



# Swords and Shovels: Game Managers, Loaders, and the Game Loop

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## DESIGNING A GAMEMANAGER



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Games are a collection of  
systems.





Prototype

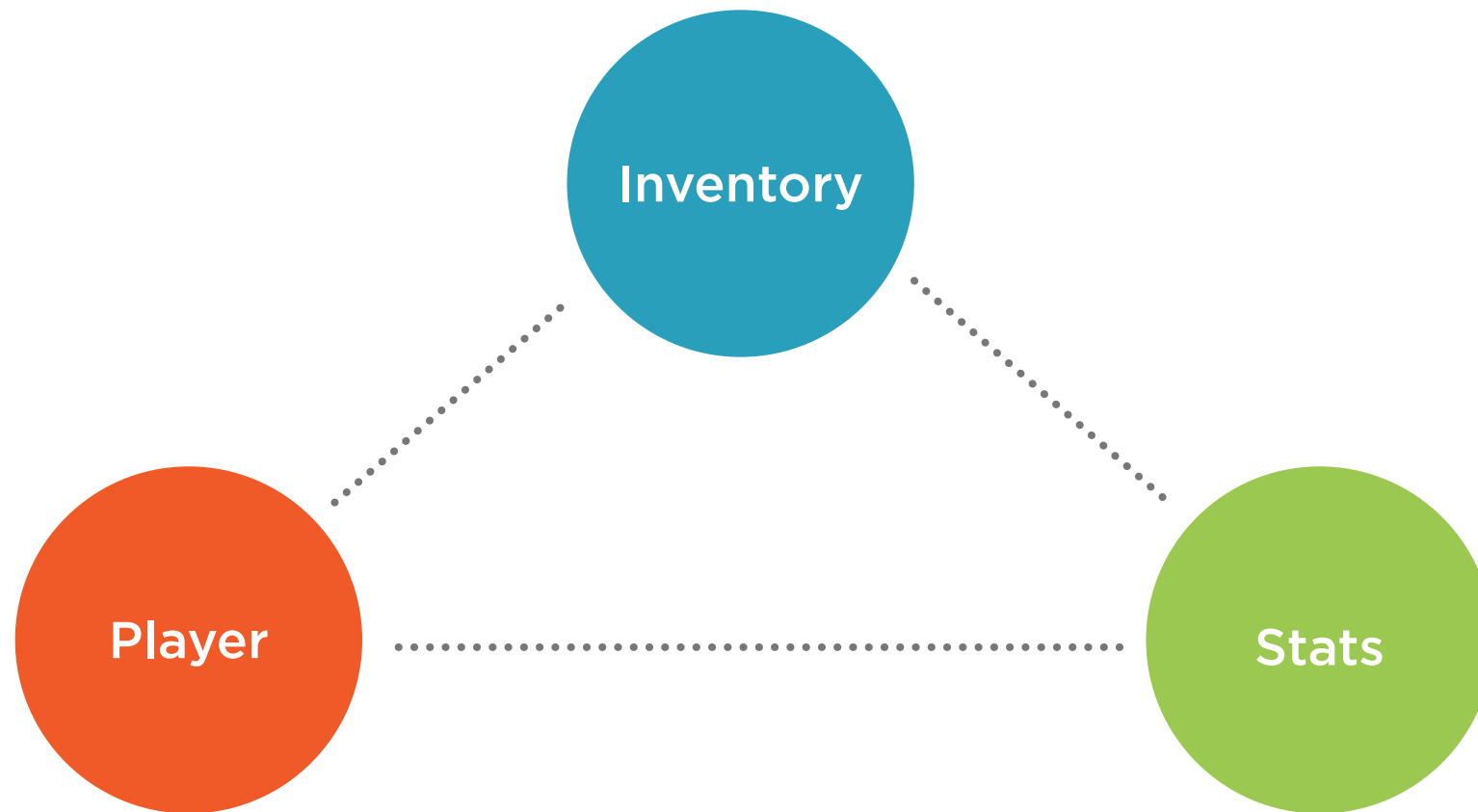


Full Game



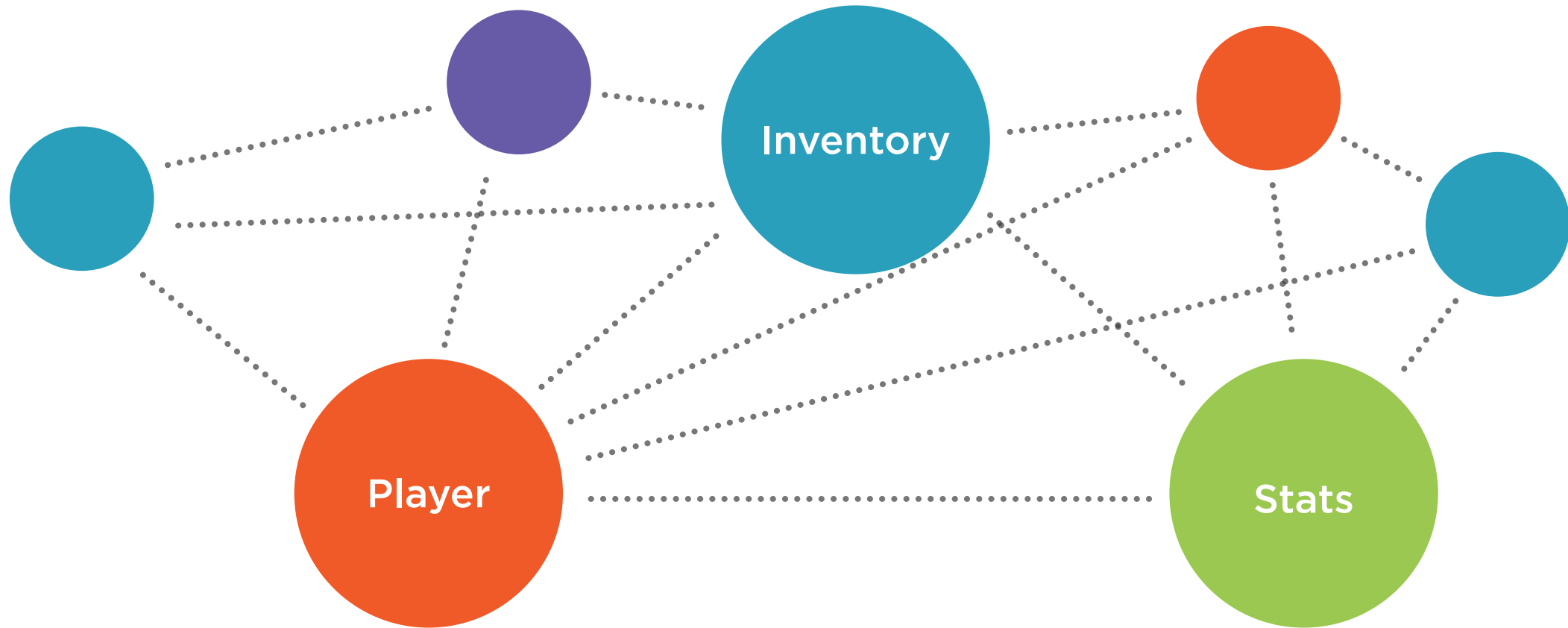


