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// ----- UI -----
/// <summary>Update HP and stamina sliders each frame</summary>
private void UpdateUI()
{
    statsUI[0].value = hp;
    statsUI[1].value = stamina;
}

// ----- Damage Handling -----
/// <summary>Detect collisions with enemy attacks</summary>
private void OnTriggerEnter(Collider other)
{
    if (other.CompareTag("enemy_attack"))
    {
        HandleEnemyAttack(other.gameObject);
        other.SetActive(false);
    }
}

/// <summary>Determine type of enemy and apply corresponding damage</summary>
/// <param name="enemyObj">Enemy GameObject that collided</param>
private void HandleEnemyAttack(GameObject enemyObj)
{
    var enemyScript = enemyObj.GetComponent<IntermediarForEnemyController>();

    if (enemyScript.enemyController != null)
        ApplyDamage(enemyScript.enemyController.powerOfAttack);
    else if (enemyScript.bossController != null)
        ApplyDamage(enemyScript.bossController.powerOfAttack);
    else if (enemyScript.projectileController != null)
        ApplyDamage(enemyScript.projectileController.powerOfAttack);
}

/// <summary>Apply damage to the player, taking guard/block into account</summary>
/// <param name="damage">Amount of damage</param>
private void ApplyDamage(float damage)
{
    playerController.GenerateSoundEffect("blood_takeDmg_clip");

    if (!animator.GetBool("guard"))
    {
        hp -= damage;
        if (hp <= 0)
            playerController.youAreDead = true;
        else
            playerController.CameraTakeDamageEffectTrigger();
    }
    else
    {
        animator.SetTrigger("guard_impact");
        playerController.CameraTakeDamageEffectTrigger();
    }
}

// ----- Experience & Leveling -----
/// <summary>Add XP and check for level up</summary>
/// <param name="xp">XP gained from enemies</param>
public void GainXP(float xp)
{
    currentXP += xp;
    CheckLevelUp();
}

/// <summary>Check if the player has enough XP to level up</summary>
private void CheckLevelUp()
{
    while (currentXP >= currentLevel * 20)
    {
        currentXP -= currentLevel * 20;
        currentLevel++;
        LevelUp();
        Time.timeScale = 0; // Pause for level-up UI
    }
}

/// <summary>Instantiate level-up UI for choosing skills</summary>
private void LevelUp()
{
    Instantiate(levelUpPrefab);
}

```