

Blackjack System Trainer

1.0 Introduction

Blackjack System Trainer is a simulator which can be used to practice a Play Strategy and a corresponding Bet Strategy for playing the game of Blackjack. Set the Bet Strategy using mathematical formulas based upon the result (Loss or Gain) on the previous hand. Automatically set Basic Blackjack Play Strategy or your own variation, for any combination of typical Game Rules. Monitor the simulation as bets are wagered, cards are displayed, decisions are made, and results are shown.

1.1 Using the Application

Navigate through the application and open strategy windows by using the menu and tool bar buttons at the top of the main application window.

Menu and Tool Bar




In the **Game Rules** window, set any combination of Blackjack rules by which to run the simulation.

In **Play Strategy** windows, set play decisions for all possible hands against any dealer up card according to set Game Rules.

In the **Bet Strategy** window, set the formulas to use for calculating the Initial Bet for each hand.

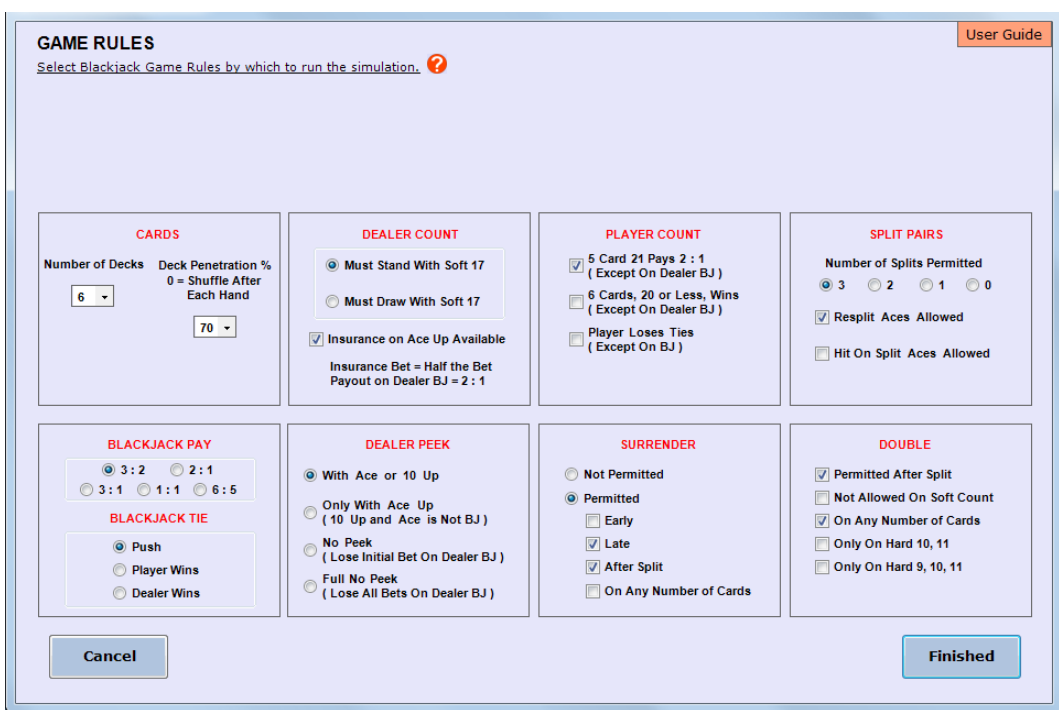
Minimize the application by clicking the **Minimize** button at the top right corner of the main application window. Close the application by clicking the **Close** button at the top right corner, or by using the **Exit** button within the **File** menu.

Help regarding a specific topic in any window can be displayed by clicking  next to the topic.

2.0 Game Rules

In the **Game Rules** window, set any combination of Blackjack rules by which to run the simulation.

Game Rules



After all rules have been set, click the **Finished** button to keep the selections and return to the main application window. If a simulation is in progress, it will be reset.

To discard any changes made to the rules and return to the main application window, click the **Cancel** button. If a simulation is in progress, it can then be continued from the point where it was stopped.

