Name	Lalith Aditya Chunduri	Team	Error 404	TL	5	Date	April 15	Time	4:00pm

Fill in the underlined areas (and the boxes above), now but don't write on the remainder of this form.

Contribution: Briefly describe what your feature(s) is/are: ***I created Whole Graphics for Our Game, created a Help Menu for the Game and created an animated key which we used for all three levels.*** Walk me through your Gantt chart. How long did this take? How long did you estimate it would take? What did you learn about your skill as an estimator? ***It got me 17hrs, but I assumed It may take 18hrs. I am assuming my estimation was right. But I encountered and wasted some time creating the same things which I created due to some git issues.*** Run your game and point out places where your code is called and run. (I will cycle through asking you this question and the next one until you either run out of interesting things to talk about or it is clear that you have made an above average contribution.) Show the C++/C# code that was run. Walk me through the methods called from the time it enters your section of code.	/10
Technical: Walk me through your test plan. Give an example where a test case later found a bug in your code by things a teammate added later. (Or explain why you chose a test case specifically because you wanted to ensure that a teammate would know if they broke your code.) ***I Created an animated Key where the player needs to collect to go to next level or to win the game. If the teammate's participation incorrectly influences the key animation, an error in regression could occur. My Tl02 added a sphere as an key firstly before I added the Key animation later I added it but when I tested if it works or no it got different and the key is not being picked instead moving by the touch of player moment.*** Pick a Prefab you have created that is documented well in a separate readme file. (I will point to several places in your code documentation and ask) What question where you trying to answer here? Who do you anticipate would be asking that question? What other questions might this person need the answers to? Prefab Name: ***Help Menu***	/4 /3 /3

Show me a class in your code where there could be either static or dynamic binding. Write some mock code on this paper showing how you would set the static type and dynamic type of a variable. Super Class: ***GAME MENU*** Sub Class: ***HELP MENU*** Virtual Function: ***void AddHelpMenuFunctionality(HelpMenu menuComponent)***	
Choose a dynamically bound method. What method gets called now? ***// Dynamically bound method call*** ***menu.AddHelpMenuFunctionality(); // Calls AddHelpMenuFunctionality() in HelpMenu class***	/4
Change the dynamic type. What method gets called now? ***// Change the dynamic type*** ***menu = new GameMenu(); // Dynamic type and static type are now GameMenu*** ***// Dynamically bound method call with changed dynamic type*** ***menu.AddHelpMenuFunctionality(); // Since dynamic type is GameMenu, it will call AddHelpMenuFunctionality() in GameMenu class*** Pick a statically bound method. Which one would be called in each of the two previous cases? ***// Statically bound method*** ***// Static method example: ToString() method*** ***string result = menu.ToString(); // Calls ToString() in GameMenu class because the static type is GameMenu***	/4
Show me an example of reuse in your code where you violate copyright law. How does it violate copyright? ***I learnt most of my design or assets from web where it states for educational reasons only and we may use it for our personal or while learning things, and because they are free, I Assume we can download and use them in our game As they mention in their terms.*** What did you have to do to integrate it with the code you wrote? What are the legal implications if you market your code with the re-used portion? Use fair use argue that you can use this anyway. 4. One big or two small, well-chosen patterns. Small Patterns = {Singleton, Private Class Data} Which patterns did you choose? ***Singleton: This is a small pattern. It ensures that a class has only one instance and provides a global point of access to that instance. In the provided code, the MenuManager class is implemented as a singleton using the yaSingleton library.***	

Private Class Data: This is a big pattern. It encapsulates the data within a class, ensuring that it can only be accessed through the class's methods and not directly by external code. In the provided code, access to the _canvas and activeMenus variables is restricted within the MenuManager class, demonstrating encapsulation through private data members.

Why did you choose each pattern? (Justify your use of it).

Singleton:

Justification: Ensures only one instance of MenuManager exists, preventing duplication and ensuring consistent menu management across the game.

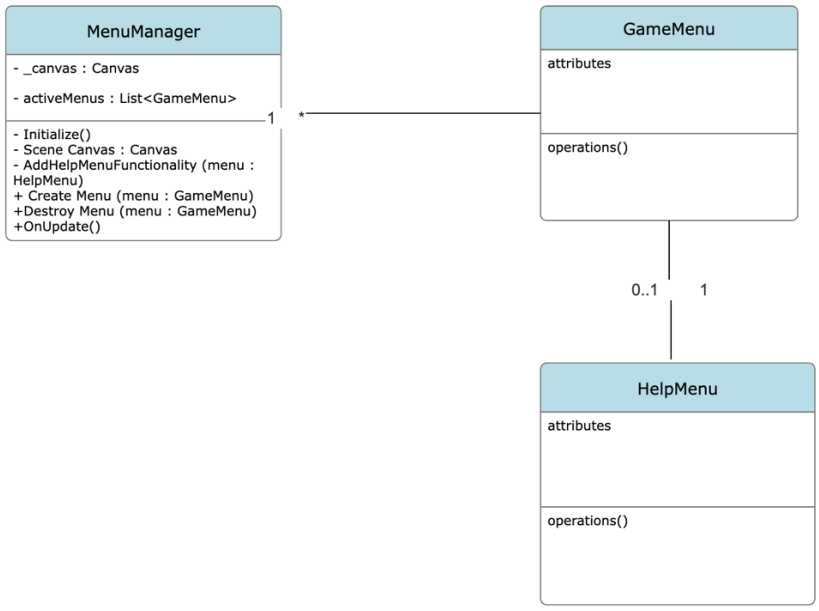
Use Case: Ideal for managing global resources or systems where only one instance is necessary, such as a menu manager in a game.

Private Class Data:

Justification: Encapsulates data within MenuManager, restricting direct access and ensuring data integrity.

Use Case: Prevents unintended modification of critical class members like the canvas and active menus, maintaining control over the internal state of the class.

Draw the class diagram for your pattern(s).



Would something else have worked as well or better than this pattern? When would be a bad time to use this pattern? ***Bad Time to Use Singleton:*** ***When there's a need for multiple instances of the class with different configurations or contexts.*** ***Bad Time to Use Private Class Data:*** ***When there's a need for extensive data sharing between multiple classes or components.*** ***In situations where performance considerations favor direct data access over encapsulation, such as in high-performance computing or low-level system programming.***	