POE Individual Report

1. List of Component/Objects on the Forms:

* DRAGON label: This label serves as a title for the game interface related to "Dragomon." The game's name will indicate to a player that this game features dragons and mystical elements.
* Play button: the game will start up the game mode when clicked; it will trigger the game to begin,
* Bestiary button: The bestiary serves as a collection of creatures, providing details such as their names, descriptions, abilities, and perhaps even strategies for encountering or defeating them. This button allows players to Learn the lore of these dragons and their world and choose the best Dragon for combat, thus enhancing the player's experience.
* Quit button: This button, when clicked, simply takes the player out of the game. It's a straightforward feature that allows players to exit the game if they decide not to play further.

Group Box 1:

* + Player Name Textbox: Allows the player to input their name.
  + Dragon Name Textbox: Allows the player to input the name of their Dragon.
  + Player Name Label: Displays a label indicating "Player Name."

GroupBox3:

* + Fire Dragon Checkbox: Allows the player to select a fire dragon.
  + Wind Dragon Checkbox: Allows the player to select a wind dragon.
  + Earth Dragon Checkbox: This allows the player to select an earth dragon.
  + Water Dragon Checkbox: Allows the player to select a water dragon.
  + Save Player 1 Details Button: Saves the details entered by Player 1, including their name, dragon name, and dragon type.

Group Box 2:

* + Player Name Textbox: Allows the second player to input their name.
  + Dragon Name Textbox: Allows the second player to input the name of their Dragon.
  + Player Name Label: Displays a label indicating "Player Name."

GroupBox4:

* + Fire Dragon Checkbox: Allows the second player to select a fire dragon.
  + Wind Dragon Checkbox: Allows the second player to select a wind dragon.
  + Earth Dragon Checkbox: This allows the second player to select an earth dragon.
  + Water Dragon Checkbox: Allows the second player to select a water dragon.
  + Save Player 2 Details Button: Saves the details entered by Player 2, including their name, dragon name, and dragon type.

Start Game Button: Initiates the game after both players have entered their details.

Back Button: Allows returning to a previous screen or closing the application.

Game Screen Form:

* Timer: Displays a timer to track the duration of the battle.
* Attack Button: Allows players to perform a standard attack during the battle.
* Background Image of the Battleground: Provides a visual representation of the battleground.
* Special Attack Button: Allows players to execute a special attack with increased power.
* Picture Box: Displays visual representations of the battling dragons.
* Block Button: Allows players to defend against incoming attacks.
* Williams Round Label: Displays the current round of the battle.
* Player 1 Textbox: Displays the name of Player 1.
* Tim Round Label: Indicates the opponent's name in the round of the fight.
* Player 2 Textbox: Displays the name of Player 2.
* BattleLog Text Box: Displays a log of actions and events occurring during the battle.

2. Functionality of the Game:

PlayerMenu:

This form will show the menu for the game with three buttons. The screenshot below shows the menu form's design. The attached form is used as the starting page after the game is opened. Upon opening the game, the player has three options when they land on this screen. When the player clicks the play button, they will be taken to the player details screen. If the player clicks on the Bestiary button, it will take them to a screen where they can see the details of the dragons that are playable in the game. If the player clicks on the quit button, the game will close, and the player will have to re-open the game if they want to play again. The Exit and Play buttons are simple action buttons that allow the player to make a decision to play the game or not. The bestiary button looks to expand the player's mind and put them into this game's world by telling the dragons' lore. The button will also show you which is the strongest Dragon and its special attacks and weaknesses.

Input:

* Play button
* Bestiary button
* Quit button

Output

* Written lore of the dragons
* Exit game
* Go to the next window

Player info Form:

* This form collects essential information from players before starting the game, such as their name, Dragon's name, and The type of Dragon they would like to play with from a checkbox list of Fire, Wind, Earth, and Water Dragon for players one and 2—a button to save this data into the Game screen form. A Start game button at the bottom allows a user to begin the game alongside a Back button if any mistakes occur.

