

Documentation v1.1+ (English translation by Craig Patchett)

Whether you are an amateur or professional magician, *Stack Master* will allow you to learn, study, and/or enhance your knowledge of your favorite card stack.

If you don't already know what a stack is and you're reading this, you can move on (unless you're curious); Stack Master *is probably not for you...*

Several well-known stacks are supported and you can even import your own if you cannot find what you are looking for among those offered.

Have fun!

Alistair Crompton

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Home Screen - Overview

Stack Master consists of four distinct sections which are accessible from the home screen:



Practice

The practice modules let you train without a time limit, focusing on the cards you specify.

Challenges

Challenges offer timed mini-games that put your knowledge to the test.

Scores

The scoreboard shows the rankings of the best challenge players, for those who decide to publish their scores.

Settings

These screens are used to configure *Stack Master*.

General Operation

Exit a screen



Wherever you are in the application, you can return to the previous screen at any time by tapping on the red \mathbf{X} button at the top right of each screen.

If you are on the home screen, **you will exit the application**.

Sound



At any time, you can enable/disable the sounds of the application by tapping on the yellow speaker button at the top left of each screen.

Select a Stack

Predefined stacks

Before getting down to business, you need to choose which stack to work with. *Stack Master* offers you several pre-defined stacks.

To access the Stack selection screen from the home screen, simply tap on:





The stacks are presented in alphabetical order in the stacks screen:

- → Aragon
- → Aronson
- → Eléphant
- → Isis
- → Mnemonica
- → Nikola
- \rightarrow Osterlind
- \rightarrow Redford
- → Rix
- → Si-Stebbins

Drag the slider on the right side of the screen until the stack you want is visible. To select a stack, tap on its name.

Create a stack

If your favorite stack is not available, you have two options:

1. Your stack is well-known and *Stack Master* should offer it.

If this is the case, email me and I'll be happy to add your stack to*Stack Master* . The operation is quick, painless and does not even require updating the application ;)

2. Your stack is not known, only you use it (selfishly) and you (really) don't want to share it with the community.

In this case, you will be able to configure your stack via a screen dedicated to this purpose. Please note that if you use a "custom" stack, your scores cannot be published.



At the end of the list of predefined stacks, tap on the **New** button to access the screen for creating a stack.



Then you just have to deal the cards one-by-one in the desired order by dragging them onto the white circle.

The index of the last dealt card appears at the top right.

If you make a mistake, you can cancel and go back by tapping the **X** button to the left of the white circle (don't confuse this with the one at the top right of the screen).



When you have dealt all 52 cards, you need to give your creation a name and tap the green button to save.

The green button does not appear until all 52 cards are dealt and you enter a valid name.

Your new stack will then be available via the list of predefined stacks in the previous screen.

Practice Modules



Several practice modules are available. The last three modules are special ones.

"Flash Cards" is the ideal module if you want to learn a new stack.

"Classic", also available in challenge mode, presents you with multiple-choice questions.

"**Deck split**" allows you to practice dividing the deck into two packets (see*"The Great Divide"* by Harry Lorayne or *"Green Angle Separation"* by Lennart Green).

"Simple Math" allows you to practice calculating the position of a card by adding or subtracting the positions of two other cards.

"**Perfect hit**" allows you to practice producing a card named by a spectator, much like in "*Mnemonicosis*" by Juan Tamariz from his book "*Mnemonica* ".

"Sandbox" is a module that gives you the possibility to "play" with your stack. You will be able to freely mix, cut, distribute, and faro your stack according to your desires and experiments of the moment...

"The core" is a training module for the beautiful Pit Hartling routine. This module can only be activated if you own Hartling's routine. This routine is described in his book *"In Order to Amaze"* and is also available on its own as a PDF.

Some modules are timed and your response time is important: **the faster you answer, the more points you score**. At the end of the training, the application gives you a bonus: **any remaining time is converted into points**.

Your ranking

At the top of several learning module screens, your ranking (or knowledge level)for the selected stack is displayed:



This ranking varies with your progress. Here are the different ranks you can achieve, sorted in ascending order:

Muggle	Child	Novice	Student	Padawan	Master	Wizard	Chuck Norris	Jedi
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You can also check your ranking at each card level via the working stack display screen. Note that learning a card "stabilizes" once the card has been played more than 20 times.

Flash Cards

The "**Flash Cards**" module uses memory cards to drive your learning. This system is very well-known and extremely effective for quickly memorizing a series of key/value relationships. Many people memorize their stack this way "by hand," creating flash cards with a regular deck of cards dedicated for this purpose by writing the positions on the back of each card.

