Playing Strategy Tables

There are two tables used for playing strategy decisions. The first is called the Base Play Table. The other is called the Special Play Table. These tables are used to determine what the correct play should be. This is determined by finding the intersecting cell in the table and applying that decision. Decisions are Hit, Stand, Split, Double Down, and Surrender.

The current playing strategy tables in effect are used by the Hint Feature and the Auto Help System. Whatever decisions you have coded into the two strategy tables are used to provide Hint Button feedback as well as displaying the correct playing decision (Auto Help).

The strategy decision cells are arranged in a matrix format in which each row and column have specific meanings. Across the top of a table are the 13 possible "up card" values for the Dealer's Hand. Down the left side of a table are the 27 types of basic hand combinations the player may have.

To find the correct playing decision, start with correct "Dealer Shows" column and work your way down the "Players Hand" rows until you reach the one that represents your hand value. The intersecting cell contains the correct playing decision.

	BASE PLAY TABLE - Ultima21.sgy												
						Deal	er Sh	OWS:					
Your Hand:	2	3	4	5	6	7	8	9	10	J	Q	K	Α
2 thru 7	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
8	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
9	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
10	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
11	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
12	Hit	Hit	Std	Std	Std	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
13	Std	Std	Std	Std	Std	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
14	Std	Std	Std	Std	Std	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
15	Std	Std	Std	Std	Std	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
16	Std	Std	Std	Std	Std	Hit	Hit	Hit	Hit	Hit	Hit	Hit	Hit
17 thru 21	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std

Base Play Table:

The Base Play Table is the "default" decision table and is used when the Special Play Table's decisions do not apply. The Base Play Table contains only Hit and Stand decisions and are always available.

Special Play Table:

	SPECIAL PLAY TABLE - Ultima21.sgy												
						Deal	ler Sh	OWS:					
Your Hand:	2	3	4	5	6	7	8	9	10	J	Q	K	Α
2 thru 7	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	Dbl	Dbl	-	-	-	-	-	-	-	-
9	Dbl	DЫ	Dbl	Dbl	Dbl	-	-	-	-	-	-	-	-
10	DЫ	Dbl	DЫ	DЫ	DЫ	DЫ	DЫ	DЫ	-	-	-	-	-
11	Dbl	DЫ	Dbl	Dbl	Dbl	Dbl	Dbl	Dbl	DЫ	Dbl	Dbl	Dbl	DЫ
12	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	Sur	Sur	Sur	Sur	-
16	-	-	-	-	-	-	-	-	Sur	Sur	Sur	Sur	Sur
17 thru 21	-	-	-	-	-	-	-	-	-	-	-	-	-

This table is always checked **first** to see if a Double Down, Split, or Surrender decision is coded. If no decision is coded ("-" appears in cell), or if the decision is not allowed for the current hand (e.g. cannot split an Ace-Two hand), the Base Play Table will be used (as the default).

A decision is not allowed when: (a) you have that feature turned off (e.g. no double down allowed) or (b) when there are too many cards in the hand for the feature (e.g. split on first two cards only).

Changing a Cell's Decision:

To change cell's decision, simply move the mouse pointer over the cell and click the left mouse button. This will place the currently selected "Copy Decision" in the cell. You may "click" as many cells as needed in order to change the current strategy table.

Normally, you would activate one of the available Copy Decisions and click all the cells that are to contain that decision. Then you would move on to the next Copy Decision and click all the cells that are to contain it.



The "current Copy Decision" is located in the group box in the upper right hand corner of the screen. Whichever Copy Decision is currently selected will be copied to each cell you click with the left mouse button. To change the current Copy Decision, just click one of the

available decisions.

Note: when editing the Base Play Table, only the Hit and Stand Copy Decisions are available. Similarly, when editing the Special Play Table, only the Double Down, Split and Surrender decisions are allowed. In the example above, only the first two decisions are available (Hit, Stand) and the other three are grayed out (not available).

Switching Strategy Tables:

To switch from the Base Play Table to the Special Play Table, press the button.

Spe<u>c</u>ial Plays

To switch from the Special Play Table to the Base Play Table, press the Base Plays button.

Each time you access the playing strategy section of the program, the last table you accessed (Base or Special) will be displayed first.

Saving Strategy Table Changes

After you have completed making your changes, you can save them into a strategy table

file. This is done by pressing the **Save** button. Strategy table files always contain <u>both</u> the Base Play and Special Plays Tables cell decisions.

When this game first loads, it automatically loads the strategy table values stored in a file called ULTIMA21.SGY. This is the <u>default</u> strategy table file and it contains the cell decisions for both the Base Play and the Special Play Tables.

When you press the Save Button, a file selection window will appear asking you to select the strategy file name and directory to be used. The default file name is ULTIMA21.SGY and the default directory is where this game is located.

To save multiple strategy files, use the Save Button and specify different strategy file names before pressing the Ok Button on the file selection window. Once saved, you can

load them at a later time by using the **Load** button.

Undo All Changes Made To Strategy Table

<u>U</u>ndo all

Pressing the button will undo all changes made to the current strategy table being edited. The Undo Button will reset all the cell decisions on the current table back to their original values.

IMPORTANT: the undo feature can only undo changes made since you first brought up this table. Once you exit or save this this table, the ability to Undo is lost forever. Therefore, be sure all changes are correct before saving the current table, switching to another table, or loading a new table.