# Game Systems





# Game Systems





Complicated systems are  
hard to debug.





# Game Systems





# Game Manager



**A central location for data**

**Determines who can change what**

**Informs other systems of changes**







# Persistent Systems

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# Game Manager





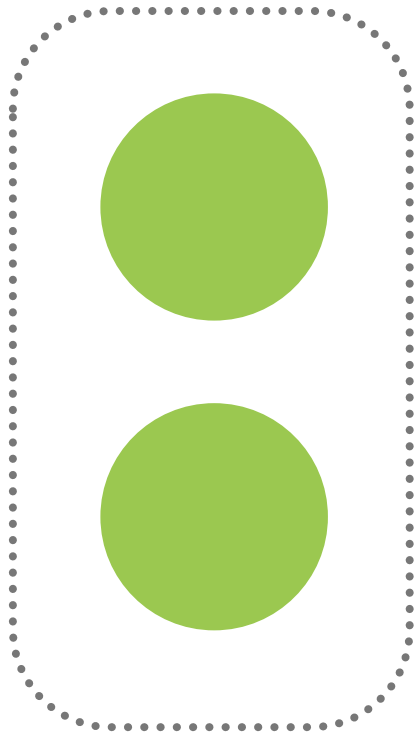
Globally accessible  
for the life of the game