This training module allows you to use the same principle.

Settings

The first thing to do is to select the set of cards to use via the first settings screen: you choose how the application should construct the sequence of cards to be drawn when it tests you. Several "smart" sets of cards are at your disposal:



The second setup screen asks you to define the set of cards to be used for your training. With this settings screen, you can choose several things:



- → How many cards do you want to use for your training?
- → What portion of your stack would you like to use? Here you enter a range of cards using the sliders.
- → What maximum index shift do you want to use (see below)? If you are learning a new stack, you can leave this value at zero.

Training

When the training starts, a card appears on the screen and three types of questions are possible:



The card is displayed face up: You must deduce its position.



The card is displayed face down and its position is displayed: You must deduce its value.



The map is displayed with an index shift value: You must deduce the value of the card that is the specified number of positions before or after the displayed card.

This type of question is directly affected by the maximum shift value selected in the previous screen.

When you think you know the correct answer, tap on the displayed card and **the** correct answer will be revealed to you.

If you were right, tap the green button:



If you were wrong, tap the red button:



Each answer is remembered so that the application can measure your learning level and adapt its questions accordingly.

Each correct answer gives you a yellow star:	$\langle \mathbf{x} \rangle$
Each wrong answer gives you a gray star:	$\langle \mathbf{x} \rangle$
If you get the correct answer but took too long, you get an orange star:	
In this case, your answer will not be counted towards your progress. (It will be marked as neither right nor wrong.)	

At any time, you can check your knowledge level for each card via the stack view screen.

Additional options

In the second settings screen, if you choose zero offset then two additonal options become available.

"Spelling indexes" replaces each index of your stack with the number of letters in the corresponding card value.

"Negative indexes" replaces each index of your stack with the negative index. The last card in your stack, for example, would have a negative index of -1.

These additional modes have no effect on your progress.

Classic

The **"Classic"** module is identical to the previous module except that it gives you **multiple-choice questions**. This module is also available as a challenge.

Settings

The two module settings screens are identical to those in the **"Flash Cards"** module.

Training



Like in the **"Flash Cards"** module,*Stack Master* asks you three types of questions and then offers you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been validated, the application shows you **the correct answer in green**.

The more cards you chose in the setting screen, the more time you will have available on the timer.

Once the time reaches zero,**the training is not interrupted** but at the end of the exercise your "time bonus" will be zero.

The application memorizes your best score for the settings chosen, then this score is displayed below the score of the current game.

Please note that unlike challenges, scores for training modules are never published.

Deck split

The **"Deck split"** module is a module that allows you to practice splitting the deck into two packets. This module is also available as a challenge (the separation indexes are less permissive on the challenge side).

Settings



In the settings screen, you can choose several options:

- → How many cards would you like to use for your workout?
- → How would you like to divide your stack into two groups? Here you define two split points by dragging the two sliders to specify the indexes to split at.
- → Do you want to prioritize the cards you know the least about? Otherwise the draw is random.
- → Should the application warn you when you make a mistake?
- → Should the cards and game buttons be arranged vertically or horizontally?

Once your settings are defined, you can start training.

Training



Stack Master will deal pairs of cards and youhave to tap on the button that corresponds to the correct interval the cards are from.

The more cards you have chosen in the settings screen, the more time you will have available on the timer.

If the timer reaches zero, **the training is not interrupted** but at the end of the exercise your "time bonus" will be zero.



At the end of the training, if you have made less than 6 mistakes, the app will go into "intruder" mode and ask you to find the cards you missed.

Stack Master saves your best score for the settings chosen and displays it below the score of the current game.

Simple Math

Settings



After choosing the Simple Math module, the settings screen gives you several options regarding which cards to use for your training:

- → Tap to indicate how many cards you would like to use.
- → What portion of your stack would you like to use? Here you enter a range of cards using the two sliders.
- → You can also choose to only work on the indexes of the cards. The module then behaves like a mental arithmetic training module.

Once your settings are defined, you can start training.

Training



This module offers you a series of random arithmetic operations using the cards of your stack.

You must find the card at the index that is the result of adding or subtracting the indexes of the two shown card.

The app gives you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

The more cards you have chosen in the settings screen, the more time you will have available on the timer.

Once the time reaches zero, **the training is not interrupted** but at the end of the exercise your "time bonus" will be zero.

Stack Master saves your best score for the settings chosen and displays it below the score of the current game.

The core



"The core" is a training module for Pit Hartling's beautiful routine by the same name. **This module can only be activated if you have Hartling's routine.** This routine is described in his book *"In Order to Amaze"* and is also available on its own as a PDF.