Player Statistics

Player Statistics							
		PLAYERS					
STATISTICS	#1	#2	#3	Dealer			
Total hands played:	8	8	8	8			
Total hands won:	3	4	2	-			
Total hands pushed:		2	1	-			
Total hands lost:	5	2	5	—			
Total blackjacks:		1					
Total 6 card winners:				-			
Total double downs:				-			
Total hands split:				-			
Total hands busted:			1	1			
Total surrendered:				_			
Current win streak:				—			
Current lose streak:	2	2	3	-			
Longest win streak:	2	3	1	-			
Longest lose streak:	2	2	3	—			
Highest bank balance:	\$500.00	\$522.50	\$505.00	\$5,012.50			
Lowest bank balance:	\$490.00	\$500.00	\$485.00	-			
Average starting bet:	\$5.00	\$5.00	\$5.00	-			
	<u>O</u> k	<u>R</u> eset	<u>H</u> elp				

This window presents the Player Statistics kept during all games played. Each time a new game is started, these stats are reset back to zero. As each hand is played, the stats for each player are calculated and updated.

NOTE: stats are only maintained and displayed for active players (1-3).

NOTE: The Dealer's Highest Bank Balance amount reflects the current amount of chips in the Dealer's tray. If the Dealer's tray runs out of chips, the Casino Manager will halt play until the chip tray is restocked.

To reset the player stats at any time, press the Reset Button.

Card Count Statistics

	Card Counts							
Cards:	Dealt:	Left:	Total:	Card Counts:	Number:	Percent:		
Aces:	2	2	4	Aces Left:	2	50.00%		
Twos:	2	2	4	Fives Left:	3	75.00%		
Threes:	2	2	4	Faces Left (10-K):	7	43.75%		
Fours:	2	2	4	2 thru 6's Dealt:	10	50.00%		
Fives:	1	3	4	7 thru 9's Dealt:	6	50.00%		
Sixes:	3	1	4	10 thru A's Dealt:	11	55.00%		
Sevens:	2	2	4					
Eights:	4		4	Cards Dealt:	27	51.92%		
Nines:		4	4	Cards Remaining:	25	48.08%		
Tens:	3	1	4	Number of Decks:	1			
Jacks:	1	3	4	Running-Count: (a)	-1			
Queens:	2	2	4	True-Count: (a)	-2			
Kings:	3	1	4	User-Count: (a)	0			
Hearts:	7	6	13	(a)	Basis:	·		
Diamonds:	8	5	13	These three card counts do not include any cards				
Clubs:	8	5	13	buried at the start of a new deck and their respective calculations are based on the "experts" generally				
Spades:	4	9	13	accepted count formulas		generally		

This window presents the accumulated statistics for all cards dealt since the last shuffle.

As each card is dealt from the deck, individual card stats are calculated and updated. The left side of this window shows the number dealt for each card (Ace thru King), the number remaining in the deck, and the total number in the deck. If you are playing with a single deck, the total for each card is four. If you are playing with 6 decks, the total will be 24. The total cards dealt plus total cards remaining should always equal the total cards in the deck (for each card and for all cards).

In addition, the left side shows stats for each suit (hearts...spades). Like individual cards, suit stats show the number dealt, remaining, and total in the deck. They too should always "add up" to the total available in the deck.

NOTE: The LEFT side of the window includes any cards "buried" at the start of a new deck (just after a shuffle).

The right side of the window displays card count stats which are provided for "card counters". It automatically accumulates and shows the most widely used card count stats needed by most card counting systems in use today.

NOTE: The RIGHT side of the window <u>DOES NOT</u> includes any cards "buried" at the start of a new deck.

The Running Count, true counts, and user counts are normally calculated based on a +1, -

1, and 0 point values assigned to each card in the deck. As cards are dealt, the Running Count is tabulated on a point system and the True Count is the Running Count adjusted by the remaining cards in the deck.

Normally, 2's thru 6's equal a "+1", 7 thru 9's equal "0", and 10 thru A's are "-1". Therefore, if the Dealer deals an Ace, Two, Three, Five, Eight, and King, the Running Count will be a total of 1 (-1, +1, +1, +1, 0, and -1).

When the Running Count is a high positive number, this means the deck is "heavy" on tens because a lot of small cards have been dealt. The opposite is also true. When the Running Count is a large negative number, the deck is "light" on tens since more face cards and aces have been dealt.

NOTE: the term "tens" used above means 10s, Jacks, Queens, Kings, and Aces.

When the deck is "heavy", you normally increase your bet for a new hand since it is more likely you will get a higher starting hand since more face cards and aces are in the deck than low cards.

NOTE: when playing with more than one deck, the Running Count information must be adjusted to a basis of a single deck. Otherwise, the information can be misleading. This is due to the fact that multiple decks will produce higher "heavy" and "light" count values since there are more high and low cards in the total deck. This is where the True Count comes in.

The True Count is normally the Running Count adjusted by the remaining decks to be played. This adjustment helps offset the misleading higher Running Count values resulting from playing with multiple decks. If you are playing with 3 decks and you estimate that 2 decks remain (1 deck has been dealt so far), a Running Count of +8 is reduced by a factor of 2 (8 divided by 2) to yield a "True Count" of +4.

When playing with a single deck, the True Count and Running Count are the same.

When playing with multiple decks, the Running Count will normally be higher than the True Count.

Displaying Counts During Play

You have the option to display the Running Count and True Count during play. They will appear on the main playing table just above the command buttons at the bottom of the window. As each card is dealt, they will be updated to show the count values as they change.

To access the window to turn on/off the card count display feature, press the button at the bottom of the Card Count Window.

