Play/Complete Level Sequence

Actors/Participants: User, Player, GameManager, Level, GameObject, UserInterface, PlayerProgress

Successful Level Completion Flow

User → GameManager: startGame()

GameManager → Level: initialize()

Level → UserInterface: showInstructions()

User controls player to explore

User → Player: move(direction)

User → Player: interact(item)

Player → GameObject: interact(item)

GameObject ⇠ Player: collect()

Player → UserInterface: updateMaterialCount()

User uses unlocked tools via key bindings

User → Player: useTool(compass)

Player → GameObject: useTool(compass)

GameObject → GameObject: processToolUsage()

User builds required structures

User → Player: interact(buildable)

Player → GameObject: addMaterial(sticks)

GameObject → GameObject: build()

GameObject ⇠ Player: buildComplete()

Validate completion

Level → Level: checkCompletion()

Level → PlayerProgress: completeCheckpoint()

UserInterface ← PlayerProgress: showFeedback("Success!")

Award progress

GameManager → PlayerProgress: awardBadge()

UserInterface ← PlayerProgress: displayBadge()

GameManager → GameManager: progressToNextLevel()

GameManager → UserInterface: showLevelComplete()

Ready for next level