

# Lighten Your Load with Learning Methods

Take care of your brain - build sustainable habits



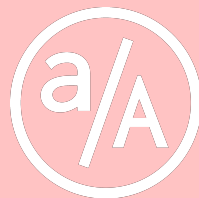
# Agenda

1. How to study
  - a. Spaced Repetition
  - b. Consistency
  - c. Understanding what works for you
2. Study Methods
  - a. Leitner
  - b. Pomodoro
3. Taking Care of Yourself
  - a. Sleep
  - b. Stress
4. Resources at a/A



# A brief aside...

What is “spaced repetition?”

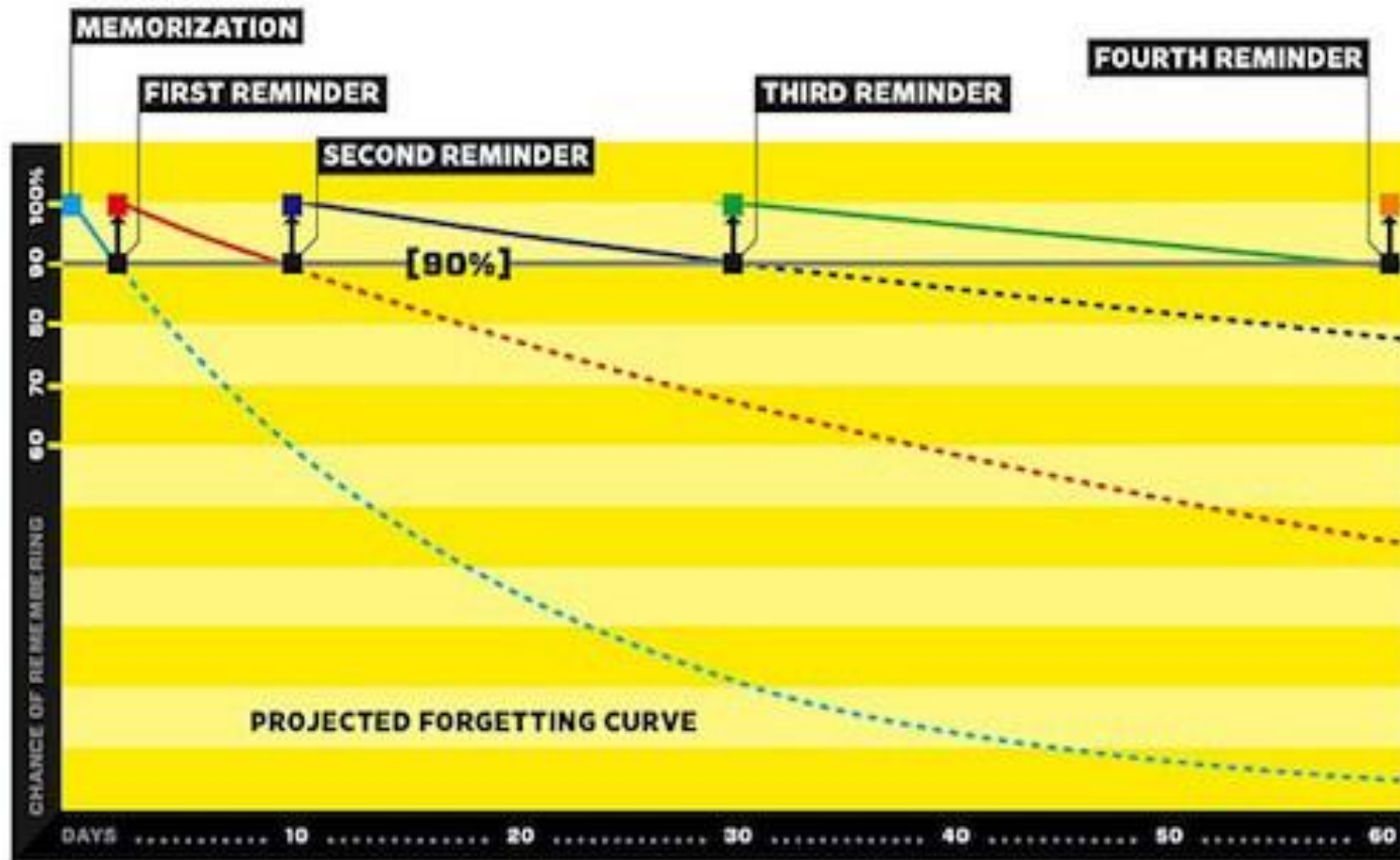


# Spaced Repetition

Tackling the problem of forgetting.

