of occurrence: the memory of the experience lives on long afterwards. Design for the memory. Positive computing? It is about time.

Insightful and whimsical, profoundly intelligent and easily accessible, Don Norman has been exploring the design of our world for decades

Don Norman video: try to make technology work well with people. I am a cognitive designer, try to understand human cognition and apply that to make technology, services, system better for the people who are involved. For the benefit for people.

https://www.nngroup.com/articles/voice-first/

Echo Show (蘋果的Siri)

But the design challenges of integrating two very different interaction modes have thus far prevented any single system from fully realizing the benefits of both voice and screen.

Too often, the voice agent can initiate only the first step of a task, and any subsequent steps require the user to shift to a touch interaction style.

Siri will execute a web-search query or open the Apple News application in response to a voice command,

voice-recognition accuracy / increases users' cognitive load and frustration

Alexa currently has a library of over 15,000 skills, many of which can only be accessed by speaking the name of the skill. Even if users only have a few dozen skills installed, how can they be expected to remember the exact name of every skill they've installed?

And with the looming complexity of holistic, intelligent voice and screen interfaces, UX designers need all the tools they can get.

https://www.smashingmagazine.com/2016/08/user-memory-design-how-to-design-for-experiences-that-last/

People such as Don Norman and Aarron Walter have been writing about the elements of emotional design for years now. Emotional design is all about going beyond utility and usability to create moments that

stand out and get remembered. When used well, elements of emotional design help make experiences stick.One of the many emotional design techniques — and my personal favorite — is to create moments of surprise by letting users make their own discoveries in a UI.

https://www.goodreads.com/work/quotes/18518-the-psychology-of-everyday-things
"The vicious cycle starts: if you fail at something, you think it is your fault. Therefore you think you can't do that task. As a result, next time you have to do the task, you believe you can't, so you don't even try. The result is that you can't, just as you thought. You're trapped in a self-fulfilling prophecy."
— **Don Norman**, **The Design of Everyday Things**
"Good design is actually a lot harder to notice than poor design, in part because good designs fit our needs so well that the design is invisible, serving us without drawing attention to itself. Bad design, on the other hand, screams out its inadequacies, making itself very noticeable."
— **Donald A. Norman**, **The Design of Everyday Things**

Processing practice

drop/bassline(low pitched/synthesizer)
waveform(wireframe soundwave texture pack)

file:///Users/Zoe/Documents/Processing/libraries/minim/documentation/index_analysis.html
if the brain detects a *brutal variation in sound energy*. the beats are big variations of sound energy.BeatDetect has two modes: sound energy tracking and frequency energy tracking.

http://hciresearch4.hcii.cs.cmu.edu/M-HCI/2016/Bloomberg/design.html
sonify:Audio representation of line graphs through computer generated pitch / allowed users to interact with an audio graph via touch on a **computer trackpad**

低音次數，連到thingspeak，統計重音次數(processing加上counter)。未來：偵測到過多重音次數，volume down。How to Prevent Hearing Loss From Noise. 分析一個人常聽怎樣的歌（每天記錄），分析 volume(not loudness)!