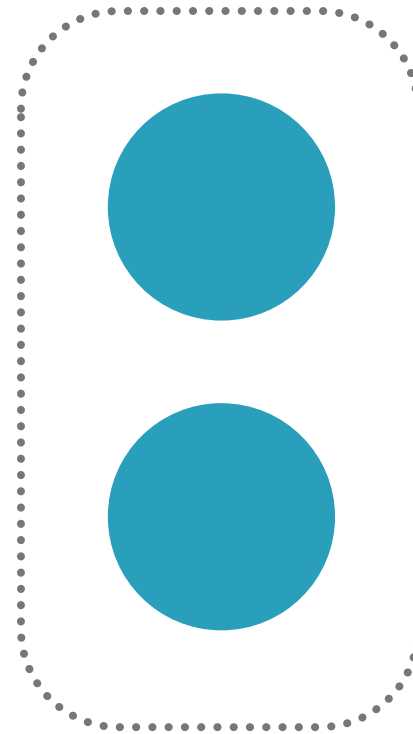


# Unity Containers

Scene

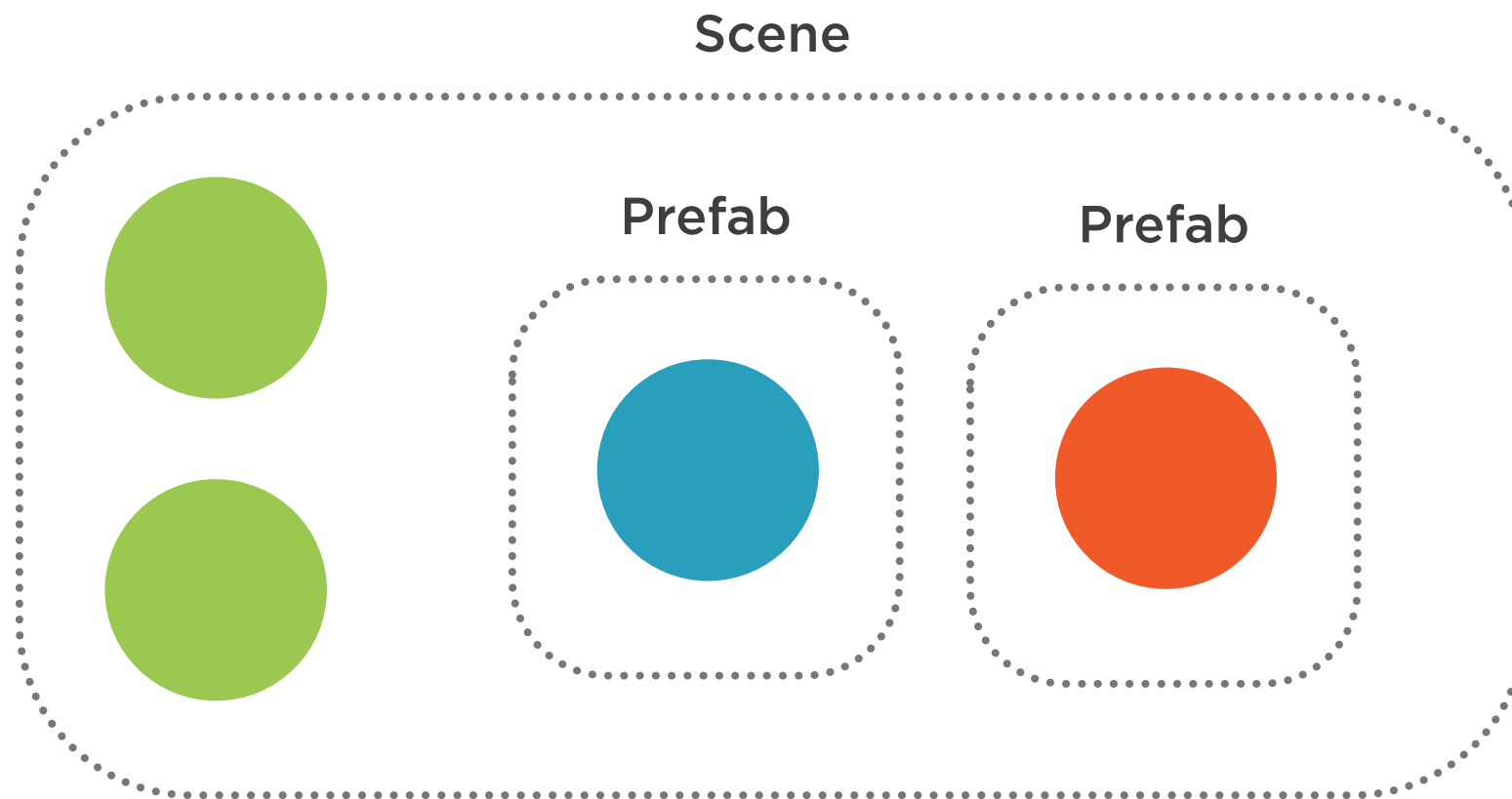


Prefab





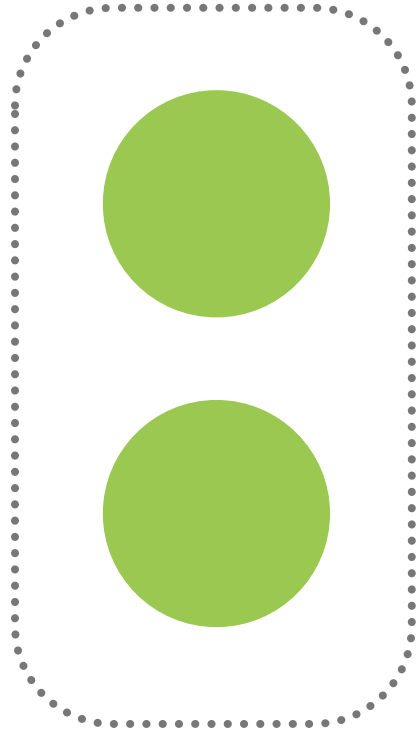
# Unity Containers





# Game Start

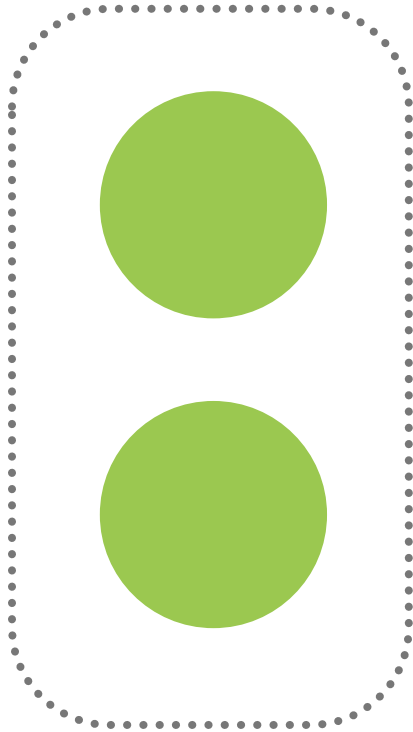
Persistent  
Scene



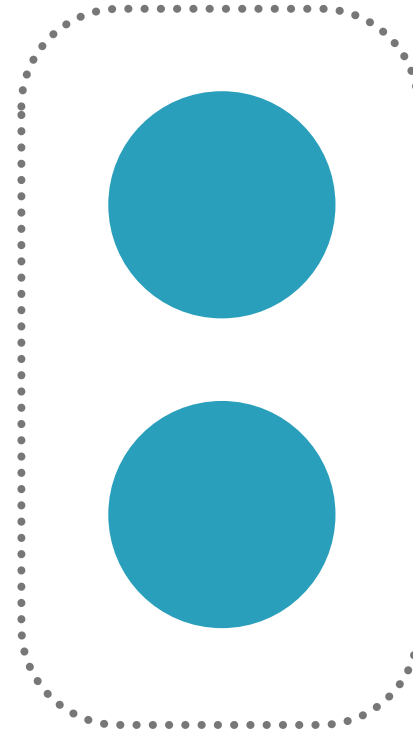


# Load Level 1

Persistent  
