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
- Taking Care of Yourself
 - a. Sleep
 - b. Stress
- 1. Resources at a/A

A brief aside...

What is "spaced repetition?"

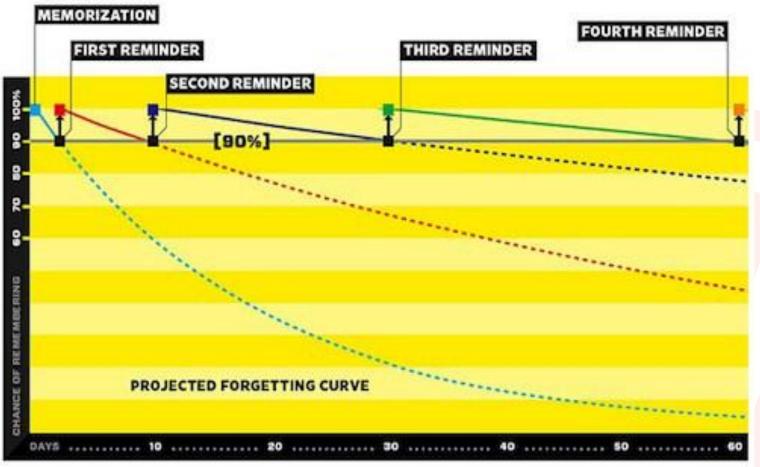


Spaced Repetition

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.



13%

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

VS.

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...

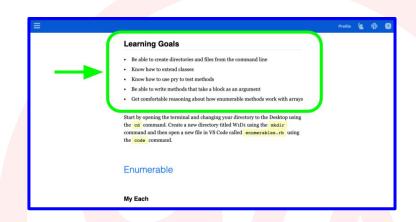
"I'm studying to code! How do you even make flashcards for software development????"



Thank you for your likeness, Jackie Chan

Curriculum => Flashcards

- Methods and Algorithms
- Curriculum: Ask yourself
 - What are the terms?
 - What are the concrete concepts?
 - O 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?

Week 3 SQL & Rails

Days 1-3

JavaScript: Intro

Expression vs Statement

An expression is a line of code that returns a value.

A statement is any line of code.

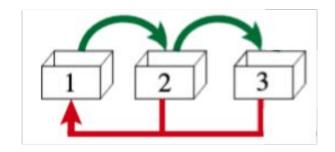
(Every expression needs a semi-colon at the end. Others don't generally require semi-colons.)

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 move 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

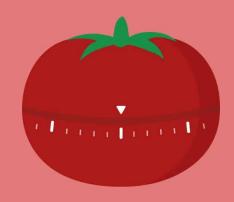
A day in the use of Leitner for



- Typical course day:
 - O 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
- O 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®

A SIMPLE METHOD TO BALANCE FOCUS WITH DELIBERATE BREAKS



- 1 PLAN YOUR TASKS
 How many pomodoros mightyou need?
- 2 DO 1 POMODORO

Time for 25 mins then take a 5 min break

PROTECT
YOUR POMODORO!

FOCUSED WORK

25 Mins



NO SNEAKY

WORKING!

3 REPEAT X 4 POMODOROS
Then take a longer break









LONG

BREAK 5 Mins

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 learning.

Resources for Studying!

- <u>Pomodoro Chrome Extension</u>
 - There are many!!
- <u>Forest App Chrome</u>

 <u>Extension</u>
- <u>StayFocused Chrome</u> <u>Extension</u>
- Quizlet and OtherFlashcard 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?









WELLNESS







Sleep!

Sleep is critical to...

- Resiliency
- Memory
- Focus
- Positive Outlook



Get good sleep

- Watch caffeine intake
 later in the day
- Turn off technology 30min 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



Hehehehe that's funny 2



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:

- Evaluate your situation as objectively as possible
- 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





Resources for Wellness!

- Spaceship You Video
- Headspace and OtherMeditation Apps
- Some <u>At Home Workouts</u>
- 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.