<u>D</u>isplay

Custom Card Count Systems

This window allows you to customize the Running Count, True Count, and User Counts used by this blackjack program.

Cards:	Running	User	True
Aces:	-1	0	-
Twos:	1	0	-
Threes:	1	0	-
Fours:	1	0	-
Fives:	1	0	-
Sixes:	1	0	-
Sevens:	0	0	-
Eights:	0	0	-
Nines:	0	0	-
Tens:	-1	0	-
Jacks:	-1	0	-
Queens:	-1	0	-
Kings:	-1	0	-

In the upper left corner of the window, are the current settings for all three count systems. If a count system is based on individual card point values, these cells will contain a value from -5 to +5.

When this program first starts, it looks for the default card counts data file called ULTIMA21.CNT in the directory where this game was loaded from. If it finds this file, it will load it into memory and use it for the rest of the game. If you wish to use different values, you will need to access this window and change point values and/or calculation methods.

Changing Point Values

To change individual cell point values, simply move the mouse pointer over the cell you wish to change and press the left mouse button. This action causes the currently selected "point value" to be copied from the Point Values Group Box to the cell you clicked with the mouse.

Point	Point Values:			
.5	O +5			
O -4	O +4			
O -3	O +3			
O -2	O +2			
O -1	O +1			
() O				

To change the currently selected point value, click on one of the 11 available values (-5 thru

+5) in the Point Values Group Box. Once selected, whatever cell(s) you click will receive the point value you selected.

NOTE: Unless the True Count Calculation Method is "by Individual Point Values", the True Count cells will be grayed out and you will not be able to change their point values.

Changing The True Count Calculation Method

Normally, the True Count is calculated by taking the Running Count and dividing it by the number of remaining decks. You can change the calculation method to be the Running Count divided by remaining half-decks or to be calculated "By Individual Point Values".

If you select "By Individual Point Values", the True Count's cells will become active and allow you to assign point values to them.

<u>User Count</u>

The User Count is provided to allow you to experiment with various point value combinations (or systems) without changing the Running and True Counts.

The User Count is always active and can be displayed on the Main Playing Table by turning on the <u>Display Counts Feature</u>.

Changing the User Count cell values is performed just like the Running Count. Just select a point value in the Point Values Group Box and click the cell(s) you wish to receive the point value.

Reverting Back To The Defaults

If you make changes to the Count Systems and decide you wish to change them back to

the way they were before, press the **Defaults** button.

This will reset the Running and True Counts back to their original values. Please note the default values are considered to be those values that existed before the Customize Window was last accessed or last saved.

NOTE: The Defaults Button does not affect the User Count point values. The User Count has no "default" set of values and therefore cannot be reset back.

Saving Customized Card Count Values

To save all changes you make to the card count values, press the button. This will save all settings to a file called ULTIMA21.CNT and it will be located in the directory where this game was started from.

From then on, whenever this game starts, this file will be read into memory and its values will be used for card counting.

Including Buried Cards In the Counts

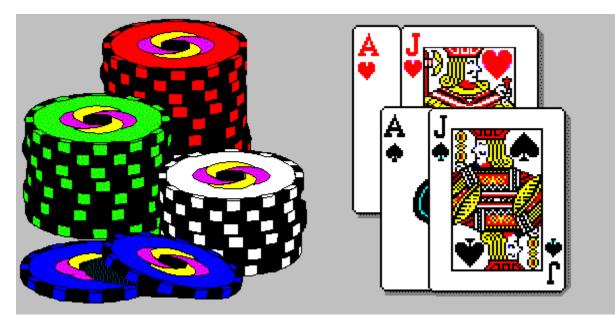
Normally, buried cards are NOT included in card counting calculations since these cards are never "seen" by the players at the table.

You may change this feature to include buried cards in the card counts by clicking on the "Yes" option in the Group Frame shown below.

Include Cards	Buried in the Counts:
⊖ <u>Y</u> es	۵ <u>N</u> o

If you are trying to "match" your counts to those maintained by this program, you should turn this feature OFF by selecting "No". Otherwise, the game will include buried cards in its count and you will not (since you never saw them). As a result, your counts will never match the game's.

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About Windows Blackjack

Ultima 21 Deluxe for Windows (tm)

Copyright (c) 1993-1994, All Rights Reserved Bitwise Software International, Inc.

> Author: Jay J. Falconer Phoenix, AZ

Entering Bets

There are several ways to change a player's bet. Most of which will bring up the Enter Bets Window as shown below.

Enter Bet	
Please enter a bet for th	is player:
Player Name: #2	Bank: \$500.00
Minimum bet: 2	Maximum bet: 500
Enter Bet: 5	•
Select an Amount: () \$1 (1) \$5 (10) \$25 (1)	\$50 \$100 \$250
Ok Give credit	Help

This window is used to enter a bet for a single player. The player's name is shown at the top of the window as well as his/her bank balance and the table's minimum and maximum bet limits.

NOTE: You may only change your bet <u>before</u> the start of a new hand. Attempting to change your bet after a hand has started is considered cheating and you will be asked to leave the casino.



You may enter a bet manually in the blue text field in the center of the window. Just type in the amount you wish to bet and press Enter or the Ok Button to accept the bet. If you type in an amount greater than the player's bank balance, an error will result.

To the right of the bet field is a control which allows you to quickly increase or decrease the bet amount with the mouse. Just place the mouse pointer over the 💽 or

If arrow and click the mouse button. This will change the bet amount accordingly. Holding the left mouse button down will change the bet continuously until you release the mouse button.