- Spaced repetition is about **RETAINING WHAT YOU'VE LEARNED.**
- Research shows that the best time to relearn something is **just before you are about to forget it.**

In essence: memory maintenance.



Credit: <https://medium.com/@jessewhelan/using-the-leitner-system-to-improve-your-study-d5edafae7f0>

# 13%

vs.

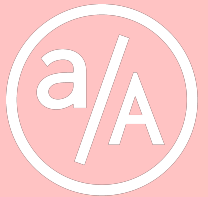
The average amount of information lost after 2 days after studying using spaced repetition via periodic testing/quizzing.\*

# 50%

The average amount of information lost in just 2 days after “cramming” or using classic recitation/review methods of studying.\*



So... Why is consistency  
important?

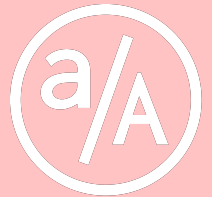


# Consistency

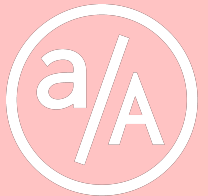
- Having a routine can help your mind get into the study space faster
- Ensures that you are learning a little bit frequently (no last minute cramming)
- Helps keep other positive habits (sleep, nutrition, etc.)
- Helps to organize study groups



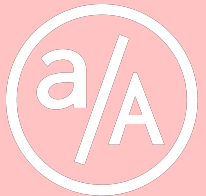
Are you a night person or  
a morning person?



Do you like to study alone  
or with others?



Do you like to listen to  
music when you study?  
Or study in silence?

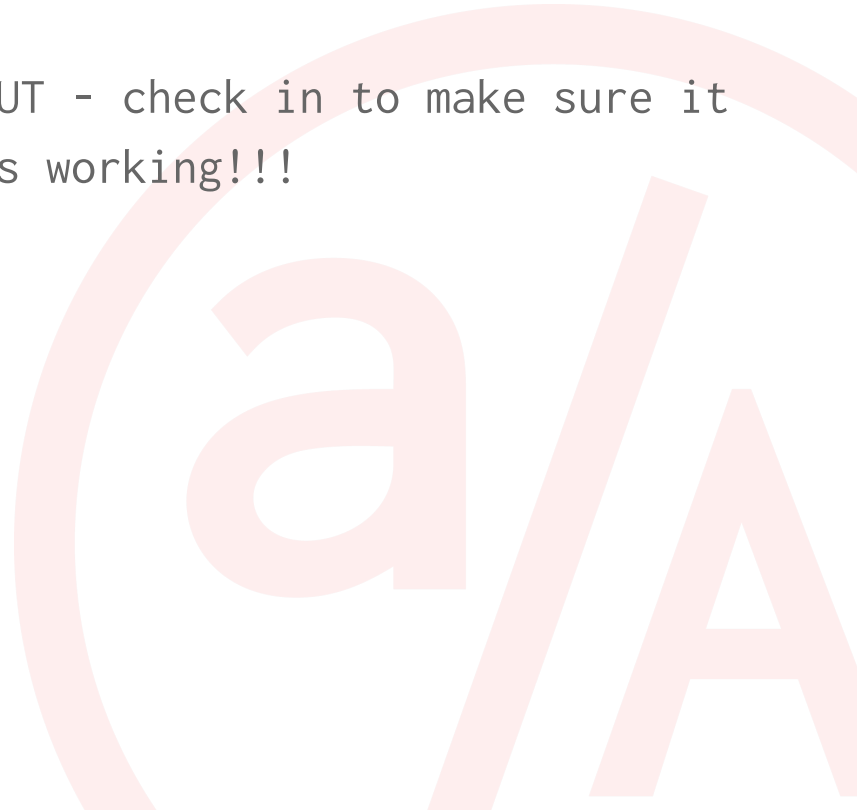


# Understand what works for you:

Set yourself up for success...

- When should you study?
- Where should you study?
- Do you need accountability?

BUT - check in to make sure it is working!!!



