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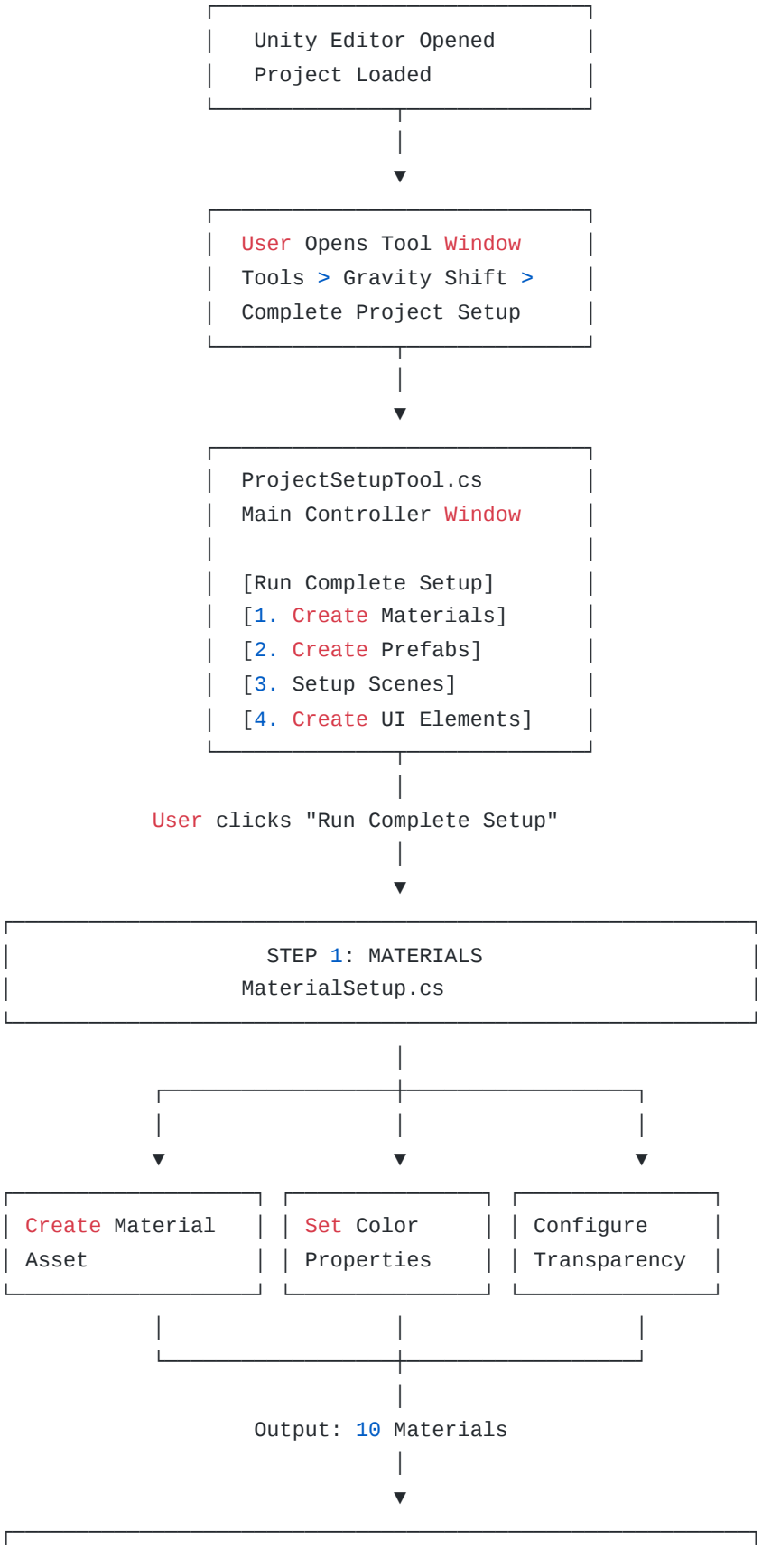