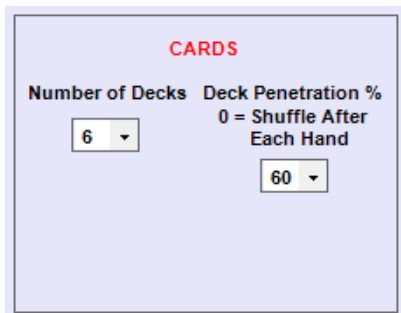
2.1 Rule Options

Number of Decks

Set the number of card decks used from 1 to 8.

Deck Penetration

The percentage of cards used before a shuffle occurs. Set at 0, 30, 40, 50, 60, 70, or 80 percent. Shuffle occurs after the set penetration is reached and the hand is completed. "0" Deck Penetration signifies a shuffle after each hand.



Blackjack Pay

The amount paid to the Player for a Blackjack. Set as a ratio to the amount of the Bet. Ratios available are 3:2, 2:1, 3:1, 1:1, and 6:5

Blackjack Tie is Push

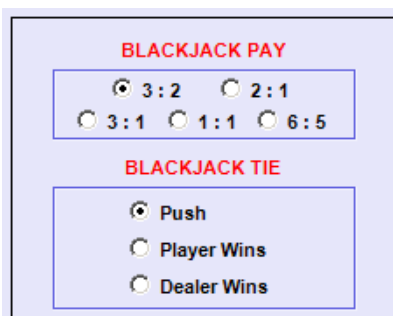
When both Player and Dealer have Blackjack, the result is neither win nor loss.

Player Wins Blackjack Tie

When both Player and Dealer have Blackjack, the Player wins.

Dealer Wins Blackjack Tie

When both Player and Dealer have Blackjack, the Dealer wins.



Dealer Must Stand With Soft 17 (At least one Ace in hand).

Dealer stands on either a hard or soft 17 count.

Dealer Must Draw With Soft 17 (At least one Ace in hand).

Dealer stands on hard 17 and must draw card on a soft 17 count.

Insurance on Dealer Ace Up Available

When the Dealer up card is an Ace, the Player may bet half the Bet wagered on the hand that the hole card will be a 10 (giving the Dealer a Blackjack). If the Dealer gets a Blackjack, payout to the Player is 2:1 on the Insurance Bet.

DEALER COUNT

Must Stand With Soft 17

Must Draw With Soft 17

Insurance on Ace Up Available

Insurance Bet = Half Initial Bet
Payout on Dealer BJ = 2 : 1

Dealer Peeks With Ace or 10 Up

Dealer checks for Blackjack before any play, if the up card is an Ace or 10. If the Dealer has Blackjack, the play ends immediately.

Dealer Peeks Only With Ace Up

Dealer checks for Blackjack before any play, only if the up card is an Ace. If the dealer has Blackjack, the play ends immediately. If the Dealer's up card is 10 and the hole card turns out to be an Ace, it is treated as 21 and not Blackjack.

No Peek (Lose Initial Bet on Dealer Blackjack)

Dealer checks for Blackjack after Player plays hand. If the Dealer has Blackjack, the Player loses only the Initial Bet. Bets wagered on split hands are not lost, except on hands that busted (exceeded 21).

Full No Peek (Lose All Bets on Dealer Blackjack)

Dealer checks for Blackjack after Player plays hand. If the Dealer has Blackjack, the Player loses all bets, including bets wagered on split hands.

DEALER PEEK

With Ace or 10 Up

Only With Ace Up
(10 Up and Ace is Not BJ)

No Peek
(Lose Initial Bet On Dealer BJ)

Full No Peek
(Lose All Bets On Dealer BJ)

5-Card 21 Pays 2:1

When the Player's hand count equals 21 with exactly 5 cards, the Player is paid 2:1, except when the Dealer wins with Blackjack.

6 Cards, 20 or less, Wins

When the Player's hand count is 20 or less with 6 or more cards, the Player wins automatically, except when the Dealer wins with Blackjack.

Player Loses Ties

Player loses when the Player and Dealer have the same hand count. When both have Blackjack, the Blackjack Tie rule applies.

PLAYER COUNT

5 Card 21 Pays 2 : 1
(Except On Dealer BJ)

6 Cards, 20 or Less, Wins
(Except On Dealer BJ)

Player Loses Ties
(Except On BJ)

Surrender Not Permitted

Player cannot surrender the hand and forfeit half the Initial Bet.

