

Flashing Abacus

Mental Arithmetic Training Web Application

What is Abacus / Mental Arithmetic?

Abacus is a traditional Chinese & Japanese arithmetic tool used to compute highly complex and difficult arithmetic problems. Students and scholars alike still practice the arts of mental arithmetic today to enhance their mathematical abilities and gain a deeper appreciation its cultural significance.

Flashing Abacus is free-to-use tool built to help students practice mental arithmetic. Designed as a web-based, easy-to-use, mobile-optimized platform, Flashing Abacus is widely accessible to interested students without the clunkiness or costs associated with traditional computer arithmetic software.

How does the Application Work?

Flashing Abacus has 2 different formats, regular and color-coded. The color-coded format follows the regular format very closely, with changes only in how correct and incorrect answers are displayed. You can refer to our tutorial video (<https://bit.ly/flashingabacusdemo>) for more information.

Instructions:

1. Go to the application section (<http://flashingabacus.com/#portfolio>).
2. Select the application that best fits what type of mental arithmetic practice you want to perform. Currently, Flashing Abacus supports Addition, Subtraction, Multiplication, and Division. In this tutorial, we will use addition as the application we want to practice with.
3. Within the addition application, specify the how you would like to practice. You can choose from the time between each number to add, the total amount of numbers to add, and how many digits each number will be.
4. Click the button “**Click here to begin**” to start the application.
5. After you have computed the numbers, enter your answer in the space below. Click “**Check your Answer**” once you have finalized your answer. A popup box will notify whether your answer is correct.
6. If you would like to know the correct answer without having to enter an answer, click “**Answer**”. A popup box will notify you of the correct answer.
7. When you have finished the problem, click “**Next Question**” to reset the application.
8. You may now continue to the next question. Feel free to change your specifications for the application by following steps 3-7.

Future Improvements?

Support will be added for:

- Randomized digits for addition and subtraction
- Blinking feature after each number is displayed in the addition and subtraction applications
- More randomized division algorithm

Refer to our Github (provided below) changelog and README for more details or to contribute.

Additional Information:

Website: <http://flashingabacus.com>

Contact: hello@flashingabacus.com

Source code / Github: <https://github.com/nathan2wong/flashingabacus>