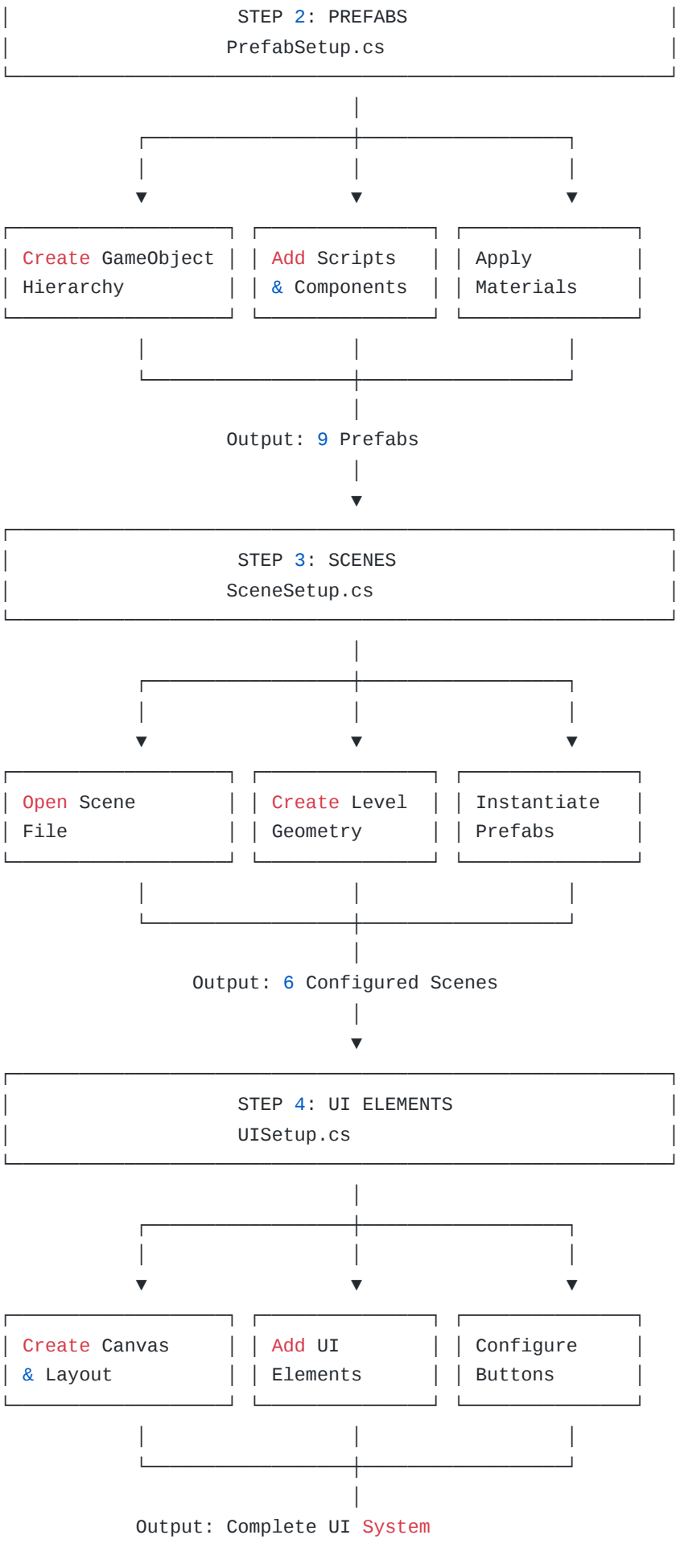
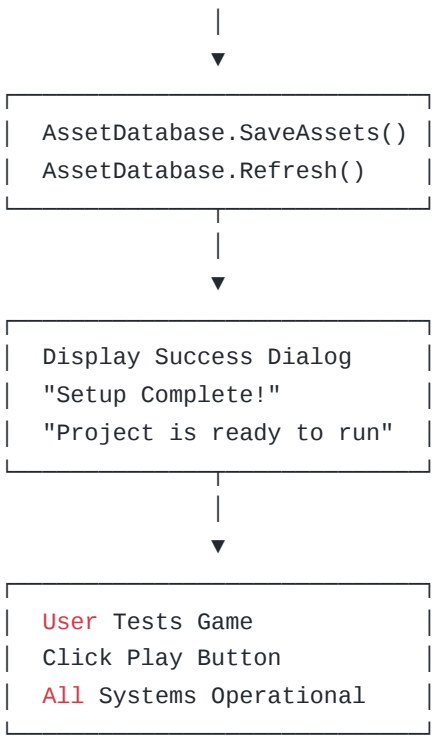
AUTOMATED PROJECT SETUP TOOL -