When the player runs out of money in his/her bank, the **Give credit** Button will become active. Pressing this button allows the player to bet more than his remaining bank balance.

NOTE: Please be sure the bet complies with the minimum and maximum bets allowed for this table.

Selecting a Pre-Programmed Amount

To select one of the pre-programmed bet amounts shown on the Enter Bet Window, use the mouse and click on one of the options in the Select an Amount group box shown below:

⊂Select an	Amount:						
O \$1	● \$ 5	\$10	\$25	\$50	\$100	\$250	

When you do, the bet amount field will change automatically. If any of the pre-programmed bet amounts are grayed out, this means that they do not conform to the table limits in effect and are not available for selection.

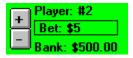
Accessing the Bet Window For All Active Players

To change the bets for all active players, press the **Bets** button located at the bottom of the Main Playing Table.

This will bring up the Enter Bet Window for <u>each active</u> player. When you select a bet for the first player and press the Ok Button, the Enter Bet Window will appear again for the next active player. This continues until all active players have been accessed.

Access the Bet Window For a Single Player

To access the Enter Bet Window for a single player, use the mouse pointer and click on the player's bet **square** on the Main Playing Table. Please see the example below:



Doing so will bring up the Enter Bet Window for this player only.

As discussed earlier, to change bets for all active players, use the **Bets** button at the bottom of the Main Playing Table.

Quick Bet Change Feature

An advanced betting feature is provided on the Main Playing Table and is located just to the left of each player's bet square.

	Player: #2
<u> </u>	Bet: \$5
_	Bank: \$500.00

The 🛨 button will increase the player's bet by 1 "base unit". The

button will decrease the player's bet by 1 "base unit". To press either of these buttons, move the mouse pointer over them and press the left mouse button. Holding the left mouse button down will cause the increase/decrease action to be performed multiple times.

A <u>Base Unit</u> is the bet amount selected the last time the Enter Bet Window was accessed. For example, if you select a \$10.00 bet from the Enter Bet Window, each time you press the

+ button, the player's bet will increase by \$10.00. If the bet amount was \$25.00, the new bet amount will be \$35. Press it again and it will be \$45.

To change the Base Unit amount, just access the player's Bet Window and select a new bet amount. Each time a new bet amount is selected from the Enter Bet Window, the new amount becomes the Base Unit amount for that player. Each player has their own Base Unit amounts.

Why Does The Bet Amount Keep Doubling?

When you Double Down, your bet is doubled and you get one card. If you lose the hand, then you lose the entire bet and your bank balance is reduced accordingly.

If you win the doubled hand, your bank balance is increased and the doubled bet remains on the table in the bet square. Just like in the real casinos, if you do not remove/reduce your doubled bet, you are <u>"letting it ride".</u> The next hand will then start and you will be playing the full doubled amount as your bet.

Installation

To install this blackjack game from the distribution diskette, simply copy the file "ULTIMA.EXE" to the desired directory ("\ULTIMA21" suggested) on your hard disk and run the program.

This is a self-extracting packed file and running it will unpack all the needed files and programs. Once self-extraction is complete, this file can be removed. However, you should always retain a copy of this file on diskette or tape just in case you need to reload it in the future.

NOTE: If you obtained a copy of this game from Compuserve or Ziff-Net, the file VBRUN300.DLL was not included in the packed file ULTIMA.EXE. This was done to save download time and related costs. The file VBRUN300.DLL is available in most BBS forums -- check with your forum's Sysop or search the BBS files by name. Some BBS Systems pack this file and call it VBRUN3.ZIP. To locate this file, perform a wildcard search such as VBRUN*.* or VB*.*.

There have been several versions of Visual Basic (v1.0, 2.0 and 3.0) and as a result there are several versions of the Visual Basic Runtime Library that all Visual Basic programs require. This program <u>REQUIRES VBRUN300.DLL</u> not any other version of the Visual Basic Runtime Library.

If a message appears asking you whether or not you wish to replace an existing file in the ULTIMA21 directory, answer with a "Y". DO NOT USE OLD FILES WITH A NEW VERSION - FATAL ERRORS WILL RESULT.

To start the blackack game, run the file ULTIMA21.EXE from Windows File Manager.

The icon file ULTIMA21.ICO contains the icon for you to use if you wish to add this game to your Games Program Group or set one up just for this blackjack game.

Please see the Windows Users Manual OR this help file for more instructions on adding Program Items and setting up Program Groups from the Program Manager.

Files Required For This Program To Run

This program was written in Microsoft's Visual Basic V3.0 and REQUIRES the following files:

- BSISOUND.DLL Deal card sound effect routines.
- FXTOOLS.DLL Special Effect Routines (Licensed).
- MHDES200.DLL Special Effect Routines (Licensed).
- MHRUN200.DLL Special Effect Routines (Licensed).
- QCARD.DLL Steven Murphy's Card Drawing Routines (Freeware).
- QPRO200.DLL Special Effect Routines (Licensed).
- VBRUN300.DLL Microsoft's Visual Basic Runtime Library (Licensed).
- RSW31.DLL RealSound Runtime Library (Licensed)
- READ.ME Last Minute Information You Should Read
- ULTIMA.ZIP Self-extracting packed distribution file.
- ULTIMA21.EXE Unpacked Windows Blackjack Game.
- ULTIMA21.HLP Help File for this program.
- ULTIMA21.ICO Icon for adding to Window's Program Manager.