Input:

* + Player's name
  + Dragons Name
  + Type of Dragon

Output:

* + Confirmation message
* Why Output: A confirmation message acknowledges that the player's input has been received and processed. Thus, the user is taken to The Game screen form, where their information is stored and saved.

The Player screen form has four group boxes asking for two players to add their information to be stored. Group box 1 has a player label that asks player one to add their name, and it is alongside a text box that asks them to fill in their name. A dragon name label is next, asking for the player to add the name of the Dragon to further differentiate between the two players, and a textbox is next to it to allow a user to input their Dragon's name. Group box 3 has a checkbox list of the types of dragon Player one can use. Fire, Wind, Earth, and Water dragons are the choices, and only one Dragon can be chosen. At the end of the group box, a button called Save Player 1 details can be seen, and this button stores Player One's information, which can be accessed on the following form so the player can see it.

Group box 2 has A player label that asks player one to add their name, and it is alongside a text box to fill in the name. A dragon name label is next, asking for the player to add the name of the Dragon to further differentiate between the two players, and a textbox is next to it to allow a user to input their Dragon's name. Group box 4 has a checkbox list of the types of dragon players two can use. Fire, Wind, Earth, and Water dragons are the choices, and only one Dragon can be chosen. At the end of the group box, a button called Save Player 2 details can be seen, and this button stores the information of Player One to be accessed on the following form so the player can see it.

Two buttons can be found at the bottom of the Player info screen. One button, called Start game, takes a user to the next form, the Game screen, with the saved data that the two players have inputted. Player One details will be displayed, showing the name, Dragon's name, and type of Dragon chosen. The same goes for player two; details will be displayed, showing the name, dragon name, and kind of Dragon chosen. The other button, called Back, will allow users to exit the game if they don't want to play. If a user clicks back but says save both player details, they will resume where they left off.

Game screen form:

This form allows the players to take turns to cause damage to each other and use various buttons to dictate the fight. Attack, Special Attack, and block buttons are used by a player whose turn it is. The player's name is next to the Dragon they chose in a small picture box. A battle log is shown at the bottom to update the player and make them aware of what event has occurred. Two text boxes with the player's details alongside the HP show them the best move going forward to ensure your Dragon doesn't die because you didn't strategise. This text box also indicates the name of the noticeable attack for that Dragon.

* Input:
  + Attack button
  + Special Attack
  + Block
* Output:
  + BattleLog
  + To display the events that take place for each round
  + Player One and Two's Dragon details
  + Picture box of Dragon
  + Name of player
  + Player HP

The Game screen form has three action buttons a player will use during their round. It is vital for a player always to keep an eye on their HP to ensure they don't lose quickly. The Attack button allows a player to harm their opponent by punch, kick or fire breath. The attack button, however, only deals 5 HP damage to an opponent's Dragon compared to the Special Attack. The Special Attack button deals 15 HP damage to an opponent's Dragon, and the screen will showcase the Special Attack's name when the button has been pressed and will say, for example, "Terraquake" for an earth dragon. The Special Attack button intensifies the game and makes players think critically about when to use it, as it can only be used once.

The importance of the Block Button comes into play as it serves as the equaliser for the Special Attack; this is because the Block Button can be used all game, and once it blocks a Special Attack, the advantage is on the side of an opponent who blocked it. A blocked Special Attack means that the player is not allowed to block for that next round, meaning they could be vulnerable to a Special attack. In order to use the block button, a player must be 15 HP or lower to ensure that the players aren't just blocking each other the whole game. A timer at the top left corner indicates to players that they have limited time to decide, so they must think logically about their next move. A player only has 30 seconds per round before your turn is given to the opponent.

A label and picture box is assigned to both players, with the opponent's name inside the label and a list of whose round it is. The picture box displays the type of Dragon the player chose in the Player input form. This picture allows the player to have a visual representation of the Dragon. The background image represents the battleground in which this game takes place, allowing the players to create a level of immersion while playing the game. The text boxes in the middle of the form contain the Dragons' details. These text boxes display the name of the Dragon, the amount of HP and the name of the Special attack assigned to that Dragon.

