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BA COMPUTER GAMES DESIGN

GAME THEORY & DESIGN

Adams and Rollings: Actions



Adams & Rollings: Actions

- **Actions**
- **Actions For Gameplay**
- **Defining Your Actions (with Exercise)**
- **Actions that Serve Other Functions**
- **Game Examples – Steam/Epic Games Libraries**





GAME THEORY & DESIGN

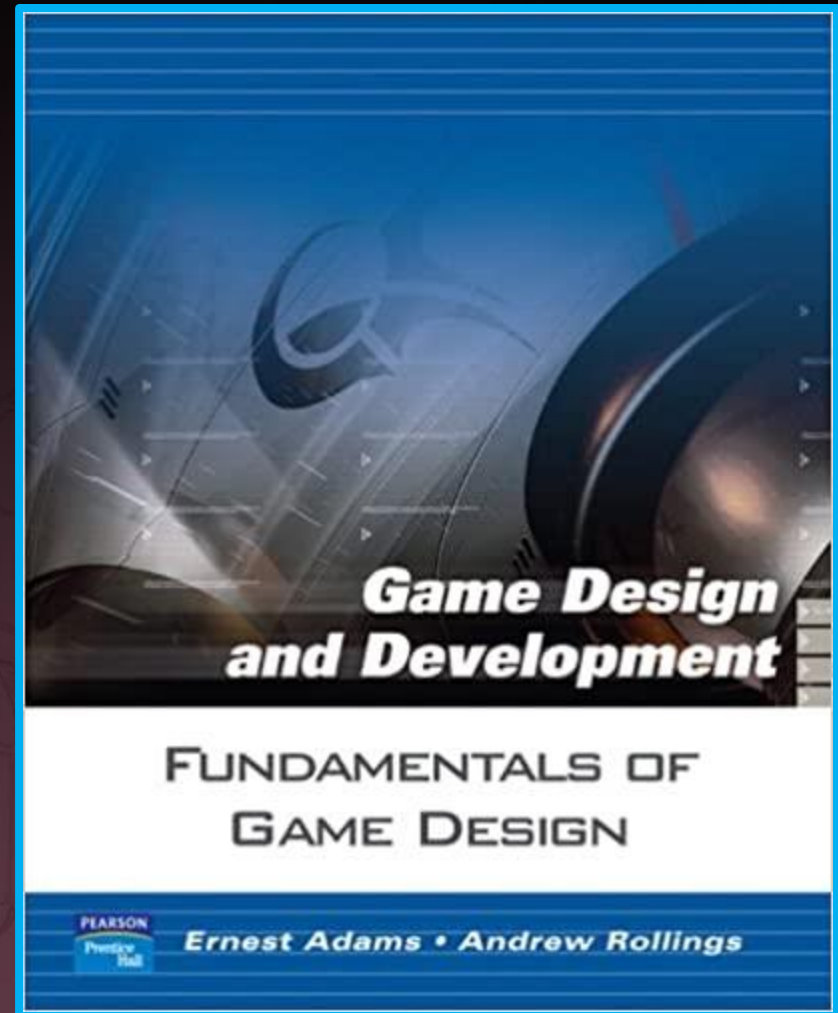
Adams and Rollings: Actions

Further reading:

Actions

Ernest Adams & Andrew Rollings, Fundamentals of Game Design

(Available in **Y Fforwm Library**, SA1)





Ernest Adams & Andrew Rollings Commonly Used Challenges

Actions



The user interface links the input devices in the real world to **actions that take place in the game world.**





Actions refer to events in the game world **directly caused** by the user interface's interpreting a player input.





If the player presses a button on a game controller and the user interface maps that button to striking a cue ball in a game of pool, striking the cue ball constitutes an **action**.