Scene



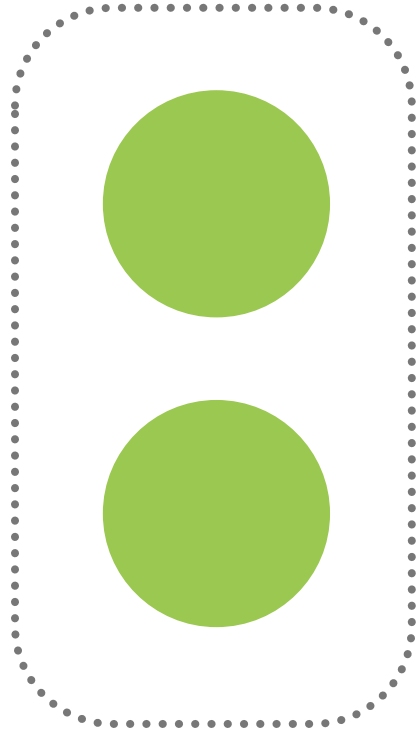
Level 1





# Unload Level 1

Persistent  
Scene

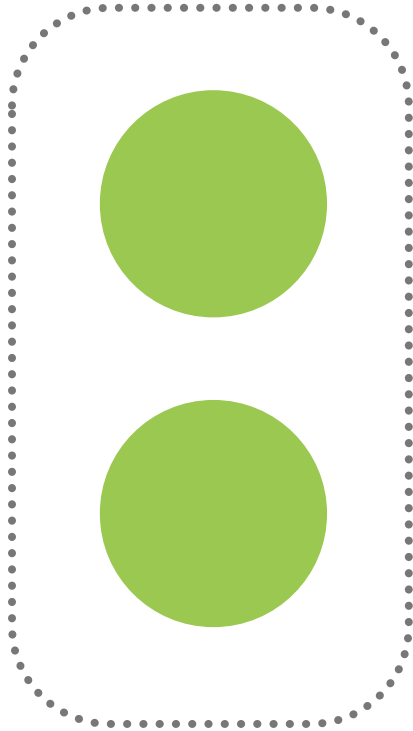




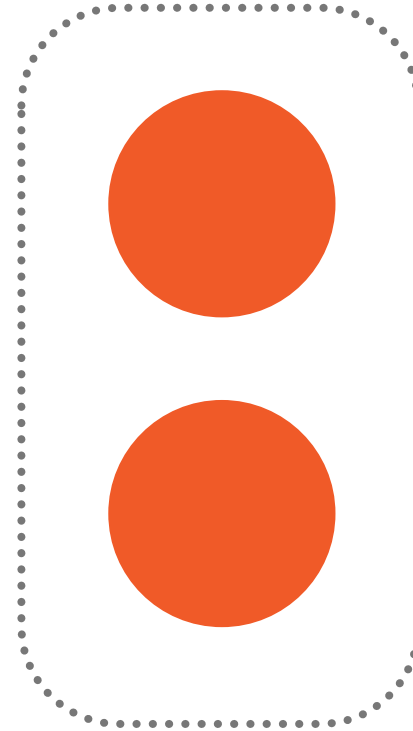


# Load Level 2

Persistent  
Scene



Level 1





# Preparing to Requirements

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It's okay to not have  
everything designed.





# Requirements

**Tracks what level is being played**

**Can create other global managers**

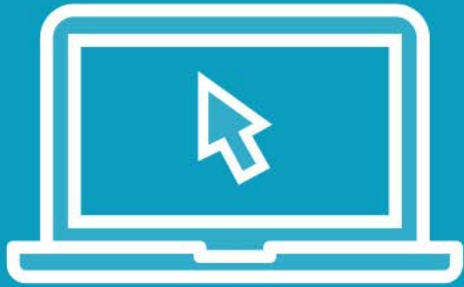
**Knows the current state of the game**

**Can cleanup game systems**





# Demo



Set up our project

Prepare to handle multiple scenes