WORKFLOW DIAGRAM




STEP 2: PREFABS
PrefabSetup.cs
Create GameObject Hierarchy
Add Scripts & Components
Apply Materials
Output: 9 Prefabs
STEP 3: SCENES
SceneSetup.cs
Open Scene File
Create Level Geometry
Instantiate Prefabs
Output: 6 Configured Scenes
STEP 4: UI ELEMENTS
UISetup.cs
Create Canvas & Layout
Add UI Elements
Configure Buttons
Output: Complete UI System



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DETAILED MODULE FLOW

MaterialSetup.cs Flow:

CreateAllMaterials() | ├──> CreateMaterial("PlayerMaterial", Blue) ├──> CreateMaterial("CrystalMaterial", Cyan) ├──> CreateMaterial("GroundMaterial", Gray) ├──> CreateMaterial("WallMaterial", DarkGray) ├──> CreateMaterial("CheckpointMaterial", Green) ├──> CreateMaterial("EnemyMaterial", Red) ├──> CreateMaterial("BarrierMaterial", Yellow, Transparent=true) ├──> CreateMaterial("PlatformMaterial", Brown) ├──> CreateMaterial("HazardMaterial", DarkRed) └──> CreateMaterial("ExitPortalMaterial", Purple)

PrefabSetup.cs Flow:

CreateAllPrefabs() | ├──> CreatePlayerPrefab() | ├──> Create Capsule body | ├──> Add Camera child | ├──> Add CharacterController | ├──> Attach PlayerController script | ├──> Attach GravityController script | ├──> Attach PlayerEnergy script | └──> Save as Player.prefab | ├──> CreateCrystalPrefab() | ├──> Create rotating cube | ├──> Add trigger collider | ├──> Attach CrystalPickup script | └──> Save as Crystal.prefab | ├──>

CreateCheckpointPrefab() ├──> CreateEnemyPrefab() ├──> CreateBarrierPrefab() ├──> CreatePlatformPrefab() ├──> CreatePressurePlatePrefab() ├──> CreateHazardZonePrefab() └──> CreateExitPortalPrefab()

SceneSetup.cs Flow:

SetupAllScenes() | ├──> SetupMainMenuScene() | ├──> Create GameManager | ├──> Create AudioManager | └──> Create MainMenuCanvas | ├──> SetupLevel1Scene() | ├──> Create ground and walls | ├──> Instantiate Player at start position | ├──> Place 3 crystals | ├──> Add checkpoint | ├──> Create tutorial platforms | ├──> Place exit portal | └──> Create HUD Canvas | ├──> SetupLevel2Scene() [Moving Platforms] ├──> SetupLevel3Scene() [Hazards] ├──> SetupLevel4Scene() [Mechanisms] └──> SetupLevel5Scene() [Final Challenge]

UISetup.cs Flow:

CreateAllUI() | ├──> CreateMainMenuUI() | ├──> Create title text | ├──> Create subtitle | ├──> Create Play button | ├──> Create Options button | ├──> Create Quit button | └──> Create language selector (EN/CN/JP/KR) | ├──> CreateGameHUD() | ├──> Create energy bar (background + fill + text) | ├──> Create crystal counter | ├──> Create score display | └──> Create gravity indicator | └──> CreatePauseMenuUI()

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    ├─> Create overlay background
    ├─> Create menu panel
    ├─> Create Resume button
    ├─> Create Restart button
    ├─> Create Main Menu button
    ├─> Create Quit button
    └─> Save as PauseMenu.prefab
```

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DATA FLOW DIAGRAM

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[User Input]
     |
     ▼
```

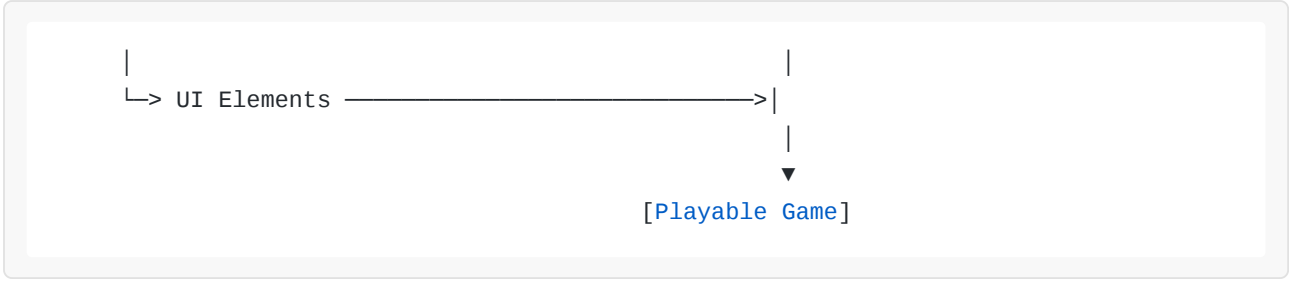
[ProjectSetupTool]