Surrender Permitted (Early)

Player can surrender a hand and forfeit half the Initial Bet before the Dealer checks for Blackjack.

Surrender Permitted (Late)

Player can surrender the dealt hand and forfeit half the Initial Bet only after the Dealer checks for, and does not have Blackjack.

Surrender Permitted (After Split)

Player can surrender a split hand and forfeit half the Initial Bet.

Surrender Permitted On Any Number of Cards

Player can surrender and forfeit half the Initial Bet after a hand is hit.

SURRENDER

Not Permitted

Permitted

Early

Late

After Split

On Any Number of Cards

Number of Splits Permitted

The maximum number of split pairs allowable. Set from 0 to 3, resulting in maximum of (4) split hands.

Re-split Aces Allowed

Normally, Aces cannot be re-split. With this option, when Aces are split and another Ace is drawn, the Player can re-split them.

Hit on Split Aces Allowed

Normally, only (1) card can be drawn on a split Ace. With this option, the Player can draw more than (1) card when Aces are split.

SPLIT PAIRS

Number of Splits Permitted

3 **2** **1** **0**

Resplit Aces Allowed

Hit On Split Aces Allowed

Double Permitted After Split

Player can double the Initial Bet and draw one card on a split hand according to rules regarding hands on which doubling is allowed.

Double Not Allowed On Soft Count

Player cannot double the Initial Bet and draw one card on a soft count (at least one Ace in hand).

Double On Any Number of Cards

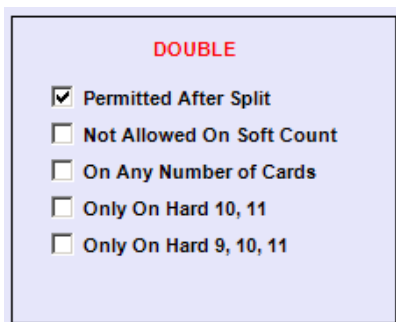
Player can double the Initial Bet and draw one card after a hand is hit.

Double Only On 10 or 11

Player can double the Initial Bet and draw one card on a hard count of 10 or 11 only (no Ace in hand).

Double Only On 9, 10 or 11

Player can double the Initial Bet and draw one card on a hard count of 9, 10 or 11 only (no Ace in hand).

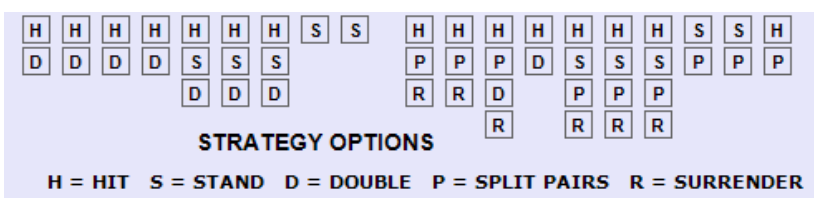


3.0 Play Strategy

All combinations of player cards and the dealer's up card are contained in (4) tables:

- Dealt Hand - First 2 Cards**
- Dealt Hand - After Hit**
- Split Hand - First 2 Cards (No Further Splits)**
- Split Hand - After Hit**

Play Strategy can be set for all decisions that occur based on the dealer's up card. As a guide in setting appropriate strategy, only sensible options are made available for each possible player hand or count in accordance with logical play. These **Strategy Options** are indicated for each player hand or count below the table. For reference, a summary of the set Game Rules is displayed on each strategy window.



To change **Play Strategy** for a particular hand or count against a specific **Dealer Up Card**, click the button in the table at the strategy to be changed until the desired strategy is indicated on the button. Only strategy options that are available, according to set Game Rules, will appear as a selection on the button. To change strategy for a particular player hand or count against all dealer up cards, click on an available **Strategy Option** below the table. All strategy buttons above the option will be changed accordingly. Unavailable options, according to set Game Rules, are not enabled.

