ICT PRACTICAL WORKSHEET - STD VIII

| Worksheet No | 4.1 |
|------------------|--|
| Name of Chapter | Computer Games |
| Name of Activity | Create Game Assets and Gun Movement in Scratch |
| Software Used | Scratch |
| Time | 40 Minutes |

Order of Events

| Opening the Software | Click on the Show Applications icon. Type Scratch in the search bar and open it. |
|---------------------------|--|
| Deleting Default Sprite | Right-click on the default "Dango" cat sprite and select delete to remove it from the project. |
| Adding a Backdrop | Click on the Choose a Backdrop icon on the Stage. Select the Blue Sky backdrop from the library. |
| Drawing the Gun Sprite | Click on the Paint icon to create a new sprite. Use the Rectangle tool to draw a simple gun. Name the sprite "gun". |
| Setting Gun Properties | Select the "gun" sprite. In the Size field, set the value to 50. Ensure its direction is set to 90. |
| Coding Gun Movement | Add the following code to the "gun" sprite: when flag clicked forever point towards mouse-pointer |
| Drawing the Bullet Sprite | Create a new sprite using the Paint icon. Draw a small bullet using the Rectangle and Reshape tools. Name it "bullet". |
| Setting Bullet Properties | Select the "bullet" sprite. Set its Size to 10. Position it at the end of the gun's barrel. |
| Saving the Project | Click File → Save to your computer. Save the project as shooting_game.sb3. |
| Finishing | Test the gun's movement by clicking the green flag and moving |

| Click on the Show Applications icon. Type Scratch in the search bar and open it. |
|--|
| the mouse. |

ICT PRACTICAL WORKSHEET - STD VIII

| Worksheet No | 4,2 |
|------------------|--|
| Name of Chapter | Computer Games |
| Name of Activity | Add Balloons and Create Variables for Game Logic |
| Software Used | Scratch |
| Time | 40 Minutes |

Order of Events

| Opening the Saved Project | Open Scratch. Click File → Load from your computer and select shooting_game.sb3. |
|--------------------------------|---|
| Adding Balloon Sprites | Click Choose a Sprite and add two Balloon1 sprites from the library. |
| Customizing Balloons | For the second balloon, go to the Costumes tab. Keep only the yellow costume and delete the blue one. Rename the sprites "blue_balloon" and "yellow_balloon". |
| Creating Burst Costumes | For each balloon, right-click on the costume and select duplicate. Use the Reshape tool to modify the duplicate to look like a burst balloon. |
| Creating Variables | Go to the Variables category. Click Make a Variable. Create two variables: bullets and score. |
| Initializing Variables | Add this code to the "gun" sprite: when flag clicked set bullets to 20 set score to 0 |
| Adding Balloon Movement (Blue) | For the blue balloon, add: when flag clicked forever go to x: pick random -230 to 230 y: -107 |

| Opening the Saved Project | Open Scratch. Click File → Load from your computer and select shooting_game.sb3. |
|----------------------------------|---|
| | glide 2 secs to x: pick random -230 to 230 y: 165 |
| Adding Balloon Movement (Yellow) | Drag the same code block to the yellow balloon sprite. |
| Adding Firing Sound to Bullet | Select the "bullet" sprite. Go to Sounds. Click Choose a Sound and add the Rip sound. |
| Saving the Project | Press Ctrl+S to save your progress. |

ICT PRACTICAL WORKSHEET - STD VIII

| Worksheet No | 4.3 |
|------------------|--|
| Name of Chapter | Computer Games |
| Name of Activity | Implement Shooting Mechanics and Game Completion |
| Software Used | Scratch |
| Time | 40 Minutes |

Order of Events

| Opening the Project | Open your shooting_game.sb3 project in Scratch. |
|---|---|
| Creating Broadcast Message | In the Events category, create a new message called "Clicked". |
| Coding the Stage for Click Detection | Add this code to the Stage: when flag clicked forever if mouse down? then broadcast Clicked |
| Implementing Bullet Cloning | Add this code to the "bullet" sprite: when I receive Clicked go to gun |

| Opening the Project | Open your shooting_game.sb3 project in Scratch. |
|---------------------------------------|---|
| | change bullets by -1 create clone of myself |
| Coding Clone Behavior | Add this code to the "bullet" sprite: when I start as a clone start sound Rip point towards mouse-pointer repeat until touching edge move 50 steps delete this clone |
| Adding Balloon Pop Effect (Blue) | For the blue balloon, add: when flag clicked show forever if touching bullet ? then switch costume to balloon1-a2 start sound Pop wait 0.05 seconds hide wait 0.5 seconds switch costume to balloon1-a change score by 1 show |
| Adding Balloon Pop Effect (Yellow) | Drag the same code block to the yellow balloon. Ensure the costume names in the code match the yellow balloon's costumes. |
| Testing the Game | Click the green flag and test all features: shooting, scoring, balloon popping, and bullet count. |
| Finalizing the Project | Add a "Game Over" message that appears when bullets = 0. Use a say block. |
| Exporting the Project | Click File → Save to your computer to save the final version. |
| Finishing | Close Scratch. |