- ULTIMA21.CNT Custom card counts save file.
- ULTIMA21.DEF New game default settings file.
- ULTIMA21.SAV Saved "NEW" Game.
- ULTIMA21.SGY Default playing strategy file.
- BACKUP.CNT backup copy of file ULTIMA21.CNT.
- BACKUP.DEF backup copy of file ULTIMA21.DEF.
- BACKUP.SAV backup copy of file ULTIMA21.SAV.
- BACKUP.SGY backup copy of file ULTIMA21.SGY.
- *.WAV various digitized sound and speech files.
- CSGROUP.VBX Licensed VB Control.
- FXIMAGE.VBX Licensed VB Control.
- FXLABEL.VBX Licensed VB Control.
- MHMQ200.VBX Licensed VB Control.

Be sure all of these files are all located in the **SAME** directory where you loaded and unzipped ULTIMA.EXE.

NOTE: Occasionally, Microsoft will release an updated VBRUN300.DLL file which will correct some bugs in their runtime modules. You should periodically compare the date/time/size of this file to the latest one available on CompuServe in the Microsoft MBASIC+ Forum. If a later one is released, please download it and place it in the ULTIMA21 directory. This blackjack game will use it automatically from then on.

Placement of VBRUN300.DLL

When this game starts, it looks for all of its needed DLL and VBX files in the same directory where it was loaded from. If it cannot find a needed file, Windows takes over and looks for the needed file in its default system directory called \WINDOWS\SYSTEM.

Be sure all of the needed files like VBRUN300.DLL are located in the same directory as ULTIMA21.EXE or in the default directory \WINDOWS\SYSTEM. <u>CAUTION!</u> We recommend you place all files that came with this program in the same directory (\ULTIMA21 is recommended). Do not blindly place unnecessary files in the Windows System Directory. There is one exception to this rule.

Since all Visual Basic V3.0 Programs require Microsoft's Visual Basic Runtime Library VBRUN300.DLL, you could end up with many copies of VBRUN300.DLL on your system (one for each VB 3.0 program).

Therefore, you may wish to MOVE the VBRUN300.DLL file from this game's startup directory to the \WINDOWS\SYSTEM directory. This way, all Visual Basic Programs on your system can share this single copy of VBRUN300.DLL. You could remove all other copies of it from your hard disk to save space.

By placing VBRUN300.DLL in the Windows System directory, all VB 3.0 programs will have access to it. Only one copy will be needed.

Casino (Game) Defaults

Each time this game starts, it looks for a Default File called ULTIMA21.DEF in the same directory this game was started from. If it finds this file, the settings stored in it become the "casino defaults" for all new games. If it does not find this file, it uses its own internal programmed settings as the casino defaults.

This game allows you to customize the game defaults and store them in this file. Some of the game defauts include: the table rules, number of players, bank balances, playing strategy, etc... **You can customize almost every feature** in this game and save them in this Game Defaults File.

THERE CAN ONLY BE ONE DEFAULT SETTINGS FILE

To save the current game settings as the defaults, click on the FILE menu & select the SAVE SETTINGS AS DEFAULT option.

This will save the current settings into a disk file called "ULTIMA21.DEF". Each time a new game is started, this game will read this file and set itself up according to the settings stored in this file.

Remember: in order for this game to locate and load this file automatically, it must reside in the same directory as this game. If it cannot find this file, it will revert back to its own "factory" or internal settings.

Starting This Game

To start this game, locate and click on this game's icon from Window's Program Manager.

The game's initial window will appear, followed by the parking garage picture, and then the Select a Casino Window will appear.

Selecting a Casino To Play At

When the following screen appears, select one of the four available casinos and press the

Ok button:



Once completed, the Casino Manager Window will Appear.

To exit this game and return to Program Manager, press the Exit Button.

Casino Manager Window

Casino Manager					
	"Hello & welcome, friends. My name is Frank Falconio and I will be your host today while you are visiting our world famous casino. If I can make your stay more comfortable, please let me know."				
	"I would like to learn each of your names before I find you a table to play at. To enter your name, press the Names Button below. If you wish to play anonymously, just press the Play Button."				
	<u>Play</u> <u>Names</u> E <u>x</u> it <u>H</u> elp				

When the Casino Manager Window appears, you have the option to jump ahead and begin

playing blackjack by pressing the Button. Doing so will take you to the Main Playing Table.

Optionally, you may press the Button and provide the Casino Manager with the names of the each player.

Adding This Game to Program Manager

To add this game to one of your existing Program Groups in Window's Program Manager, you will need to follow these few simple steps.

Be sure Program Manager is currently active on your screen.

Then, click on the Program Group you wish to add this game to. This will make the Program Group the active group.

Next, select "NEW" on the "FILE" menu at the top of Program Manager. This will present the following window:

😑 🛛 New Program (New Program Object				
New	OK				
○ Program <u>G</u> roup	Cancel				
● Program <u>I</u> tem	<u>H</u> elp				

Be sure the Program Item Option is selected as shown and press the OK Button.

Next, the following window will appear:

	Program Item Properties	
<u>D</u> escription: <u>C</u> ommand Line: <u>W</u> orking Directory: <u>S</u> hortcut Key:	None <u>R</u> un Minimized	OK Cancel <u>B</u> rowse Change <u>L</u> con
		<u>H</u> elp

Since the program fields are blank, we will ask Program Manager to assist us in filling them out. Press the "BROWSE" button to have Program Manager help us select a file (ULTIMA21.EXE) from your hard disk to be added to the Program Group.