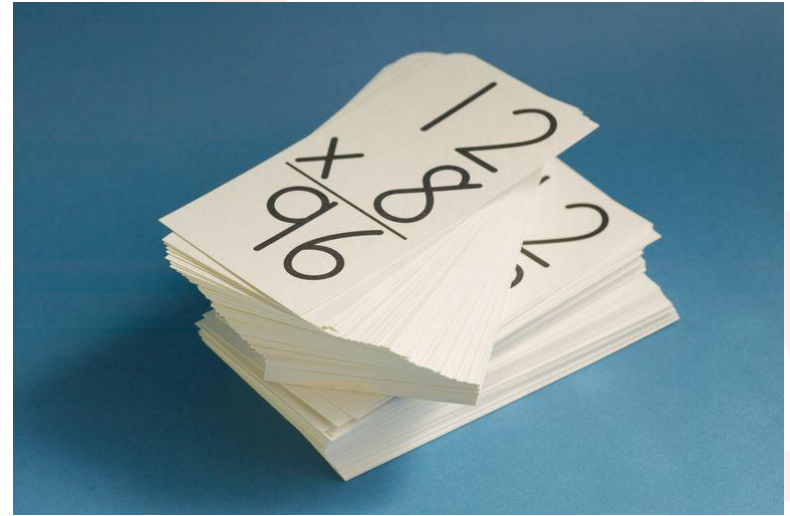
# Ways to Study



# What is the Leitner Method?

“The Leitner system is a widely used method of efficiently using flashcards that was proposed by the German science journalist Sebastian Leitner in the 1970s. It is a simple implementation of the principle of spaced repetition, where cards are reviewed at increasing intervals.” - [Wikipedia](#)

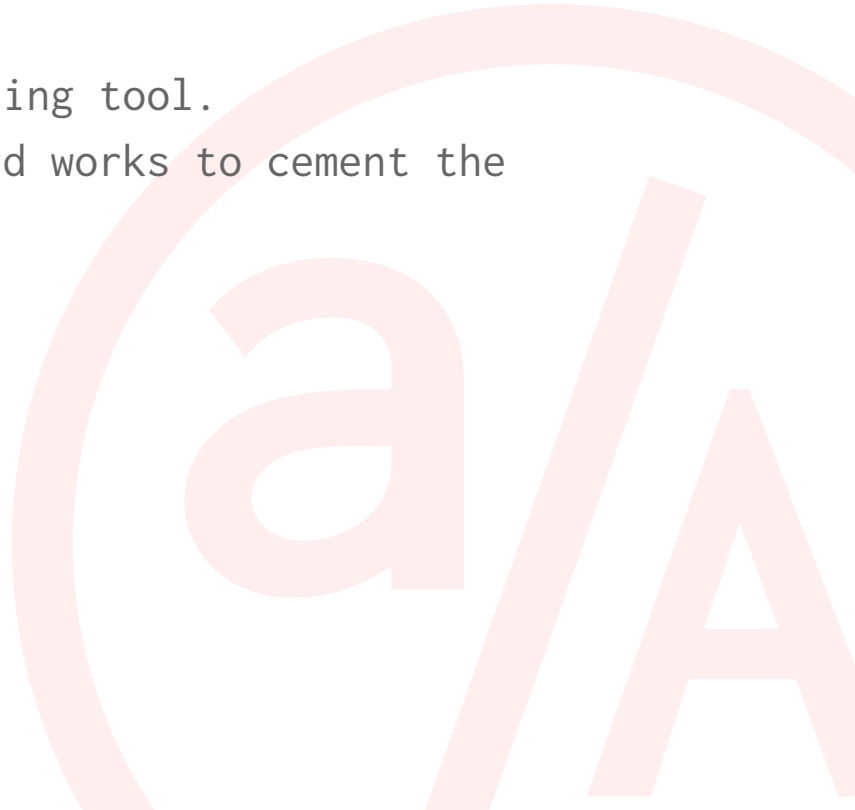
tl;dr: flashcards with piles!



# Flashcards

- They are a periodic, low stakes, testing tool.
- Simply the act of making the flashcard works to cement the content in your mind.

But wait a minute...



“I’m studying to code! How do you even make flashcards for software development????”

