

Team members:

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Script:

Character_Controller_Keyboard.cs:

- There is a function called PlayerMovement() which is called in Update().
- 2 variables horizontal and vertical are used to get Input.GetAxis("Horizontal") and Input.GetAxis("Vertical"); which are mapped to arrow keys.
- A vector is created called direction with y-axis set to 0.
- Velocity is another vector which is direction multiplied by a float variable speed.
- We move the camera and transform direction using Camera.main.transform.TransformDirection(velocity).
- And move the controller using controller.Move(velocity * Time.deltaTime) where controller is the CharacterController.

MoveCube.cs:

- We use a variable called isclicked and hover which are Boolean, it is changed if PointerDown is done and the Pointer is still on the Cube1.
- This then changes the value to true in the if condition and calls transform.Translate with a constant force(thrust) which is set in the editor as thrust.
- Similarly, if the mouse click is continued and the pointer is on the cube, the if condition still remains true, moving the cube.
- If the pointer exists the cube PointerExit calls ishover() and sets the variable hover to false, stopping the movement.
- If the mouse click is released PointerUp calls ChangeForce which changes isclicked to false, this calls the else condition in update and stops movement of the cube.

RotateCube.cs:

- We use a variable called isSpinning and ishover which are Boolean, it is changed if PointerDown is done and the Pointer is still on the Cube1.
- This then changes the value to true in the if condition and calls transform.Rotate only on the Y axis with a constant spinforce(thrust) which is set in the editor as spinforce.
- Similarly, if the mouse click is continued and the pointer is on the cube, the if condition still remains true, rotating the cube.
- If the pointer exists the cube PointerExit calls hover() and sets the variable ishover to false, stopping the movement.
- If the mouse click is released PointerUp calls ChangeSpin, which changes isSpinning to false, this calls the else condition in update and stops movement of the cube.

ColorCube.cs:

- We use a variable called clicked which is a Boolean, it is changed if PointerDown is done on the Cube3.
- This then changes the value to true in the if condition and changes the color to click color which is set in the editor as clickColor.
- Similarly, if the cube is clicked again, PointerDown calls ChangeColor changing the variable clicked to false again which allows the else condition to run and set it to the startColor or original color.

