|  |  |
| --- | --- |
| Date | Course: 11056 Video Game Design |
| 5Jan | Map Network Drive  Classroom Management  Website instructions  Software Updates, Programming Folders, YouTube Open.  Everyone Open Visual Studio  Half the Class has never programmed: They must complete Visual Studio 2010 Certification first before beginning.  The Other Half of the Class will begin R&D for Game Code, Preferred Language, and refresh themselves with Visual Studio 2010. If you have never taken a programming class before, you need to complete the Microsoft VisualStudio2010 Instructions located on MrLiesingerYDrive, under VisualStudio2010. But first watch the first 12 videos located at <http://vtc.com> under the course MicrosoftVisualStudio2010. You will save your first **HelloWorldLname** Program to turn in. |
| 7Jan | Research Career Opportunities for Video Game Design.  Write down your findings in Word.  Take screenshots of pictures that are cool.  Make sure you note the websites you have visited.  Note the job position titles, geographic locations, and salaries involved.  Make sure you note the job descriptions and the duties.  That’s enough!  How to become a game designer: <http://www.schools.com/visuals/how-to-become-a-game-designer.html>  Video Game Designer Best Jobs: <http://money.cnn.com/pf/best-jobs/2013/snapshots/15.html>  Game Design Camp: <http://www.nyfa.edu/summer_camp/programs/game-design/>  How to: <http://www.degreetree.com/resources/how-to-become-a-video-game-designer#types>  Project: Adventures in XNA – Visual Basic Game Programming Tutorials. (Full Playlist)  <http://www.youtube.com/playlist?list=PLE71169A8677DB0E8>  Here are some examples of games: <http://www.vbtutor.net/VB_Sample/sample.html> |
| 11Jan | Now we are going to begin our first game. We are going to make Minesweep and Modify it into the Irish Game Pot of Gold. (SDSU’s 2016 PDC Program: <http://www.sdstate.edu/eecs/program-design/upload/2016-PDC-Problem.pdf> )  First let’s begin with Minesweep.  MinesweepTute1: <https://www.youtube.com/watch?v=Un-MzVdT_kE&list=PLA31D2C3686E66177>  MinesweepTute2: <https://www.youtube.com/watch?v=B9hjJrAt8P4&index=2&list=PLA31D2C3686E66177>  MinesweepTute3: <https://www.youtube.com/watch?v=gczrSh5pSes&list=PLA31D2C3686E66177&index=3>  MinesweepTute4: <https://www.youtube.com/watch?v=S3HKZ-0VpaA&list=PLA31D2C3686E66177&index=4>  MinesweepTute5: <https://www.youtube.com/watch?v=vmqmJzYkXVU&list=PLA31D2C3686E66177&index=5> MinesweepTute6: <https://www.youtube.com/watch?v=c1rEOgH8tDg&list=PLA31D2C3686E66177&index=6> MinesweepTute7: <https://www.youtube.com/watch?v=Lf4I-m0w2yg&index=7&list=PLA31D2C3686E66177>  MinesweepTute8: <https://www.youtube.com/watch?v=jHE92oCAxx8&index=8&list=PLA31D2C3686E66177>  MinesweepTute9: <https://www.youtube.com/watch?v=eQv57I_6wuM&list=PLA31D2C3686E66177&index=9>  MinesweepTute10: <https://www.youtube.com/watch?v=9hU4PneX0Hk&list=PLA31D2C3686E66177&index=10>  MinesweepTute11: <https://www.youtube.com/watch?v=amxdtfKUcCg&index=11&list=PLA31D2C3686E66177>  MinesweepTute12: <https://www.youtube.com/watch?v=uJ8jmXiiXG4&list=PLA31D2C3686E66177&index=12>  MinesweepTute13: <https://www.youtube.com/watch?v=MAiGdYnobnQ&index=13&list=PLA31D2C3686E66177> MinesweepTute14: <https://www.youtube.com/watch?v=vcuqEdx22yQ&index=14&list=PLA31D2C3686E66177>  MinesweepTute15: <https://www.youtube.com/watch?v=YJP09xsCV9Q&index=15&list=PLA31D2C3686E66177>  MinesweepTute16: <https://www.youtube.com/watch?v=tGvJJNvoiKY&index=16&list=PLA31D2C3686E66177>  MinesweepTute17: <https://www.youtube.com/watch?v=InPskNHC5Po&list=PLA31D2C3686E66177&index=17>  MinesweepTute18: <https://www.youtube.com/watch?v=EaNwXgTK3Gc&list=PLA31D2C3686E66177&index=18>  MinesweepTute19: <https://www.youtube.com/watch?v=Tl2-fU8YLGc&list=PLA31D2C3686E66177&index=19> |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| 13Jan | Begin our first example game (Tic Tac Toe) in C Sharpe Parts 1 & 2: <https://www.youtube.com/watch?v=p3gYVcggQOU>  <https://www.youtube.com/watch?annotation_id=annotation_2866556309&feature=iv&src_vid=p3gYVcggQOU&v=mRg4FNvxjjo#t=32m34s> |