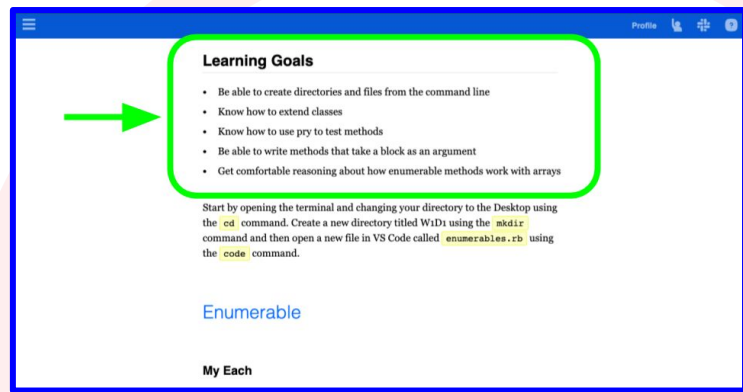


Thank you for your likeness, Jackie Chan



# Ⓐ Curriculum => Flashcards

- Methods and Algorithms
- Curriculum: Ask yourself
  - What are the terms?
  - What are the concrete concepts?
  - What isn't 100% clear to me?
- Don't be afraid to break a large concept up into (many) smaller parts



# ⓐ Curriculum => Flashcards

What other things do you think we can turn into flashcards, or, if you prefer, periodic self-quizzes?



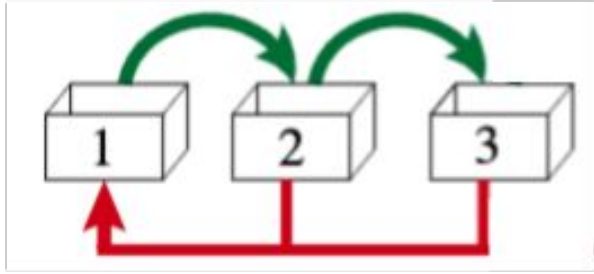
- Error messages that we encounter
- Questions that we ask TAs
- Concepts that we cover in lecture
- Questions the TAs ask the class in lecture
- Questions other people ask in lecture (since chances are you had the same question)
- Your understanding of core concepts: for example a method vs that method's receiver. What is the difference?

# The Actual System

Leitner piles to practice perfection.



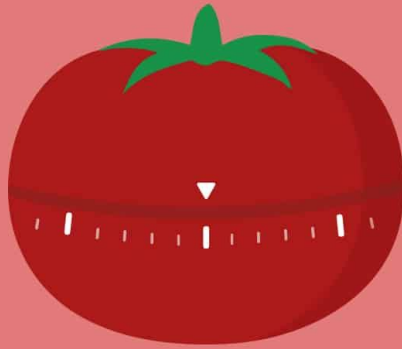
- **DON'T GO THROUGH THE DECK OVER AND OVER AGAIN!**
- Use piles that represent the amount of time you should wait before going over the cards again.



- **Pile 1:**
  - Every card starts here
  - Go over every time
  - If you get a card right it moves to Pile 2
- **Pile 2:**
  - This pile will be reviewed every other time you go through your flashcards (half as often as Pile 1)
  - If you get a card right it moves to pile 3.
  - If you get it wrong it moves back to pile 1
- **Pile 3:**
  - Go over once at the end of every day, or every other day
  - If you get a card wrong, it goes back to pile 1
  - If you get a card right, it stays in Pile 3

# A day in the use of Leitner for

- Typical course day:
  - Go through Pile 1 in the morning
  - Add new cards to pile 1 from lecture/study hall
  - Go Through Pile 1 and Pile 2 at the midpoint of the day (lunch, afternoon break)
  - Go through Pile 1 Immediately after class
  - Go through Pile 1, 2 and 3 before you stop studying for the day
  - This might seem like a lot, but this should not take you more than 10 min per review session.
- Weekend
  - Go Through Pile 1 first thing
  - Take a practice assessment
  - Do your 30 min of studying post assessment
  - Go through pile 1 and pile 2
  - Take the buggy practice assessment
  - Do your 30 min of studying post assessment
  - Go through pile 1
  - Repeat



# The Pomodoro Method

# THE POMODORO TECHNIQUE<sup>®</sup>

A SIMPLE METHOD TO BALANCE FOCUS WITH DELIBERATE BREAKS

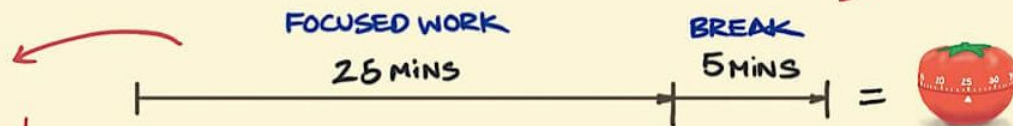


- 1 PLAN YOUR TASKS  
How many pomodoros might you need?

- 2 DO 1 POMODORO  
Time for 25 mins then take a 5 min break

NO SNEAKY  
WORKING!