Next, navigate your hard disk directories until you have found the file "ULTIMA21.EXE" in the Windows Blackjack directory. The file select window should look something like the following:

	Browse	
File <u>N</u> ame: *.exe;*.pif;*.com;*.bat ultima21.exe	Directories: c:\ultima21 C:\ C:\ Ultima21	OK Cancel <u>H</u> elp
List Files of <u>T</u> ype: Programs ±	Dri <u>v</u> es: c: ms-dos_5	

Click on ULTIMA21.EXE and press the OK Button.

The previous window will be displayed with the fields filled in from the BROWSE function.

Now you need to give this game a title. In the example below, we filled in the first field with "WINDOWS BLACKJACK". You of course can call this game program whatever you would like. This title will appear under the icon we are adding to the Program Manager Group.

Program Item Properties			
<u>D</u> escription: <u>C</u> ommand Line: Working Directory:	Windows Blackjack C:\ULTIMA21\ULTIMA21.EXE	OK Cancel	
<u>S</u> hortcut Key:	None	<u>B</u> rowse	
\$	 <u>R</u> un Minimized	Change <u>I</u> con <u>H</u> elp	

When this is done, be sure the icon that displays on this window is the icon as shown above. If not, we need to select it manually from the ULTIMA21.EXE file.

To do so, click on the "CHANGE ICON" Button. A new window will appear and you should see

the icon e on it. If not, you may have selected the wrong file. It should have been "ULTIMA21.EXE".

Once you see the correct icon, press the OK Button. Now the previous window will reappear and the correct icon will be displayed as shown above.

Now click the OK Button and this game should appear on the Program Group we selected earlier.

If you have any problems, please consult your Window's Users Manual for more information on adding Program Items.

Main Playing Table Buttons

When the Main Playing Table is shown, there are a series of command buttons shown at the bottom. Some of which will be disabled (grayed out) and some of which will be enabled.

At the start of a new hand, the DEAL button will be the default button and should be used to deal the next hand. To deal, move the mouse pointer to the DEAL button and press the left mouse button.

The other buttons will be enabled/disabled depending on what is happening at the table. For example: the DOUBLE button will only be enabled when a player's hand contains two cards that allow for a double down.

The same is true for the SPLIT and SURRENDER buttons as well. The status of these two buttons is based on the double down and split rules for the table and on the cards currently dealt to the player.

Hit	<u>S</u> tand	<u>D</u> ouble	Sp <u>l</u> it	S <u>u</u> rr
-----	---------------	----------------	----------------	---------------

HIT and STAND Buttons

The HIT and STAND buttons are always enabled during any player's hand. The HIT button will deal one card to the player. The STAND button will tell the Dealer the current player's hand is done and control will transfer to the next player's hand. If there is not a next player, control will transfer to the dealer's hand.

NOTE: the current player's hand with control is designated by the arrow on the Main Table.

NOTE: Just like in the casinos, player #1 is the RIGHT most player at the table and play passes from each player <u>RIGHT to LEFT.</u>

DOUBLE DOWN Button

The DOUBLE button will allow the player to double his/her bet and receive one card and one card only. Play will then transfer to the next player's hand. There are several double down rules you can customize and control. They are accessed from the OPTIONS MENU on the Main Playing Table.

<u>Note:</u> When you Double Down, your bet is doubled and you get one card. If you lose the hand, then you lose the entire bet and your bank balance is reduced accordingly.

If you win the doubled hand, your bank balance is increased and the doubled bet remains on the table in the bet square. Just like in the real casinos, if you do not remove/reduce your doubled bet, you are "letting it ride". The next hand will then start and you will be playing the full doubled amount as your bet.

SPLIT Button

The SPLIT button will break up a pair into two hands. This is normally allowed on like pairs

(8 and 8 or A and A) or on a pair of face cards (J and Q). When a hand is split, one card is moved to a second hand (called the split hand) and the player must match the bet of the original hand (doubles the bet).

There are several splitting and resplitting rules which you can customize and control. They are available from the OPTIONS MENU on the Main Playing Table.

SURRENDER Button

The surrender button allows you to give up or surrender your hand to the Dealer when you have a "bad" hand (like 16 against a Dealer King). The cost is one-half your original bet and surrendering is normally only allowed while the player still has the first two original cards dealt to him.

The surrender rules are customized and controlled from the OPTIONS MENU on the Main Playing Table.

The Rest of the Buttons

Deal Bets Shuffle Peek Strategy Exit Speed

DEAL: this button begins a new hand. At the start of a new hand, the DEAL button will be the default button and will deal two cards to each active player at the table.

BETS: will prompt you for <u>each active player's</u> new bet amount and is available only at the start of a new hand. For more information on betting, please see the <u>Entering Bets Help</u> <u>Section</u>.

SHUFFLE: will request that the Dealer to reshuffle the deck before the very next hand.

PEEK: will allow you to peek (view) at the next few cards to be dealt from the deck.

STRATEGY: will access the Playing Strategy Window where you may view, change, save, or load the playing strategy tables for this casino. The playing strategy tables are used in conjunction with the automatic decision help and the HINT button.

A playing strategy table consists of hit, stand, double, split, and surrender decision rules for a player's hand. Playing decisions are based on what the Dealer is showing in his hand and what the player currently has in his hand. For more information, please see the <u>Playing</u> <u>Strategy Help.</u>

EXIT: will allow you quit playing this blackjack game.

SPEED: will access the Set Game Speed Window which allows you to control how fast the cards are dealt by the dealer.

Redra <u>v</u>
Hi <u>n</u> t
Sa <u>v</u> e
<u>C</u> ount
S <u>t</u> ats

REDRAW: just updates the playing table and redraws all controls, cards, and messages.