| 15Jan | Grade the Design Phase of the Current Games each student is working on.  Have each student email the links for games they have found.  Review the TicTacToe Link C#.  Have Students change their language in the editor Studio 2010.  New Project  Make sure you set the language here to C# (The way you tell is when your Form1 comes up, it will have an extension of “.cs” instead of “.vb”  Name Project  WindowsApplications  Run blank project  Change form’s “ShowIcon”  Change form’s “Text”  Change form’s “MaximizeBox”  Menu for Closing, Starting, Help  Drag in Menu Strip  Build Sub Menu  Use buttons for the Squares  Button Text  Changing Fonts  Name each object by column and row  Select Objects to Review Event Handlers (different for each object)  Review the “shell of methods” in coding  Choose Message Box “show-method” two parts (1st string text message, 2nd string caption textbox)  Code exit.  Run  Tutorial stop: 9:13 |
| 20Jan | Begin Tutorial: 9:14  Exit Menu, Event Handler, Code End  Set Form Start Position to Center  Button Enabled  Set Button Text to Either an “X” or an “O”  Then Disable the Text on the Button so no one can overwrite it  Create the same generic Object event handler for each button “Click” called “Button\_Click”  Create a Boolean Variable called “Turn” within public class  Set the Variable “Turn” to equal “True”  Define True for the Variable Turn as “X Turn”  Define False for the Variable Turn as “Y Turn”  Must Keep Track of the Number of Total Turns Taken  If the Number of Turns reach 9, then the game is a draw.  Create an Integer Variable called “TurnCount”  Initialize the Integer to zero  End 12:12 |
| 22Jan | Begin Tutorial 12:13  How do we get the X or the O to show up on each button.  Generic Buttons Handlers As Objects Pass the Event as Parameters  Passes as Objects even though we know they are buttons  Create a Button Event and cast (“sender”) this generic “Object” as a Button (ie you are making the sender object a button and storing it in “b”)  Example: Button b = (Button)sender;  Now we want to look at the button properties  Whose Turn is, if Boolean X is True place an x in the box, else Boolean Y is False then place an O  Next Flip the Turn from True to False and Back again upon each turn.  Disable each button when clicked and labeled.  Check for a Winner after each move by creating “CheckForWinner”  Within this “Check for Winner” method you can  For Each Control on your WinForm, Evaluate Up/Down, Left/Right, Diagnols.  OR  YOU CAN SET UP IF STATEMENTS FOR EACH BY REFERENCING THE BUTTON NAMES IN A FORMULA.  Copy each If statement formula and then simply change the references per button.  Finally call the method from the Button Click event  Example: CheckForWinner();  End Video at: 18:20 |
| 26Jan | Continue Working On Tic Tac Toe  Resume Tutorial at 18:20  If there is a winner, have a message box show the win and who the winner is by creating a string “Winner”, If Statement the “Turn”, and that determines whether or not “X” or “O” shows.  Run, Debug the text values for each button because they all are empty and since they “match”, the computer thinks there is a winner. Debug by requiring more than just the “text” properties to match but adding in the enabled property as an addition requirement within each if statement.  Create a “DisableButtons” sub  Disable each button on the form by converting all of the Controls on the form  Set Controls to c  Make Buttons b equal to c  Disable c by have b equal false  End Tutorial at 25:15 |