If you want to unlock this module, you need to send me an email with proof (photo, invoice, etc.) that you own the book or the PDF.

Stack Master saves your best score for the settings chosen and displays it below the score of the current game.

Perfect hit

Settings

After choosing the **'Perfect hit'** module, the next screen asks you to choose the cards for your training.



With this settings screen, you can specify several options:

- → How many cards would you like to use for your training?
- → What portion of your stack do you want to use? Here you use the sliders to select a range of cards.

Once your settings are defined, you can start training.

Training



This specific module allows you to train yourself to make perfect "hits", a bit like with *"Mnemonicosis"* by Juan Tamariz (from his book *"Mnemonica"*).

You ask a spectator to name a random card. They will then find this card by following your instructions; the spectator is the one who manipulates the deck.

The selected card is displayed at the top right of the screen. The deck of cards, sorted into your selected stack, is displayed at the top left. Several actions are possible; you can ask the spectator to:

- → Cut the deck in one of three different ways. Only one cut can be made.
- → Choose a number from an interval your specify. Only one number can be chosen and this number may be used during the final count. (Counting can be triggered by tapping directly on the chosen number.)
- → Flip the deck. The deck can only be flipped once.



You can make an adjustment before the spectator touches the deck: one or two cards can move from low to high or vice-versa.



You can also ask the spectator to turn over the top card of the deck.



Finally, if necessary, you explain to your spectator how to count the cards. (Once the dealing has started, your spectator will no longer be able to cut the deck or turn it over.) The counting can be done according to the number of letters in the spectator's first name, the number of letters in the card chosen, or the number the spectator has chosen (or the sum of the digits that compose it).

You have a "perfect hit" and win if one of the following is true:

- → The chosen card is the last card dealt after counting.
- → The chosen card is the top card on the deck after counting.
- → The chosen card is the bottom card on the deck (no counting).
- → The chosen card is the top card on the deck (no counting).

If the chosen card is dealt during the counting process, the round is lost.

The more cards you have chosen in the settings screen, the more time you will have available on the timer.

Once the time reaches zero, **the training is not interrupted** but at the end of the exercise your "time bonus" will be zero.

Stack Master saves your best score for the settings chosen and displays it below the score of the current game.

Sandbox



"**Sandbox**" is a module that gives you the ability to "play" with your stack.

The lower part of the screen shows the current order of the deck. Use the slider to scroll through the cards.

The slider at the top of the screen allows you to select a card (shown in green in the deck) and, using that card as a cut point, you can perform a **cut** after the card, perform an **out faro** or **in faro**, with the two cut packets, or **reverse** the order of the cards up to and including the card (but not the ones after).

You can also perform an **OV**erhand shuffle or a **R**i**F**fle shuffle, and deal (split) the cards into three stacks which you can manipulate alike.

At any time, pressing the **reset** button will return the stack to its original order.

Challenges

General operation

Challenges are mini-games that explore different facets of knowing a stack. The more mini-games you play, the stronger your ability to fully utilize the stack will become!

The challenges are all timed and you have a limited time to complete them (usually one minute), so your response time is important. **The faster you answer, the more points you score.**

At the end of the game, the application grants you a bonus according to your reaction time.

The number of consecutive correct answers is also important; it determines the appearance of **visual bonuses**. Starting at 30 seconds remaining, with each elapsed second each visual bonus has a 1 in 20 chance of appearing on screen. Tap on a bonus in order to receive it. The following page offers a summary table of these bonuses.

If you get a wrong answer, your streak of correct answers is halved, or reset to zero if less than five.

Some challenges show indicators based on the answers you give:

Each correct answer gives you a yellow star:	X
Each incorrect answer gives you a gray star:	

Your best score is saved and displayed below the current game score.

Summary table of end-game visual bonuses:

Bonus	Condition	Effect	Appears multiple times
	At least 10 consecutive correct answers	+10,000 points	No
	At least 15 consecutive correct answers	+20,000 points	No
	At least 20 consecutive correct answers	+50,000 points	No
	At least 30 consecutive correct answers	+100,000 points	No
10 7 6 5 10 10 10 10 10 10 10 10 10 10	At least 8 consecutive correct answers	+20 seconds	Yes
	After 4 consecutive wrong answers	-5 seconds	Yes

"Classic"



This challenge is the variation of the classic training module that we have already seen.

The app gives you one of three types of problems (determine the card value, card position, or card value at a given index) and then offers you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

Like its training module counterpart, this challenge impacts your progress and remembers your mistakes.