HINT: will display a window that displays what the correct playing decision is. This is based on the current playing strategy tables in effect.

SAVE: will save the current game to disk. Saved games can be resumed later. Both the SAVE and RESUME game features are available from the FILE MENU on the Main Playing Table.

COUNT: will display the current card counts and statistics. This shows the number of cards dealt (ace, two, three...) as well as other card counting information. For more information, please see <u>Card Count Stats Help</u> or the <u>Custom Card Counting Systems Help</u>.

STATS: will display the current playing statistics for each active player and for the Dealer. For more information, please see the <u>Player Statistics Help.</u>

Saving and Restoring Games

This game allows you to save a game and resume playing it at a later time. This should not be confused with the saving of default settings explained in the <u>Casino Defaults Help</u> <u>Section.</u>

You may save as many different games as you like and resume playing them at any time in the future.

Saving a game saves everything about the current game so you may resume playing <u>exactly where you left off</u> at a later time. When you save a game, it is normally stored in a disk file called "ULTIMA21.SAV". However, this game provides for <u>multiple saved games</u> by allowing you to override and specify the save file's name.

To save a game, click on the FILE menu and select either the SAVE or the SAVE AS option. The SAVE option will simply save the current game to the "current save file name" (normally ULTIMA21.SAV). This action is the same as pressing the Save Button at the bottom of the Main Playing Table.

If you choose the SAVE AS option, a file name prompt window will appear and you may select or enter a save file name you prefer. You will always be required to enter a file extension of ".SAV" when entering a save file name. The name you enter to SAVE AS will become the new "current save file name".

Restoring a Saved Game

At any time, you may resume a previously saved game by clicking on the FILE menu and selecting the RESUME GAME option.

You will be prompted for the name of the save file you wish reload and resume playing. The default is "ULTIMA21.SAV" but you may select any valid save file from the file list displayed. All saved game files end with the extension ".SAV".

When you resume a saved game, you will restart play exactly where you left off. All stats, cards, players, etc... will be just as you saved it previously.

Setting Up Multiple Casinos

This game only allows only 1 default settings file that can used when a new game is started. The <u>default settings file</u> CANNOT be used to set up the rules of multiple casinos.

Instead, use the <u>save/resume game</u> features to do so. Normally, the save/resume features are used to save games already in progress so they can be resumed at a later time.

However, they can also be used to set up multiple casinos.

To use the save/resume features to set up multiple casinos, follow these steps:

1) Start a completely new game by selecting NEW GAME from the FILE MENU. This will clear the table, reset all game settings, and load the default settings file.

2) Set all the casino playing options as played at your favorite casino. When everything is set, use the SAVE AS option from the FILE MENU. Then enter the name of the casino followed by the .SAV extension. Be sure the casino name is no more than 8 characters long.

Do this for each casino you wish to set up. When you are finished, all your favorite casinos will be defined and saved in multiple "save" files.

3) Use the RESUME feature from the FILE MENU anytime you wish to switch play to one of your saved casinos. Just click on the file name saved in step 2, and you will begin a new game at that casino with that casino's rules.

Since this game allows you to save/resume as many games as you wish, you can use the steps above to save as many different casinos as you wish.

>>>> BE SURE that step 2 is done immediately after step 1 and before the DEAL BUTTON is pressed. This insures that when you resume the saved game, you will always be starting with a completely new game. In reality, you are actually resuming a previously saved game that was carefully done at the start of a new game. <<<<

Auto Decision Help

When this feature is active (see the OPTIONS MENU on the Main Playing Table), the Dealer will help you make playing decisions. That is, the Dealer will tell you whether you should hit, stand, double down, split, or surrender your hand.

Auto Help is always based on the current <u>playing strategy tables</u> in effect at the table. Since you can customize the playing strategy tables, you also control the Auto Help decisions that are displayed or required by the Dealer.

There are two types of Auto Help:

- a) Anticipation Help
- b) Correction Help

Anticipation Auto Help

Anticipation help will display the correct playing strategy for the current player's hand. This will be displayed just below the Dealer's cards and will be displayed at all times during the player's hand.

This feature "anticipates" or displays suggestions (like HIT, STAND...) to assist you in making correct playing decisions. You may still play the hand anyway you like since this type of help is only for assistance.

Correction Auto Help

Correction help will maintain a close watch on your play to insure you follow the current playing strategy tables. Instead of displaying the correct playing strategy at the top of the window, the Dealer will halt your play and inform you when you do not make the correct playing decision.

For example, if you click the Hit Button when doubling down is the correct decision, a window will appear telling you HIT is not correct and that DOUBLE DOWN is the correct choice.

This feature REQUIRES you to play along with the current playing strategy tables.

Auto Focus Help

Another feature available while Auto Help is active is called Auto Focus. An option button on the table has "focus" when it is the default button to be executed when the Enter Key is pressed.

Auto Focus sets the focus to the correct playing option button based on the current playing strategy tables. This way all you need to do is press the Enter Key and the correct decision will be made for you. Great for new blackjack players.

Sound and Speech Effects

This blackjack game comes with several digitized sound and speech files which will enhance your enjoyment of this game.

Normally, digitized sound files (known as "wave" files) require the use of an expensive addin sound card such as those available from Microsoft, Creative Labs, or Adlib. Users without one of these sound cards have had to do without the added pleasure of digital sound in their Windows Games and Application Programs.

That is, UNTIL NOW.