| 28Jan | Resume Tutorial at 25:25  Call the "DisableButtons” method from the “IfThereIsAWinner” sub  Place a “Try” and “Catch” block method around the code for Diabling buttons because when we set every control to be disabled, that also includes the menu strip and they are not stored as “b”.  Right now you have only the “Horizontal Check” completed.  Now make If Statements for “Vertical Check” and “Diagonal Checks”  Have the board reset for a new game off the menu strip  This ends Video Tutorial 1.  Now Begin Video Tutorial 2.  Make a Count of Whose turn it is and how many they have.  Make a Count of How many wins for each player.  Also include how many “Draws”.  This completes TIC TAC TOE in C# |
| 1Feb | Now we are going to begin a new Memory game in Visual Basic. The YouTube Title is “Visual Basic 2013 Express – Easy Memory Game Tutorial Part 1: <http://www.youtube.com/watch?v=HOPV3A3frc0>  WindowsFormApplication  Graphical User Interface  Picture Boxes  Arrays  Naming Conventions  Resources  Strings  Variables  Labels  Players |
| 3Feb | Finish the Memory Game in VB. |
| 5Feb | Begin the Pong Tutorial Below: <http://www.youtube.com/watch?v=O8eiHB8mxs8>  FileManagement  Forms  If Else Then Statements  Labels  Levels of Difficulty  Naming Conventions  Panel  Picture Boxes  Object Properties  Timers  Accelerations  Number of Players  Artificial Intelligence  Sound |
| 9Feb | Continue Working on Pong in VB. |
| 11Feb | Finish the Pong Tutorial Above. |
| 17Feb | We will now begin the Game of Shuffle in VB: <https://www.youtube.com/watch?v=JqY-PWRyseQ>  Begin by watching the game.  Play the Game.  Develop a GUI  Pseudo Code. |
|  | Continue Shuffle  Form  Pictures  Resources  Null  Buttons |
|  | Continue Shuffle.  Button Property FlatStyle  Button Property Font & Size Button Object Copy  Buttons Align  Randomizing |
|  | Continue Shuffle  Form  Button  Properties  Graphics  Modules |
|  | Continue Shuffle  If Else Then Statements  Check for More  Check Solved  Splash Screen with Rules  Message Box |
|  | Continue Shuffle  Dims for Variables  Counters  Tool Strips for Menus  Do While Loops  For Next Loops  Nesting |
|  | Continue Shuffle  Replace the Picture Boxes with the Text Property of Each Button  Run the Program |
|  | Now we will begin the game of Frogger.  R&D |
|  | Pseudo Code  Object/Event Table  GUI  Splash Screen  Rules Explanation  Msg Boxes |
|  | Forms  Dim Variables as Booleans  Dim Variables as Integers  Picture Boxes  Timers  Backgrounds  X,Y Coordinates |
|  | Regions  Traffic  Movement  CheckCollision  Win or Reset  KeyDown, Moves the Frog Left, Right, Up, Down  Set Frogger Size and Properties  Location  Color  Maintain the Frogger’s size and dimension while moving through If Statements nested within the Select Case  KeyCode Method using Keys A, W, S, & D.  Once the Frogg experiences a collision, the Frogger needs to be reposition back to its original starting position  through the use of another nested If Statement inside the same Select Case KeyCode Method using the Enter  Key.  Make a Labels to Inform the User/Player to Press Enter  Lose: Restart the game, ie pressing Enter will reposition the Frogger and the game can then be started over.  This label becomes visible on collision, disappears on hitting Enter.  Win: Restart the game, ie pressing Enter will reposition the Frogger and a new game can then be started.  This label becomes visible on the frog reaching the other side of the road, disappears on hitting Enter. |