軟體多工處理 multithread(processing同時有圖像顯示跟計算拍數，還要上傳thingspeak網路)
*Google 以圖搜尋

Arduino:
iOS- controlled arduino waveform generator

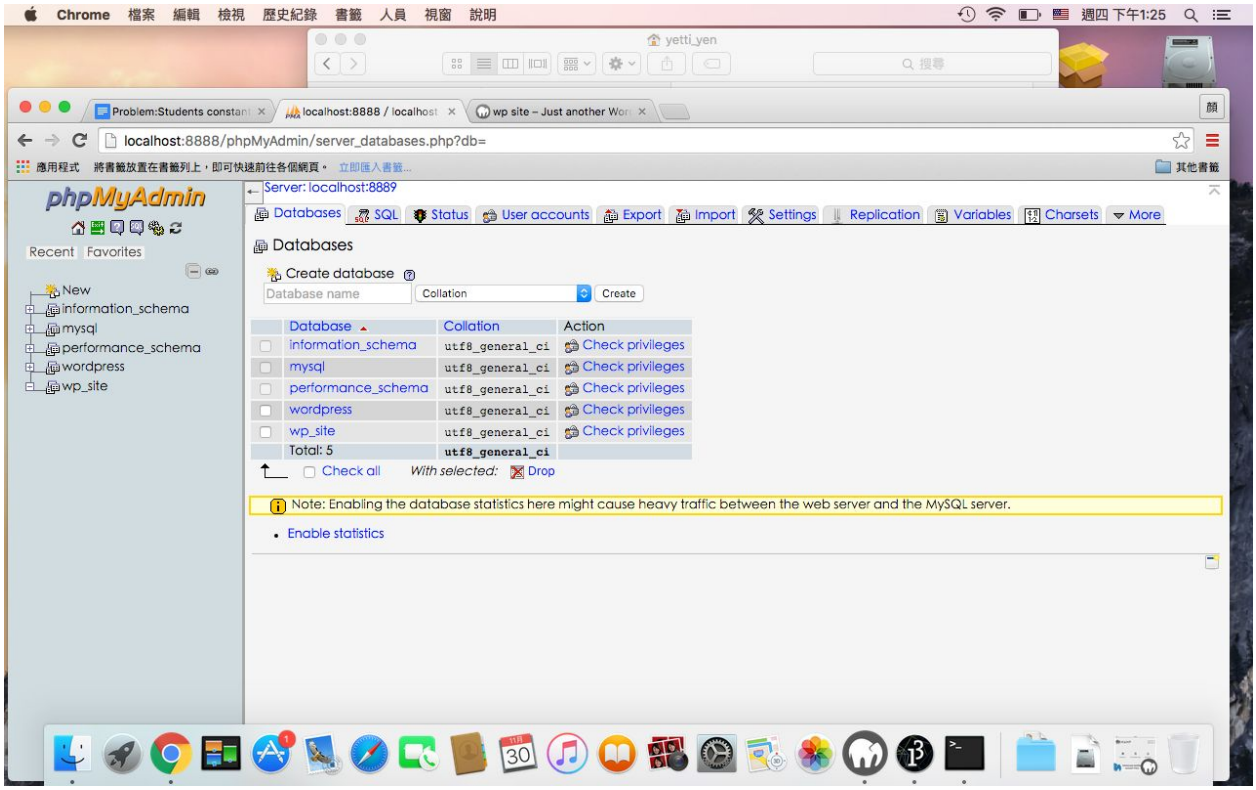
1. Volume down/up
2. LED light

Arduino Smart Home Automation
https://www.youtube.com/watch?v=1TF1s9ziu-I

Portfolio webpage reference:
http://www.domusacademy.com/en/category/news/
http://www.gungkaikoo.com/

11/25
MAMP（已經有SQL資料庫） 1. application--- htdocs---ＨＴＭＬ/wordpress (php/html語碼/MySQL資料庫)放進去(phpadmin--wordpress) 2. Yetti_yen---**網頁**---wordpress(phpadmin---wp_site)

--->phpmyadmin(建wordpress)



MAMP start server!

http://localhost/
http://localhost:8888
http://localhost:8888/wordpress/wp-admin/
(localhost 是我們自己電腦的虛擬網域，主要是做測試用的，是無法對開放的。所以我們必須增加一組新的 Host，才能讓網路上的朋友連接上我們架設的網頁。)

Username: irisyen
Password: admin

重置： command + R

localhost:8888/wordpress/wp-admin/ 進入dashboard頁面
plugins --add new (搜尋simply static網頁匯出)，搜尋elementor page builder/ heafer footer elementor（到plugin按啟動）-----到pages “add new”---右側 template 選elemantor canvas

“No parent”

Page 放作品
Post 活動 實驗 blog

Edit image box----style/
content ---link-------

也可裝google 分析～～

(網頁匯出！)網站完成後 simply static---- setting----save for offline use-- 下方 generate---generate static file(多國語言) ---- click here to download---解壓縮 -----index.html看一下
到document- github-把simply static摳過來----githubdesktop--- commit push -----> irisyen.github.io

https://irisyen.github.io/

- Disable comments! Plugin!
- Image optimizer! smush

Syphon
processing ---example(syphon)---sendscreen 貼一貼
Davinci resolve

Recommendation letter:

Sales specialist in charge of Polish market in Transcend Information. Inc.(a leading global brand of digital storage, multimedia and industrial products/ computer peripheral devices) for about two years.

- Plan marketing activities(online/in-shop branding)

Earned the highest score on a business plan regarding eyeliners with 7 members as group leader.

- Eager to try new things
- Leadership
- Presentation skills
- Although no working experience before

Uni:
University of Michigan
https://www.si.umich.edu/content/msi

IOWA state university
https://www.grad-college.iastate.edu/academics/programs/apresults.php?id=60

http://www.unimelb.edu.au/
墨爾本大學

財務報表　進銷存　ＥＲＰ(Enterprise Resource Planning/世界500強企業中有8O%的企業都在用ERP軟體作為其決策的工具和管理日常工作流程/ 企業資源規劃)　ＣＲＭ(data mining)
big data (local / cloud)
Corresa udemy

目標的公司！！！！！！microsoft 亞洲project! China project~~
想好的事情

punch card(寫得再手key)
honey well mini computer
http://www.theoengel.nl/

12/14
datamining
http://www.stat.ncku.edu.tw/faculty_private/sljeng/Datamining/predict.htm
建立模型的目的是讓我們對這個資料庫的正常狀況有所了解，如果我們知道何謂常態，便可馬上知道何謂異常 。例如要如何才能防止信用卡的盜刷，就是資料採礦的主要應用之一，也是這個思想下的產物。

Numbers檔案 拖到手機，打開後跳出訊息問要不要備份到numbers