The questions posed by this challenge are adapted to your level of knowledge.

"Quiz!"



This challenge offers you a series of random questions related to the organization of your stack.

The app gives you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

This challenge does not affect your progress.

"Cut me!"



This challenge asks you to find the index or value of a card after the deck has been randomly cut. The left card shows you the face of the card that has been cut to (now at the top of the deck), while the index of the right card must be determined.

The application offers you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

Like the training modules, this challenge impacts your progress and remembers your mistakes.

The questions asked in this challenge are adapted to your level of knowledge.

(To calculate the new index of the card shown on the right, just subtract the original index of the cut card from the index of this card and add 1.)

"Find me!"



This challenge offers you a series of random questions related to the organization of your stack.

The application shows you 16 cards and a question or category relating to those cards. Turn over each card that matches the question or category by tapping on it.

Once a card is turned over, the card will turn green if it is a correct match.

This challenge does not affect your progress.

"Deck split!"

Settings



Using the settings screen, you can specify two things for this module:

- → How would you like to separate your stack into two groups? Here you define the first and last card in one group using the two sliders and the rest of the cards will make up the second group.
- → Should the cards and game buttons be laid out vertically or horizontally?

Once your settings are defined, you can start the game by tapping on the **Play** button.

Play



The application displays pairs of cards and you have to tap on the button that corresponds to the correct interval group.

This challenge does not affect your progress.

"Quiz poker!"



This challenge asks you to find the right place to cut in your stack to get the displayed poker hand.

The first few rounds are easy because only one player is involved.

The following rounds increase the number of players and one card from the hand is hidden.

The hand shown is the dealer's hand: the last hand dealt.

The application offers you four different possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

This challenge does not affect your progress.

Stack Master saves your best score and displays it below the score of the current game.

The scores of this challenge are not published.

"Math!"



This challenge is one of my favorites!

With this challenge, you have to add (or subtract) the cards, according to their indexes, in order to reach a **target number**.

12 cards are randomly displayed. You have to turn over the cards one-by-one and choose the right operations to perform to get the target number mentioned at the top of the screen.

By default the card indexes are added together but you can also choose to subtract by clicking on the minus button.

The red **"x**" button between the plus and minus buttons allows you to abandon the current round and move on to a new question. Don't get it confused with the **Cancel** button at the top right of the screen!

This challenge does not affect your progress.

"Acaan!"



This challenge is good training to know where to cut the deck to move a card to a precise position, according to the guidelines of the famous *"Any Card At Any Number"* effect.

A random card/number pair is displayed. **You must place the displayed card at the displayed index**, cutting your stack at the right place.

The application offers you five possible answers. **You must tap on the correct cut card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

This challenge does not affect your progress.

"Faros & co!"



This challenge invites you to find the position of a random card after one or more perfect faros performed on your stack.

The application offers you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

This challenge does not affect your progress.

"Logic!"



With this challenge, a sequence of four cards is displayed, including a hidden card that you must identify.

The sequence of four cards is ordered according to a simple mathematical sequence. It is up to you to identify the sequence and determine the correct answer!

The application offers you four possible answers. **You must tap on the correct card** at the bottom of the screen.

Once your answer has been selected, the application will show you the **correct answer in green**.

This challenge does not affect your progress.

"Mates!"



This challenge is a free adaptation of the famous game *"Memory"*.

The goal of the game is to find pairs of cards* as quickly as possible, it is a memory game.

*cards of the same value and color

Each turn you tap on two cards in an attempt to select a matching pair.

To minimize the luck factor, some cards have their index printed on the back.

This challenge does not affect your progress.

"Stack Jack!"



This challenge is one of my favorites!

It is a very light version of the famous "Black Jack."

Each turn, a **target number** is generated. Each player takes a turn to place a card on the mat, at the white circle.

You play against the computer, whose cards are at the top of the screen.

The cards placed on the table add up according to their indexes and the round ends when one of the players reaches or exceeds the target number. You win the round if you reach the target number or if your opponent exceeds it.

The number of cards per hand increases as the game progresses.

This challenge does not affect your progress.

"Klondike !"

Who has never played Solitaire on their computer or smartphone?!

There are tons of Solitaire games in the app stores but I decided to add another one... stack-oriented, of course.

Settings



This settings screen allows you to set up the game options:

- → How many columns would you like to play with?
- → Would you like to use vintage card graphics?
- → Do you want to use "standard" solitaire rules?
- → Would you like to use a pyramid (rather than a triangle) card layout?

Once your settings are defined, you can start the game by tapping on the **Play** button.

