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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);  
}
```