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| Date | Course: 11056 Video Game Design |
| 5Jan | Map Network DriveClassroom ManagementWebsite instructionsSoftware Updates, Programming Folders, YouTube Open.Everyone Open Visual StudioHalf 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>  |
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| 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 ProjectMake 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 ProjectWindowsApplicationsRun blank projectChange form’s “ShowIcon”Change form’s “Text”Change form’s “MaximizeBox”Menu for Closing, Starting, HelpDrag in Menu StripBuild Sub Menu Use buttons for the SquaresButton TextChanging FontsName each object by column and rowSelect Objects to Review Event Handlers (different for each object)Review the “shell of methods” in codingChoose Message Box “show-method” two parts (1st string text message, 2nd string caption textbox)Code exit.RunTutorial stop: 9:13 |
| 20Jan | Begin Tutorial: 9:14Exit Menu, Event Handler, Code EndSet Form Start Position to CenterButton EnabledSet Button Text to Either an “X” or an “O”Then Disable the Text on the Button so no one can overwrite itCreate the same generic Object event handler for each button “Click” called “Button\_Click” Create a Boolean Variable called “Turn” within public classSet 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 TakenIf the Number of Turns reach 9, then the game is a draw.Create an Integer Variable called “TurnCount”Initialize the Integer to zeroEnd 12:12 |
| 22Jan | Begin Tutorial 12:13How do we get the X or the O to show up on each button.Generic Buttons Handlers As Objects Pass the Event as ParametersPasses as Objects even though we know they are buttonsCreate 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 propertiesWhose Turn is, if Boolean X is True place an x in the box, else Boolean Y is False then place an ONext 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 ToeResume Tutorial at 18:20If 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” subDisable each button on the form by converting all of the Controls on the form Set Controls to cMake Buttons b equal to cDisable c by have b equal falseEnd Tutorial at 25:15 |
| 28Jan | Resume Tutorial at 25:25Call the "DisableButtons” method from the “IfThereIsAWinner” subPlace 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 stripThis 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>WindowsFormApplicationGraphical User InterfacePicture BoxesArraysNaming ConventionsResourcesStringsVariablesLabelsPlayers |
| 3Feb | Finish the Memory Game in VB. |
| 5Feb | Begin the Pong Tutorial Below: <http://www.youtube.com/watch?v=O8eiHB8mxs8>FileManagementFormsIf Else Then StatementsLabels Levels of DifficultyNaming ConventionsPanelPicture BoxesObject PropertiesTimersAccelerationsNumber of PlayersArtificial IntelligenceSound |
| 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 GUIPseudo Code. |
|  | Continue ShuffleFormPicturesResourcesNullButtons |
|  | Continue Shuffle.Button Property FlatStyleButton Property Font & SizeButton Object CopyButtons AlignRandomizing |
|  | Continue ShuffleFormButtonPropertiesGraphicsModules |
|  | Continue ShuffleIf Else Then StatementsCheck for MoreCheck SolvedSplash Screen with Rules Message Box  |
|  | Continue ShuffleDims for VariablesCountersTool Strips for Menus Do While LoopsFor Next LoopsNesting |
|  | Continue ShuffleReplace the Picture Boxes with the Text Property of Each ButtonRun the Program |
|  | Now we will begin the game of Frogger.R&D |
|  | Pseudo CodeObject/Event TableGUISplash ScreenRules ExplanationMsg Boxes |
|  | FormsDim Variables as BooleansDim Variables as Integers Picture BoxesTimersBackgroundsX,Y Coordinates |
|  | Regions Traffic Movement CheckCollision Win or ResetKeyDown, Moves the Frog Left, Right, Up, DownSet Frogger Size and Properties Location ColorMaintain 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 SubsForm1KeyDownTrafficTimerCollisionDetectionGameOverTimerGameOverFormsResourcesCase StructureButtonsPicture Boxes |
|  | Frogger Cont.AnimationDetectionCollisionClient RectangleRegionsIf, Then, Else StatementsFrogger Cont.SpeedAccelerationLevelsObject PropertiesFile ManagementCommentsRuns |
|  | Begin Black JackR&DTable Of EventsPseudo Code |
|  | Black Jack ContinuedFormsResourcesShuttle/RandomizePicture boxesLabelsMsg BoxesButons |
|  | Black Jack ContinuedObject PropertiesIf Then Else StatementsCalculations/SumsDim VariablesTimers |
|  | Black Jack ContinuedDouble Down/Splitting HandsAction Options for 1 or 11Bets/WagersKittyInsurance for Black Jack |
|  | Black Jack ContinuedCheck Win/BustPlay AgainSplash ScreensCommentsRuns |
|  | Turn in Black JackHand Out Rubric for Final ProjectRemedial Game FundamentalsVisual 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 FundamentalsVisual Basic Game Programming Tutorial Part 3- Graphics and Tile Mapping: <http://www.youtube.com/watch?v=ycKo_NOBAYU> |
|  | Continue Building your own GameRemedial Game FundamentalsVisual Basic Game Programming Tutorial Part 4 - Key Input and Character Movement: <http://www.youtube.com/watch?v=69QrAV9ZWug> |
|  | Continue Building your own GameRemedial Game FundamentalsVisual 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 GameRemedial Game FundamentalsVisual Basic Game Programming Tutorial Part 5 – Transparent Brushes and Custom Dialog Boxes: <http://www.youtube.com/watch?v=59X-TuQA3wA> |
|  | Continue Building your own GameRemedial Game FundamentalsVisual Basic Game Programming Tutorial Part 6 – Terrain Collision (Improved for Free Movement): <http://www.youtube.com/watch?v=aNyj9su0wk0> |
|  | Continue Building your own GameRemedial Game FundamentalsVisual Basic Game Programming Tutorial Part 7 – Saving and Loading: <http://www.youtube.com/watch?v=aNyj9su0wk0> |
|  | Turn in Final Project |
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|  | 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](http://msdn.microsoft.com/en-us/library/vstudio/dd553235%28v%3Dvs.100%29.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> |