Play



The rules of the game are identical to those of the classic Solitaire, except that you must use your stack to form the sequences of cards.

If you use a stack that consists of an ordered deck, "Klondike" becomes classic Solitaire.

The four piles of classic Solitaire are replaced by the four "quarters" of your stack and you must assemble the cards in ascending order of your stack.

You can also move cards or groups of cards from one row to another, alternating red/black cards and following the descending order of your stack.

Example with Mnemonica: If I have the Jack of Diamonds at the end of a row, only a black king can be placed on it since a King precedes the Jack of Diamonds in the stack.

This challenge does not affect your progress.

Stack Master saves your best score and displays it below the score of the current game. *The scores of this challenge are not published.*

"Intruder!"



This challenge invites you to find an "intruder" card among the 16 cards displayed.

Several types of intruder qualities are possible. The card to be located can, for example, be the only red card or the only odd card or even the only picture card among the displayed cards...

This challenge does not affect your progress.

"\$1000 TCL !"



This challenge is a direct application of *Annemann's "\$1000 Test Card Location."*

The deck of cards is shuffled in an overhand fashion and then cut. The top card is looked at and then lost in the deck.

You must find this card and slide it onto the white target.

The more you progress in the challenge, the more the deck is shuffled.

This challenge does not affect your progress.

"Divide me!"



This challenge asks you to sort a deck of cards into two separate piles according to the posted instructions.

You must slide the cards into the correct pile.

The displayed guideline changes as the challenge progresses.

This challenge does not affect your progress.

Scores



This scoreboard shows you the scores of the top 60 players on a challenge-by-challenge basis.

For each challenge, two rankings are presented:

- → A ranking of players who use the same stack as you.
- → A global ranking of all stacks combined (excluding "custom" stacks).

Tap on the "i" button to toggle the display of the stack names in an "All stacks" score screen.

Tap on either the left and right arrow button to display the scores for the previous or next challenge. Within a challenge these buttons will switch between the scores for your selected stack and the "All stacks" screen for that challenge.

Use the scrollbar on the right to scroll through the scores.

Settings

Stacks

This screen has already been described on pages 5 and 6.

Reviewing the selected stack



This screen allows you to view the stack you have selected and review your knowledge of and progress with each card in the stack.

The stack is presented as a vertical ribbon. You can scroll through the stack by dragging the cards, dragging the yellow dot in the scrollbar on the right side of the screen, or tapping on the page up and page down buttons at either end of the scrollbar.

The index number of each card within the stack is shown to the left of the card. A colored circle around an index represents your current mastery of that card:

- Card not mastered
- Card not well-mastered
 - Card known
 - Card well-known
 - Card mastered

Reset stats

You can clear all your statistics by pressing this button. Your progress will start from scratch and all high scores will be erased.

Only the statistics related to the selected stack are impacted.

Parameters



This screen allows you to set some general options related to *Stack Master's* graphics.

- → Card graphics: tap on a card design to select it. If different resolutions are available for that design you will be presented with a screen that allows you to choose the desired resolution.
- → Aligned cards: tap this option to select whether or not the cards are aligned or in a more "natural" layout.
- → Card animations: tap this option to select whether or not the cards animate during play/ practice. (Disable the card animations in order to speed up the display of the challenges.)
- → Disable background: tap this option to select whether or not the background should be animated. (The animation can be a problem on some older smartphones.)
- → Vibrate on failure: tap this option to select whether or not your phone should vibrate on a wrong answer.

Card graphics



















High resolution Medium resolution Low resolution

High resolution Medium resolution Low resolution

Low resolution

Medium resolution

High resolution Medium resolution Low resolution

Share the scores

You can choose to post the scores of your challenges on a scoreboard shared by all *Stack Master* users.

To post your scores, you must enter a nickname.

Language choice



The application is available in French and English. Tap on a flag to change the interface language.

Frequent questions

Can I use partial stacks with <i>Stack Master</i> ?	No. Only stacks of 52 cards are supported.
Does Stack Master support jokers?	No, and this is not planned.
Can I add my own custom card graphics?	Yes, it's an undocumented feature. Tap the tomato card deck in the Parameters screen and follow the instructions.
If I find a bug, what can I do?	Go have a beer in my honor and then email me if you really think it's a bug.
Can I save my settings and then copy them to another phone?	Yes. Email me if you need to access this feature.
I have a great (reasonable) idea for improvement.	Email me, I'll see what I can do.
The application crashes on my phone. What can I do?	Choose a lower-resolution card design and disable the animated wallpaper. Restart the application and see if it fixes the problem.