PROTECT  
YOUR POMODORO!



- 3 REPEAT x 4 POMODOROS  
Then take a longer break



# Takeaways

- Spaced repetition helps us retain what we learn. No more forgetting!
- Spaced repetition can be practiced with periodic, low-stakes, quizzing, like flash cards.
- Scheduling your time will help you be more productive and motivated
- No matter what method: don't let yourself forget! Use the nightly quizzes, flashcards, any periodic self testing tool you can use to help retain all the information you're learning.



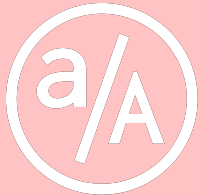


# Resources for Studying!

- [Pomodoro Chrome Extension](#)
  - There are many!!
- [Forest App Chrome Extension](#)
- [StayFocused Chrome Extension](#)
- [Quizlet](#) and [Other Flashcard Apps](#)
- Google Slides
- [How to Study Resources](#)

Now that we know some ways  
to study....

...your wellness is critical to your  
success!



# What is Wellness?





# Sleep!

Sleep is critical to...

- Resiliency
- Memory
- Focus
- Positive Outlook



# Get good sleep

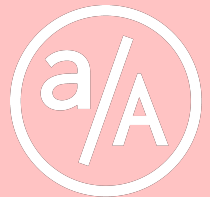
- Watch caffeine intake later in the day
- Turn off technology 30 min before bed
- Try to stick to a sleep schedule or evening routine

"alright, i'm gonna try to go to sleep by 10:00pm"

\*me at 3am\*



Your brain needs rest and  
fuel!



# Dealing with stress

- ❖ Stress is a normal part of life.
- ❖ Sometimes we can change our situation or resolve the stressful problem.
  - If so, do it.
- ❖ Often, we cannot change the situation or control what other people do.
- ❖ Stress management is about learning how to cope with things that we cannot control.





# Dealing with Stress

Stress is a response your body's sophisticated systems to enable human survival.

Most actual threats in modern life are psychological, not physical... How often are you chased by a saber toothed tiger?

Some amounts of stress are good and can actually improve performance. But, persistent and chronic stress can result in a breakdown of your physical and/or mental health if not managed properly.

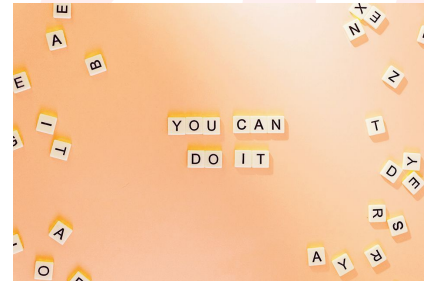


# Managing Stress

Some effective stress management techniques *in the moment* include:

1. Evaluate your situation as objectively as possible
2. Once you've done all you can to change or improve the situation, focus on letting go of what you cannot control and accepting what is so
3. Be mindful of your attitude:
  - a. Ask "Is there another way to see this?"
  - b. Optimism beats out Pessimism over time
  - c. If you can't change your perspective, focus on acceptance without the emotional attachment
  - d. Facts are often indisputable, emotional reactions are always impermanent

4. Breathe - slowly inhale for 6 seconds; exhale for 6 seconds
5. Engage your imagination - escape to your "happy place" or imagine a more positive outcome
6. Move - walk or move your body
7. Give a loved one a hug
8. Ask for help or talk with someone even if it's about a different topic





**TAKE CARE OF  
YOURSELF**

# Resources for Wellness!

- [Spaceship You Video](#)
- [Headspace](#) and [Other Meditation Apps](#)
- Some [At Home Workouts](#)
- [Easy Dinner Recipes](#)
- [Foods for Better Brain Power](#)
- [Technology and Sleep](#)
- [Managing Stress](#)

# Activity!

Build out your ideal schedule

Take 15 min:

- Look at your notes about how, when, and where you like to study
- Think about what aspects of your life are important to your wellness
- Create a schedule for a full week (Monday-Sunday) including
  - Class time
  - Homework and study time
  - Sleep
  - Time for yourself or your responsibilities

# Resources at a/A

## Technical!

- Your instructors
- Your peers
- Your coaches (in the job search)
- Google
- Curriculum

- If something is impacting your work, let your instructors know
- Student Resource Groups
- Your peers

# Go forth and learn!

You deserve to be here. We cannot wait  
to see what you accomplish.