		PLAYER HARD COUNT (NO PAIRS)																	
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
DEALER UP CARD	2	H	H	H	H	H	D	D	H	S	S	S	S	S	S	S	S	S	
	3	H	H	H	H	D	D	D	H	S	S	S	S	S	S	S	S	S	
	4	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S	
	5	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S	
	6	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S	
	7	H	H	H	H	D	D	D	H	H	H	H	H	S	S	S	S	S	
	8	H	H	H	H	H	D	D	H	H	H	H	H	S	S	S	S	S	
	9	H	H	H	H	H	D	D	H	H	H	H	H	S	S	S	S	S	
	10	H	H	H	H	H	H	D	H	H	H	H	H	S	S	S	S	S	
	11	H	H	H	H	H	H	H	H	H	H	H	H	S	S	S	S	S	

3.1 Strategy for Dealt Hand - First 2 Cards

The strategy table **Play Strategy for Dealt Hand - First 2 Cards** includes options for Hit, Stand, Double, Split Pairs, Surrender and Insurance. Strategies are grouped according to type of player hand:

- Hard Count (no Pairs)**
- Soft Count (one Ace in hand)**
- Pairs**

All split hands are generated according to this strategy table until the permitted number of split hands are dealt. After all split hands are dealt, the strategy table **Play Strategy for Split Hand – First 2 Cards (No Further Splits)** is used.

Play Strategy for Dealt Hand – First 2 Cards

PLAY STRATEGY FOR DEALT HAND - FIRST 2 CARDS User Guide

Click buttons within table or options below table to adjust strategy.

	PLAYER HARD COUNT (NO PAIRS)																		PLAYER SOFT COUNT									PLAYER PAIRS									
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-T	2-2	3-3	4-4	5-6	6-6	7-7	8-8	9-9	T-T	A-A			
DEALER UP CARD	2	H	H	H	H	D	D	H	S	S	S	S	S	S	S	H	H	H	H	S	S	S	S	P	P	H	D	P	P	P	P	S	P				
	3	H	H	H	H	D	D	D	H	S	S	S	S	S	S	H	H	H	D	D	S	S	S	P	P	H	D	P	P	P	P	S	P				
	4	H	H	H	H	D	D	D	S	S	S	S	S	S	S	H	H	D	D	D	S	S	S	P	P	H	D	P	P	P	P	S	P				
	5	H	H	H	H	D	D	D	S	S	S	S	S	S	S	D	D	D	D	D	S	S	S	P	P	P	D	P	P	P	P	S	P				
	6	H	H	H	H	D	D	D	S	S	S	S	S	S	S	D	D	D	D	D	S	S	S	P	P	P	D	P	P	P	P	S	P				
	7	H	H	H	H	D	D	D	H	H	H	H	H	H	S	H	H	H	H	S	S	S	S	P	P	H	D	H	P	P	P	S	P				
	8	H	H	H	H	H	D	D	H	H	H	H	H	S	S	H	H	H	H	S	S	S	S	H	H	H	D	H	H	P	P	S	P				
	9	H	H	H	H	D	D	H	H	H	H	R	S	S	S	H	H	H	H	S	S	S	S	H	H	H	D	H	H	P	P	S	P				
	10	H	H	H	H	H	D	H	H	H	R	R	S	S	S	H	H	H	H	S	S	S	S	H	H	H	H	H	H	P	S	S	P				
	11	H	H	H	H	H	H	H	R	S	S	S	S	S	S	H	H	H	H	S	S	S	S	H	H	H	H	H	H	P	S	S	P				
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I	-			

INSURANCE ?

I = Insurance
- = No Insurance

GAME RULES

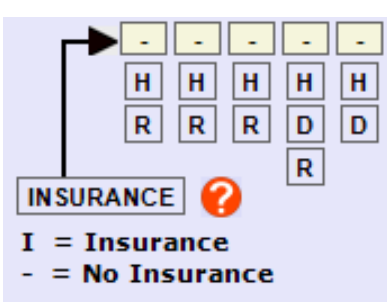
- Dealer Peeks with A or 10
- Dealer Stands on Soft 17
- Late Surrender Permitted
- Surrender OK After Split not Hit
- Double After Split Permitted
- Double After Hit Allowed
- Double on Soft Count Allowed
- Double on Any Hard Count OK
- 3 Splits Permitted
- Resplit Aces Allowed
- No Hit on Split Aces
- Insurance Available

STRATEGY OPTIONS

H = HIT S = STAND D = DOUBLE P = SPLIT PAIRS R = SURRENDER

Cancel
Finished

If **Insurance** is available according to the set Game Rules, an Insurance Bet can be wagered against a Dealer Ace Up card. To have the simulation wager an insurance bet for a particular hand or count, click the button in the Insurance row of the table to display an "I" for that hand or count. Display of a dash "-" on a button in the Insurance row indicates that an Insurance Bet will not be wagered for that particular hand or count. To set the same Insurance strategy for all hands and counts, click the **INSURANCE** option below the table. All buttons will display an "I" or a dash "-". If Insurance is not available per set Game Rules, the Insurance option is not enabled, and all Insurance buttons will display a dash "-".



