

How To Remember Everything You Learn in QA Automation

Remember Longer and Waste Less Time

bit.ly/remember-qa-all

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Tonight's Goal

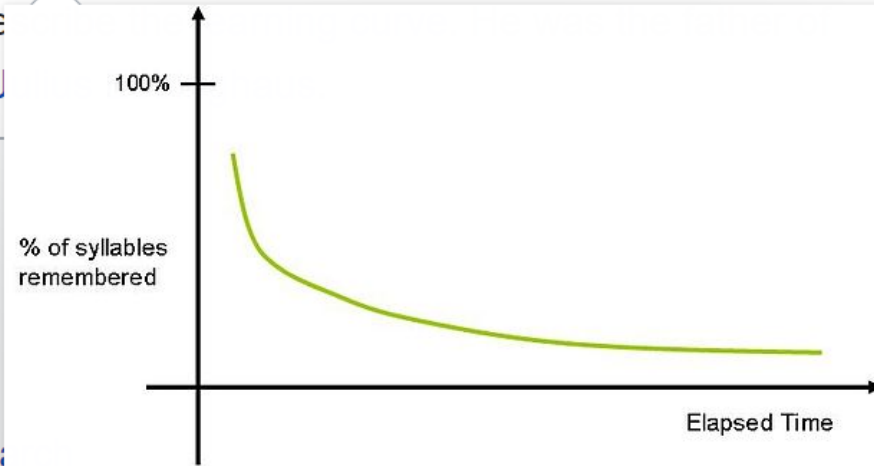
- Help you think about your education more strategically

Hermann Ebbinghaus

Hermann Ebbinghaus (January 24, 1850 – February 26, 1909) was a German psychologist who pioneered the experimental study of memory, and is known for his discovery of the forgetting curve and the spacing effect. He was also the first person to develop the neo-Kantian philosophy.

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The **forgetting curve** hypothesizes the decline of memory retention in time. This curve shows how information is lost over time when there is no attempt to retain it. A related concept is the **strength of memory** that refers to the durability that memory traces in the brain. The stronger the memory, the

Hermann Ebbinghaus



Hermann Ebbinghaus

January 24, 1850

born



Jeffrey Shek

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Chasing 10X: How Anki Saved My Software Career

I was burned out and my software career was stalling just three years in. My memory sucked. Was my poor memory from stress, lack of sleep or was it always this bad? Work was a cycle of "TODAY IS THE DAY I CHANGE" and end in a self-loathing dopamine-addicted HackerNews, Reddit and Medium. I was a failure.

Advice I Needed But Ignored #213: Don't tie your self-worth to your work.

I wanted to be a good, hell, great software engineer. But my work was mediocre. Even worse, I was trying. My ass was in that chair twelve hours a day, six days a week trying to write beautiful Python code. I was constantly looking up documentation and sucked into the internet's rabbit-hole of distractions. I was a try-hard failure.

And then there was Kyle. Kyle and I had started programming from scratch; we were both learning on the job. Three years later, our progress was nothing alike.

Pros

- Retaining information
- Removing Cognitive Load
- Making you more productive
- Increasing confidence

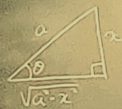
Cons

- Not as effective for learning topics, more for recall
- It takes more effort in the beginning
- It is counterintuitive

Polling Time

How many of you have re-read text before?

Test #1: Wed 3rd 544-7.3



$$\text{thus } \cos \theta = \frac{\sqrt{a^2 - x^2}}{a}$$

$$\text{or } \sqrt{a^2 - x^2} = a \cos \theta$$

$$\text{If } x = a \sin \theta$$

$$\text{then } dx = a \cos \theta d\theta$$

$$\begin{aligned} \text{eg } \int x^5 \sqrt{9-x^2} dx & \quad \left(\begin{array}{l} \text{let } x = 3 \sin \theta \\ dx = 3 \cos \theta d\theta \\ \sqrt{9-x^2} = 3 \cos \theta \end{array} \right) \\ &= \int (3 \sin \theta)^5 (3 \cos \theta) 3 \cos \theta d\theta \\ &= 3^7 \int \sin^5 \theta \cos^2 \theta d\theta \end{aligned}$$

$$= 3^7 \int \sin \theta (\sin^4 \theta) \cos^2 \theta d\theta$$

$$= 3^7 \int (1 - \cos^2 \theta)^2 \cos^2 \theta \sin \theta d\theta$$

$$= 3^7 \int (\cos^4 \theta - 2 \cos^2 \theta + \cos^2 \theta) \sin \theta d\theta$$

$$= 3^7 \left(-\frac{1}{3} \cos^3 \theta + \frac{2}{5} \cos^5 \theta - \frac{1}{7} \cos^7 \theta \right) + C$$

$$= 3^7 \left(-\frac{1}{3} \left(\frac{\sqrt{9-x^2}}{3} \right)^3 + \frac{2}{5} \left(\frac{\sqrt{9-x^2}}{3} \right)^5 - \frac{1}{7} \left(\frac{\sqrt{9-x^2}}{3} \right)^7 \right) + C$$

$$= -27 (9-x^2)^{3/2} + \frac{18}{5} (9-x^2)^{5/2} - \frac{1}{7} (9-x^2)^{7/2} + C$$

The Results

Unit exams were the normal pencil-and-paper tests given by the teacher. Exams were also given at the end of the semester and at the end of the year. Students had been exposed to all of the material tested in these exams through the teacher's normal classroom lessons, homework, worksheets, and so on, but they had also been quizzed three times on one-third of the material, and they had seen another third presented for additional study three times. The balance of the material was neither quizzed nor additionally reviewed in class beyond the initial lesson and whatever reading a student may have done.

The results were compelling: The kids scored a full grade level higher on the material that had been quizzed than on the material that had not been quizzed. Moreover, test results for the material that had been reviewed as statements of fact but not quizzed were no better than those for the nonreviewed material. Again, mere rereading does not much help.

Tips

- Focus on the basics first
- Focus on principles
- Master Syntax that Holds You Back
- Use your computer to create Anki Cards
- See Jeff Shek's blog for more

Tools Needed

- Get Anki on Your Device - <https://apps.ankiweb.net/>
- Get a habit tracker -
 - Loop https://play.google.com/store/apps/details?id=org.isoron.uhabits&hl=en_US
 - Habitica <https://habitica.com/static/home>

Demo Time

Resources and Links Used

Make It Stick, Ultralearning, Tiny Habits, Understanding How We Learn: A Visual Guide, and More Books -

<https://tylerslemke.com/books/>

Jeff's Blog Post - <https://senrigan.io/blog/chasing-10x-leveraging-a-poor-memory-in-software-engineering/>

Jeff's Complete Anki Guide - <https://senrigan.io/blog/everything-i-know-strategies-tips-and-tricks-for-spaced-repetition-anki/>

<https://www.learningscientists.org/posters>