We have taken great pride in providing a means for our digitized sound files to be played through BOTH an add-in sound card and thru your PC's speaker! This allows for digitized sound enjoyment for all Windows Users. Now everyone call play and hear our Blackjack game. No sound card is required.

When this game is shipped, the default mode for sound play is through the PC Speaker. If you have a sound card, simply access the SOUND option on the main table's menu and select one of the two sound card sound output options.

Below is the Sound Effects Control Window that appears when you access the Sound Option from the Main Table's Menu System.

Sound Effects Control			
Sound/Speech Effects: © On Off	● PC Sr ○ Adlib	Send All Sound To: PC Speaker Adlib Sound Card Multimedia Sound Card	
Select Sounds To Be /	Active:	Voice Type:	
Deal Card Sound Effect:	🛛 YES	Male	
Shuffle Cards Sound Effect:	🛛 YES		
Button Pressed Speech:	🗆 no		
Hand Total Speech:	🛛 YES		
Winner/Loser Speech:	🗆 no		
Other Game Actions Speech	: 🛛 YES	<u>o</u> ĸ	
For increased dealing speed, game speed, and to lower resource usage, turn all the sound effects OFF. Be sure all wave files (*.WAV) are placed in this program's startup directory. If this program cannot locate the WAV files, digitized sound will be NOT be available.			

Sound/Speech Effects:

This option activates or deactivates the sound system built into this blackjack game.

Turning the sound OFF will disable all sound and speech effects throughout the game. When you click on this option, the other options on this window will disappear.

Turning the sound system ON makes the other options appear again and also allows you to customize how the sounds are played and which sound effects are active.

Send All Sound To:

There are 3 options for playing the sound and speech effects. Select one of the three options available. This tells the game program where you want sound to be played from.

PC Speaker:

If you do not have a sound card, then select the PC Speaker as the sound output device from the Sound Window. Almost all of the wave files shipped with this program can be played through your PC Speaker.

However, due to the limited design of the PC Speaker system, a couple of the wave files sound terrible (like the shuffle deck sound effect). Therefore, when sound is being sent to the PC Speaker, this game will <u>display</u> the deck shuffle instead of playing the shuffle deck sound effect.

Other Sound Card Options:

If you have an Adlib Sound Card installed and running in your system, then select the Adlib option as the sound output device from the Sound Window.

If you have one of the other types of multimedia sound cards, then select the last sound output option on this window. This one works with most sound cards from Creative Labs and Microsoft.

Which Sound Output Option Do I Choose?

If you do not know which sound card you have, then try all three of the sound output options and stick with the one that sounds the best to you. If you select the wrong choice, you will simply hear nothing (no sound effects) when the game is played. In this case, try another option.

<u>Note:</u> be sure this game can find the wave files (*.WAV) in it's startup directory. This is the directory where ULTIMA21.EXE is located and run from.

<u>Note:</u> be sure you have turned on any external speaker system that may be installed on your computer system. Otherwise, you won't hear anything.

Select Sounds To Be Active:

You have complete control over which sound and speech effects are active during game play.

Use the space bar or the left mouse button to toggle each option from YES (checked) to NO (unchecked). As you change each option, the YES and NO phrase next to the check box will

change to identify each check box's setting.

Deal Card Sound Effects:

This option controls whether or not the "click" sound is generated for each card dealt. This is not a digitized wave file and turning this option off will NOT increase the game's speed very much. Normally, this sound is left active (YES).

Shuffle Cards Sound Effect:

When the Dealer shuffles the deck, the "shuffling cards" wave file will be played when this option is set to YES (on). If set to NO (off), then the game will display the deck shuffle instead of playing the sound effect.

<u>Please note:</u> If you are directing the sound output to the PC's Speaker, the game will NOT play the sound effect. Instead, it will display the card shuffle on the screen. This is required since the shuffle cards wave file sounds terrible when played through the PC Speaker. Therefore, we will display the card shuffle instead.

Buttons Pressed Speech:

There are five action buttons on the main playing table. They are HIT, STAND, DOUBLE DOWN, SPLIT, and SURRENDER. When you turn on this sound effect, the button's action will be spoken by the computer. For example, if you press the HIT button, the computer will say "hit". Only these five buttons "action" are spoken by the computer.

If you do not want the action buttons speech active, set this check box to NO (off).

Hand Total Speech:

Set this option to YES (on) if you wish to have the computer announce the hand total for each active player's hand. When a hand is first dealt, the computer will say "Player 1 has..." and then the hand's total (like "17"). As the same player takes additional cards, the computer will just say the hand total (not "player 1 has...").

When this option is on, the computer will announce when any player or the Dealer has blackjack in their hand. If you "bust" (exceed 21), the computer will say "too many".

Turn this option off (NO) to disable all hand total speech.

Winner/Loser Speech:

When a hand is over and the Dealer has taken his/her cards, the computer can announce whether each player has won, lost, or pushed. This option controls this speech. Set the check box to YES to activate the hand results speech. If you do not want to hear the hand results, turn this feature off (NO).

Other Game Actions Speech:

Other areas of this game have speech associated with them. When this is active (YES), you will hear speech when you press the HINT or EXIT buttons, ask for drinks, or when the Dealer offers insurance to the players.

Turn this option off (NO) to disable other game actions speech.

GAME SPEED and SOUND EFFECTS:

When sound effects are active, this game must take time out to play the various wave files and this results in slower game speed and higher memory usage.

To reduce both of these, turn all sound effects OFF. On the other hand, setting only a couple of the sound effects on will save some memory and improve game speed in the disabled areas. You will need to experiment with each option to find the combination that best suits you and your system.