After the Play Strategy has been adjusted, click the **Finished** button to keep the settings and return to the main application window. If a simulation is in progress, it will be reset.

To discard any adjustments made to the Play Strategy and return to the main application window, click the **Cancel** button. A simulation in progress can then be continued from the point where it was stopped.

3.2 Strategy for Dealt Hand - After Hit

The strategy table **Play Strategy For Dealt Hand After Hit** includes options For Hit, Stand, Double, and Surrender. The strategy applies to the initial dealt hand after the first hit and successive hits. Strategies are grouped according to the Player's hand count:

Hard Count (no Ace in hand)
Soft Count (at least one Ace in hand)

Play Strategy for Dealt Hand after Hit

PLAY STRATEGY FOR DEALT HAND AFTER HIT
User Guide

Click buttons within table or options below table to adjust strategy.

PLAYER HARD COUNT

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
D	H	H	H	H	D	D	H	S	S	S	S	S	S	S	S	S
E	H	H	H	D	D	D	H	S	S	S	S	S	S	S	S	S
A	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
L	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
E	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
R	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
U	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
P	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
7	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
8	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
C	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
A	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
D	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
A	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S

PLAYER SOFT COUNT

	3	4	5	6	7	8	9	10	11	
13	H	H	H	H	H	S	S	S	S	2
14	H	H	H	H	D	D	S	S	S	3
15	H	H	D	D	D	D	S	S	S	4
16	D	D	D	D	D	D	S	S	S	5
17	D	D	D	D	D	D	S	S	S	6
18	H	H	H	H	H	S	S	S	S	7
19	H	H	H	H	H	S	S	S	S	8
20	H	H	H	H	H	S	S	S	S	9
21	H	H	H	H	H	S	S	S	S	T
A	H	H	H	H	H	S	S	S	S	A

STRATEGY OPTIONS
H = HIT S = STAND D = DOUBLE R = SURRENDER

Cancel

Finished

GAME RULES

- Dealer Peeks with A or 10
- Dealer Stands on Soft 17
- Late Surrender Permitted
- Surrender OK After Split not Hit
- Double After Split Permitted
- Double After Hit Allowed
- Double on Soft Count Allowed
- Double on Any Hard Count OK
- 3 Splits Permitted
- Resplit Aces Allowed
- No Hit on Split Aces
- Insurance Available

After the Play Strategy has been adjusted, click the **Finished** button to keep the settings and return to the main application window. If a simulation is in progress, it will be reset.

To discard any adjustments made to the Play Strategy and return to the main application window, click the **Cancel** button. A simulation in progress can then be continued from the point where it was stopped.

3.3 Strategy for Split Hand - First 2 Cards (No Further Splits)

The strategy table **Play Strategy for Split Hand – First 2 Cards** includes options for Hit, Stand, Double, and Surrender. Strategies are grouped according to the Player's hand count:

Hard Count (no Ace in hand)
Soft Count (at least one Ace in hand)

All split hands (first 2 cards) are generated according to the strategy set for the initial Dealt Hand until the permitted number of split hands are dealt. Therefore, the strategy for a dealt split hand does not address pairs. If the game rules are set for no splitting, the strategy windows for a split hand are not accessible.

Play Strategy for Split Hand – First 2 Cards

PLAY STRATEGY FOR SPLIT HAND - FIRST 2 CARDS (No Further Splits)
User Guide

Click buttons within table or options below table to adjust strategy.