[MaterialSetup] [Asset Database]

[PrefabSetup] [Project Window]

[SceneSetup] [Scene View]

[UISetup] [Game View]



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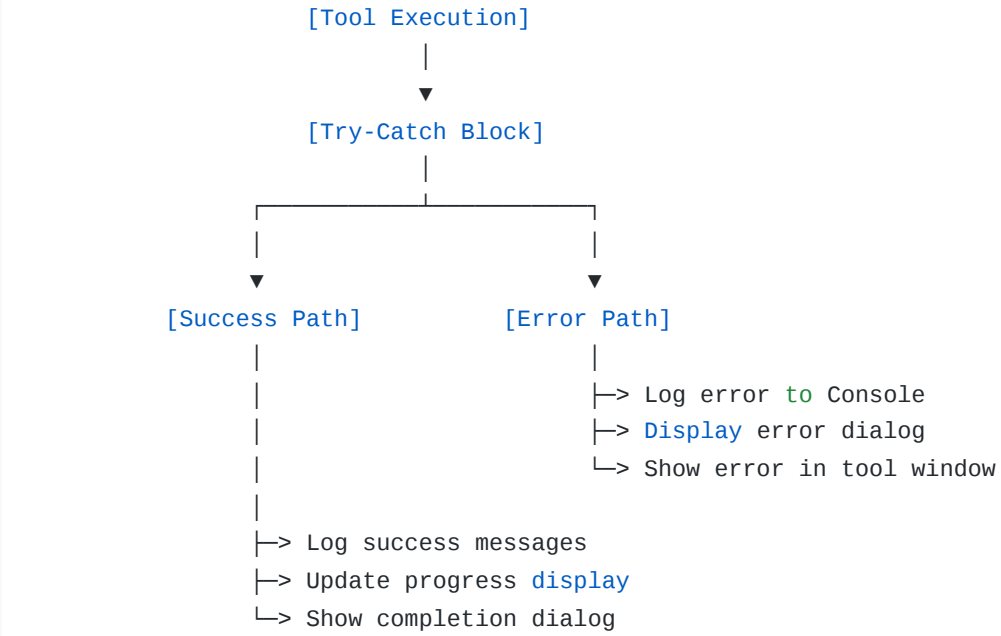
ERROR HANDLING FLOW



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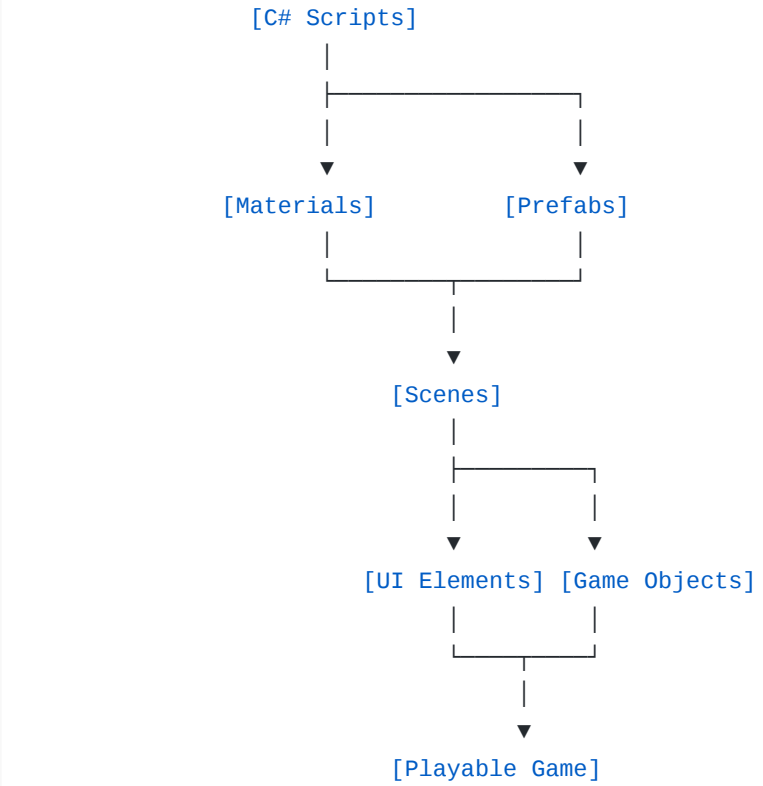
ASSET DEPENDENCY GRAPH



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END OF WORKFLOW DIAGRAM