

# Bugs

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- renderableSystem crash -> read access denied

# Features

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- Scenes
  - Each scene should have a camera and FBO (size..)
  - Scene save/loader + tabs in the engine
  - Scene instancing inside other scenes
  - Swappable Renderer per scene
    - Render to Fbo
    - Render color
    - Render depth
    - Render physic objects
- Instanced Rendering entity.
  - Transform[] component? + CustomData[] component?
  - Additional system for instanced groups
- Shadows
- Animation
  - CpuAnimationPlayer
  - GpuAnimationPlayer (Baked from CpuAnimationPlayer)
- Physics

# Org

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Scenes within a render

Each have a Camera / Fbo

2 cameras : same scene

2 cameras : different scenes

## 1 cam at a time

Camera switching or Scene switching.

- Enter a new area
- Add underwater cam
- Add night vision cam

## 2 cams on screen

- Mini map cam
- Backview mirror, puddle, etc.

- side-by-side multiplayer couch
- Camera from another room (diff physical scene bundle)

## Better org

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### Different bundles?

Just make a different world and render it as well?

### 2 cams same world

Make make a Layout to organize the cameras?

or just tell each cam to render at specific coordinates on the screen (viewport)?

## Ui

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Also need different ui pages

## Saves

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Scenes as saves and as nodes