The Battle Log label will have a text box underneath to show what event occurred in that respective player's round. The player's name is shown alongside a descriptive text of what happened after a button was pressed. This battle log will continue until a declared winner is declared. A confirmation message will pop up stating that the winner is the player's name alongside its Dragon's name. The battle log helps the player track what events took place, allowing them to strategise the next move. The confirmation message will state how much HP the winner has left and ask the player if they want to play another game or exit. The details of that last game will be stored and kept in records for later viewing.

3. Overall Logic and Rules of the Game:

Dragon Battle is an exhilarating two-player game that thrusts participants into a realm of mythical creatures and epic clashes. Players will engage in strategic combat. This game combines strategy, decision-making, and excitement, offering an immersive experience for players of all ages. On the first window, a player will input their name and the name of their dragons using dedicated text boxes. This is a must, as it should be easy to identify between the two players. The game will not allow players to have the same or Dragon names.

The Player menu screen allows users to learn more about dragons by clicking the Bestiary button and discovering this world's lore. This lets the player know which dragons have the best elements and the other Dragon's weaknesses.

They are selecting a dragon's elemental affinity. Fire, Wind, Earth, and Water dragons offer distinct advantages and weaknesses. A player can choose a dragon with more or less HP than the opponent, making the game more strategic and engaging. Players can choose the same Dragon but must know they will have the same Special attack and HP. After configuring their character and Dragon, players can confirm their choices by clicking the "Save Player Details" button. This will take place in Group boxes 1 and 3. This action ensures that their selections are recorded and ready for the upcoming clash. The process repeats for the second player within Groups Box 2 and 4.

The "Attack" button enables standard offensive moves, while the "Special Attack" button unleashes devastating techniques unique to each Dragon's elemental. When the special attack is clicked, the move's name will flash across the screen. To defend against incoming assaults, players can utilise the "Block" button, stopping damage and maintaining their position on the battlefield. A "Block button, however, cannot cause harm to a dragon. Each decision carries weight, shaping the outcome of the confrontation. A picture box is displayed for the chosen dragons for each player alongside their name. The text box contains the player's details, such as dragon name, HP, and special attack. The rules for these buttons are simple.

* A player must make a move.
* A player must attack or block
* A player can use their special attack once a game.

The Battle log feature offers valuable insight into the flow of the battle, allowing players to analyse their strategies and adapt accordingly. The battle log records the events and helps the player think of a move from now on. Once a player is deemed the winner, a confirmation message will show the player who the winner is. The message will read "WINNER dragon name" and ask the players if they want to start a new round or exit the game.

Flowchart of the Battle Dragon Game Flowchart of the Battle Dragon Games works.







This is the flow for the program from the beginning when the player opens the program right till when either one of the players wins and wants to close the program.

The flowchart begins with the program's start. Upon clicking, players are directed to the menu screen, which is the starting point of the flowchart. Players are met with three choices: play, access the bestiary or quit. Opting out of all three results in an infinite loop until a positive selection is made

Choosing to quit leads directly to the program closing, marking the flowchart's end. If players select the bestiary, they transition to viewing dragon stats. They face another decision to go back or stay. If they opt against returning, they remain on the bestiary screen until they decide otherwise. Clicking back returns them to the main menu. Players can make previous decisions from the main menu or opt to play. Choosing to play directs them to the player info screen. Here, they input their usernames and dragon names and select their dragon type. The flow continues, prompting players to save their details before proceeding. Upon saving, players enter the game screen, making move selections.

The game progresses freely, determining victories and looping back for additional moves until one player emerges victorious. The subsequent flow branches depending on the winner. Player one leads to the player one win screen, while player two leads to the player two win screen. After either win screen, the flowchart concludes. This flowchart outlines the program's journey from start to stop.

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