PLAYER HARD COUNT

	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
D	H	H	H	H	H	D	D	H	S	S	S	S	S	S	S	S	S
E	H	H	H	H	H	D	D	D	H	S	S	S	S	S	S	S	S
A	H	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S
L	H	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S
E	H	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S
R	H	H	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S
U	H	H	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S
P	H	H	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S
7	H	H	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S
8	H	H	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S
C	H	H	H	H	H	D	D	D	H	H	H	H	R	S	S	S	S
A	H	H	H	H	H	D	D	D	H	H	H	H	R	S	S	S	S
D	H	H	H	H	H	D	D	D	H	H	H	H	R	S	S	S	S
A	H	H	H	H	H	D	D	D	H	H	H	H	R	S	S	S	S

PLAYER SOFT COUNT

	A-A	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-T	
2	S	H	H	H	H	H	S	S	S	S	2
3	S	H	H	H	H	D	D	S	S	S	3
4	S	H	H	D	D	D	D	S	S	S	4
5	S	D	D	D	D	D	D	S	S	S	5
6	S	D	D	D	D	D	D	S	S	S	6
7	S	H	H	H	H	H	S	S	S	S	7
8	S	H	H	H	H	H	S	S	S	S	8
9	S	H	H	H	H	H	S	S	S	S	9
T	S	H	H	H	H	H	S	S	S	S	T
A	S	H	H	H	H	H	S	S	S	S	A

STRATEGY OPTIONS
H = HIT S = STAND D = DOUBLE R = SURRENDER

Cancel

Finished

GAME RULES

- Dealer Peeks with A or 10
- Dealer Stands on Soft 17
- Late Surrender Permitted
- Surrender OK After Split not Hit
- Double After Split Permitted
- Double After Hit Allowed
- Double on Soft Count Allowed
- Double on Any Hard Count OK
- 3 Splits Permitted
- Resplit Aces Allowed
- No Hit on Split Aces
- Insurance Available

After the Play Strategy has been adjusted, click the **Finished** button to keep the settings and return to the main application window. If a simulation is in progress, it will be reset.

To discard any adjustments made to the Play Strategy and return to the main application window, click the **Cancel** button. A simulation in progress can then be continued from the point where it was stopped.

3.4 Strategy for Split Hand - After Hit

The strategy table **Play Strategy For Split Hand After Hit** includes options for Hit, Stand, Double, and Surrender. The strategy applies to all split hands after the first hit and successive hits. Strategies are grouped according to the Player's hand count:

Hard Count (no Ace in hand)
Soft Count (at least one Ace in hand)

Play Strategy for Split Hand after Hit

PLAY STRATEGY FOR SPLIT HAND AFTER HIT
User Guide

Click buttons within table or options below table to adjust strategy.

PLAYER HARD COUNT

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
D	H	H	H	H	D	D	H	S	S	S	S	S	S	S	S	S
E	H	H	H	D	D	D	H	S	S	S	S	S	S	S	S	S
A	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
L	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
E	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
R	H	H	H	D	D	D	S	S	S	S	S	S	S	S	S	S
U	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
P	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
7	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
8	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
C	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
A	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
D	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S
A	H	H	H	D	D	D	H	H	H	H	S	S	S	S	S	S

PLAYER SOFT COUNT

	3	4	5	6	7	8	9	10	11	
13	H	H	H	H	H	S	S	S	S	2
14	H	H	H	H	D	D	S	S	S	3
15	H	H	D	D	D	D	S	S	S	4
16	D	D	D	D	D	D	S	S	S	5
17	D	D	D	D	D	D	S	S	S	6
18	H	H	H	H	H	S	S	S	S	7
19	H	H	H	H	H	S	S	S	S	8
20	H	H	H	H	H	S	S	S	S	9
21	H	H	H	H	H	S	S	S	S	T
A	H	H	H	H	H	S	S	S	S	A

STRATEGY OPTIONS
H = HIT S = STAND D = DOUBLE R = SURRENDER

Cancel

Finished

GAME RULES

- Dealer Peeks with A or 10
- Dealer Stands on Soft 17
- Late Surrender Permitted
- Surrender OK After Split not Hit
- Double After Split Permitted
- Double After Hit Allowed
- Double on Soft Count Allowed
- Double on Any Hard Count OK
- 3 Splits Permitted
- Resplit Aces Allowed
- No Hit on Split Aces
- Insurance Available

After the Play Strategy has been adjusted, click the **Finished** button to keep the settings and return to the main application window. If a simulation is in progress, it will be reset.