|  | Frogger Cont.  Private Subs  Form1KeyDown  TrafficTimer  CollisionDetection  GameOverTimer  GameOver  Forms  Resources  Case Structure  Buttons  Picture Boxes |
|  | Frogger Cont.  Animation  Detection  Collision  Client Rectangle  Regions  If, Then, Else Statements  Frogger Cont.  Speed  Acceleration  Levels  Object Properties  File Management  Comments  Runs |
|  | Begin Black Jack  R&D  Table Of Events  Pseudo Code |
|  | Black Jack Continued  Forms  Resources  Shuttle/Randomize  Picture boxes  Labels  Msg Boxes  Butons |
|  | Black Jack Continued  Object Properties  If Then Else Statements  Calculations/Sums  Dim Variables  Timers |
|  | Black Jack Continued  Double Down/Splitting Hands  Action Options for 1 or 11  Bets/Wagers  Kitty  Insurance for Black Jack |
|  | Black Jack Continued  Check Win/Bust  Play Again  Splash Screens  Comments  Runs |
|  | Turn in Black Jack  Hand Out Rubric for Final Project  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 1- Building a Game Loop and Frame Counter: <http://www.youtube.com/watch?v=XV2HFzbKOJI>  Visual Basic Game Programming Tutorial Part 2- Handling Mouse Input: <http://www.youtube.com/watch?v=YSMbnIAELxI> |
|  | Continue Your Final Project Building Your Own Game.  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 3- Graphics and Tile Mapping: <http://www.youtube.com/watch?v=ycKo_NOBAYU> |
|  | Continue Building your own Game  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 4 - Key Input and Character Movement: <http://www.youtube.com/watch?v=69QrAV9ZWug> |
|  | Continue Building your own Game  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 4 – Update – Improved - Key Input and Character Movement: <http://www.youtube.com/watch?v=pU_WTI7sElc> |
|  | Continue Building your own Game  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 5 – Transparent Brushes and Custom Dialog Boxes: <http://www.youtube.com/watch?v=59X-TuQA3wA> |
|  | Continue Building your own Game  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 6 – Terrain Collision (Improved for Free Movement): <http://www.youtube.com/watch?v=aNyj9su0wk0> |
|  | Continue Building your own Game  Remedial Game Fundamentals  Visual Basic Game Programming Tutorial Part 7 – Saving and Loading: <http://www.youtube.com/watch?v=aNyj9su0wk0> |
|  | Turn in Final Project |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Some other examples of games: Concentration, ConnectFour,  Shuffle: <https://www.youtube.com/watch?v=JqY-PWRyseQ>  Frogger: <https://www.youtube.com/watch?v=SFr8lNJ3IKk>  Maze: <https://www.youtube.com/watch?v=X4qxc_sR5Yk>  ConnectFour1: <https://www.youtube.com/watch?v=X4qxc_sR5Yk>  ConnectFour2: <https://www.youtube.com/watch?v=HXY4lVDN_k8>  ConnectFour3: <https://www.youtube.com/watch?v=Qo3J-D0RRZw>  MazeGameInVB: <https://www.youtube.com/watch?v=X4qxc_sR5Yk>  MatchingGame: <http://msdn.microsoft.com/en-us/library/vstudio/dd553235(v=vs.100).aspx>  ShuffleGame: <https://www.youtube.com/watch?v=JqY-PWRyseQ>  Pong: <http://www.youtube.com/watch?v=O8eiHB8mxs8>  BlackJack: <https://www.youtube.com/watch?v=nkfzr8m_1XM>  More Games and Competitions: <http://www3.sdstate.edu/eecs/program-design/>  Memory Game in C#(Concentration): <http://www.youtube.com/watch?v=0_pQsHgfuVo>  Visual Basic 2010 Tutorial, Create Tic Tac Toe Game, 1(Concept & Button Functions): <http://www.youtube.com/watch?v=kppGf5nmnBY>  Visual Basic 2010 Tutorial, Create Tic Tac Toe Game, 2(Reset Button): <http://www.youtube.com/watch?v=eXcuiNYl7GE>  Visual Basic 2010 Tutorial, Create Tic Tac Toe Game, 3(Winner Function): <http://www.youtube.com/watch?v=m1JmV-0Bv8I>  Visual Basic 2010 Tutorial, Create Tic Tac Toe Game, 4(Adding Function for 16 Button): <http://www.youtube.com/watch?v=b053N7YtDHo> |