To discard any adjustments made to the Play Strategy and return to the main application window, click the **Cancel** button. A simulation in progress can then be continued from the point where it was stopped.

3.5 Basic Play Strategy

Basic Play Strategy, based on statistical analysis and probabilities, can be loaded into the strategy tables to account for all combinations of selected rules. To set Basic Play Strategy, click the button **Set Basic Strategy** in the **Play Strategy** dropdown at the top of the main application window or within the **File** menu. After **Basic Play Strategy** is set, all play strategy tables are changed accordingly. The strategies can then be adjusted by opening each Play Strategy window.



4.0 Calculated Bets

In the **Calculated Bet Strategy** window, set **BANKROLL** (100 – 100,000) for the amount to be shown as **Balance** at the start of the simulation.

Set **START BET** (1 – 10,000) for the Bet wagered on the first hand of the simulation. Set **MINIMUM BET** (1 – 10,000) and **MAXIMUM BET** (1 – 100,000) to establish a range of bets to wager. When the calculated Bet for a hand is outside of this range, the Bet to be wagered for that hand reverts back to the **START BET**.

Set **LOSS LIMIT** (1 – 100,000) and **PROFIT GOAL** (1 – 100,000) to establish limits within which to utilize the formulas. When outcome of a hand results in either **Loss Limit** or **Profit Goal** reached, the Bet for the next hand reverts back to the **START BET**.

The Bet wagered on each hand after a Net Loss and after a Net Gain is to be determined by a calculation based on the Initial Bet wagered on the previous hand. Separate formulas are set up for calculating the Bet, depending on **Loss** or **Gain** as a result of the previous hand. To determine the Bet to be wagered for the next hand, set a factor by which the previous Bet will be multiplied, and an amount to either **Add** to or **Subtract** from that result. For both a Loss and a Gain, the amount of the Bet wagered on the next hand can be formulated to continually increase, decrease, or remain the same as the previous Initial Bet on the previous hand. If a Loss or a Gain does not occur, (**Balance** does not change) the Bet on the next hand remains the same.

Calculated Bet Strategy

User Guide

Set Bankroll, Start Bet, Bet Limits, Loss Limit and Profit Goal. ?

BANKROLL <input style="width: 50px;" type="text" value="200"/>	START BET <input style="width: 50px;" type="text" value="5"/>
MINIMUM BET <input style="width: 50px;" type="text" value="1"/>	MAXIMUM BET <input style="width: 50px;" type="text" value="20"/>
LOSS LIMIT <input style="width: 50px;" type="text" value="50"/>	PROFIT GOAL <input style="width: 50px;" type="text" value="50"/>

Set formulas by which Initial Bets are calculated. ?

To calculate the Bet on the next hand after a Net Loss:

Multiply Initial Bet wagered on the previous hand by and

To calculate the Bet on the next hand after a Net Gain:

Multiply Initial Bet wagered on the previous hand by and

Example:

In the formula to calculate the bet on the next hand after a Gain, the factor by which to multiply the previous Bet is set at 2 and the "Add" amount is set at 1. In the formula for bet strategy after a Loss, the factor by which to multiply the previous Bet is set at 3 and the "Subtract" amount is set at 4. If the Bet wagered on the previous hand was 5 and the result of the hand is a Gain in Balance, the Bet wagered on the next hand will be $(2 \times 5) + 1 = 11$. If that hand results in a Gain, the Bet wagered on the following hand will be $(2 \times 11) + 1 = 23$. But, if the hand results in a Loss, the formula set up for the next bet following a Loss is utilized, and the Bet will be $(3 \times 23) - 4 = 65$.

After the Bet Strategy has been adjusted, click the **Finished** button to keep the settings and return to the main application window. If a simulation is in progress, it will be reset.

To discard any adjustments made to the Bet Strategy and return to the main application window, click the **Cancel** button. A simulation in progress can then be continued from the point where it was stopped.

5.0 Simulation

Control the simulation in the control box at the lower right corner of the main application window. Set the number of **HANDS** to run in the simulation (1 - 1,000).

The time delay between display of each card, decision and result can be adjusted by moving the **PRACTICE SPEED** slider. The delay can be set from less than 1 second to approximately 3 seconds, and can be adjusted before the simulation is started, or during the run.

The simulator will use a formula established in the Calculated Bet Strategy window to calculate the Bet wagered on a hand, based on either a loss or gain as result of the previous hand.

Click the **Start** button to run a simulation. During a simulation run, the Start button will change to a **Continue** button. Click the **Stop** button to stop the simulation. Click the **Continue** button to restart the simulation from the point where it was stopped. Click the **Reset** button to clear the cards, and to zero all results. Various **STOP POINTS** can be set, as desired.

HANDS

PRACTICE SPEED

Slow Fast

5.1 Simulation Run

The simulation will run at an adjustable speed. All player and dealer cards are displayed for each hand. A message appears when Dealer checks for Blackjack and when a card shuffle occurs. Amount of bet, insurance bet, hand counts, player decisions, and results of the hand are displayed as the simulation progresses. Open any of the Strategy windows when the simulation is not running by using the menu or tool bar buttons at the top of the window. Betting parameters and game results are displayed as the simulation progresses.

A message is displayed when the **Profit Goal** is reached or the **Loss Limit** is reached. When this happens, the Bet on the next hand will be the value of the **Start Bet**. A message is also displayed when the calculated Bet is not within the limits set for **Minimum Bet** or **Maximum Bet**. When this happens, the Bet on the next hand will be the value of the **Start Bet**.

Progress toward Profit Goal or Loss Limit is displayed as **BALANCE +/-** since last reverting to the Start Bet due to reaching the Profit Goal or reaching the Loss Limit. When the Profit Goal is reached or the Loss Limit is reached, the bet wagered on the next hand will be the Start Bet and **BALANCE +/-** is reset to zero.

Main Application Window – Practice Mode

The screenshot displays the 'Main Application Window – Practice Mode' for a blackjack simulation. The interface is divided into several sections:

- Menu Bar:** File, Window, Help.
- Game Controls:** Game Rules, Bet Strategy, Play Strategy (dropdown), and a User Guide button.
- DEALER:** Shows four cards: 2 of Spades, King of Clubs, Ace of Hearts, and King of Clubs. The count is 23 and the result is BUST.
- PLAYER:** Shows three hands:
 - DEALT HAND:** 8 of Spades and King of Clubs. Bet: 1.00. Count: 16. Decision: STAND. Result: WIN 1.00.
 - SPLIT HAND 1:** 5 of Diamonds and 9 of Diamonds. Bet: 1.00. Count: 15. Decision: STAND. Result: WIN 1.00.
 - SPLIT HAND 2:** 8 of Clubs, 6 of Diamonds, and King of Clubs. Bet: 1.00. Count: 22. Decision: BUST. Result: LOSS 1.00.
 - SPLIT HAND 3:** 6 of Spades and 9 of Diamonds. Bet: 1.00. Count: 16. Decision: STAND. Result: WIN 1.00.
- Game Statistics (Right Panel):**
 - DEALT HANDS: 34
 - SPLIT HANDS: 40
 - HANDS PUSHED: 5
 - BALANCE: 76.00
 - BANKROLL: 100.00
 - MINIMUM BET: 1
 - MAXIMUM BET: 10
 - START BET: 1
 - INITIAL BET: 1.00
 - TOTAL BET: 3.00
 - NET RESULT: +1.00
 - BALANCE +/-: -4.00
 - PROFIT GOAL: 10
 - LOSS LIMIT: 10
 - MINIMUM OR MAXIMUM BET WAGERED: (empty field)
 - PROFIT GOAL OR LOSS LIMIT REACHED: (empty field)
- GAME RULES (Bottom Left):**
 - Dealer Peeks with A or 10
 - Dealer Stands on Soft 17
 - Late Surrender Permitted
 - No Surrender After Hit or Split
 - Double After Split Permitted
 - No Double After Hit
 - Double on Soft Count Allowed
 - Double on Any Hard Count OK
 - 3 Splits Permitted
 - No Resplitting Aces
 - No Hit on Split Aces
 - Insurance Available
- Hand and Speed Controls (Bottom Right):**
 - HANDS: 100
 - PRACTICE SPEED: (slider from Slow to Fast)
 - Buttons: Stop, Reset, Continue