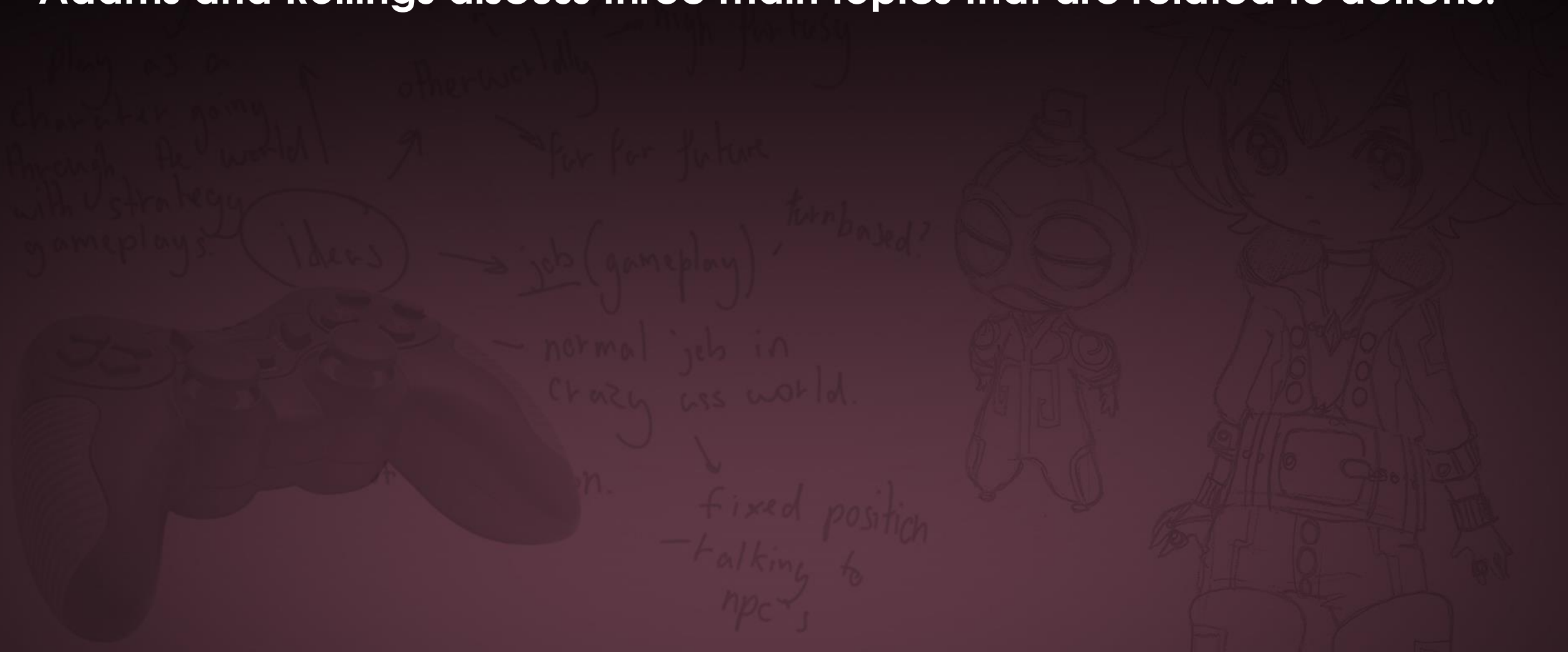


If the cue ball knocks another ball into a pocket, that is an **event** but not an action; the movement of the other ball is a **consequence** of the player's actions.





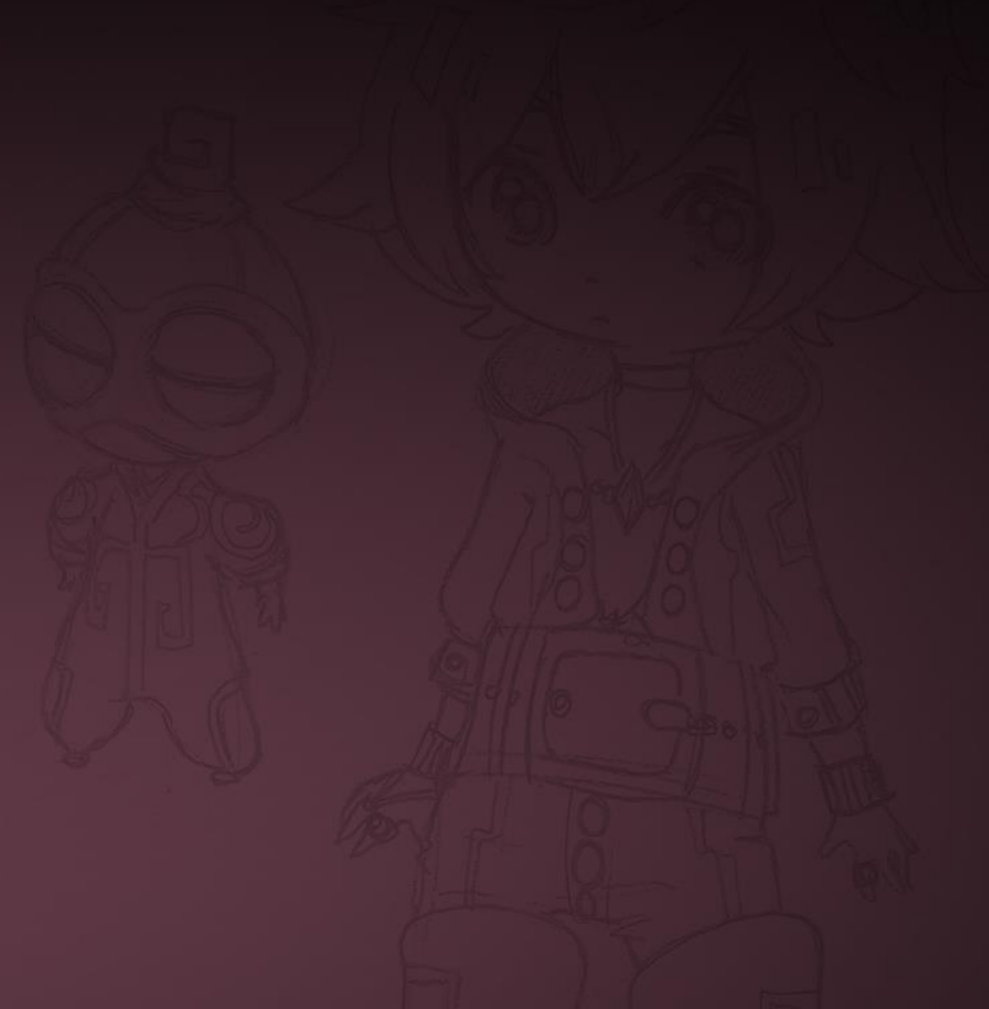
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- **Actions for Gameplay**
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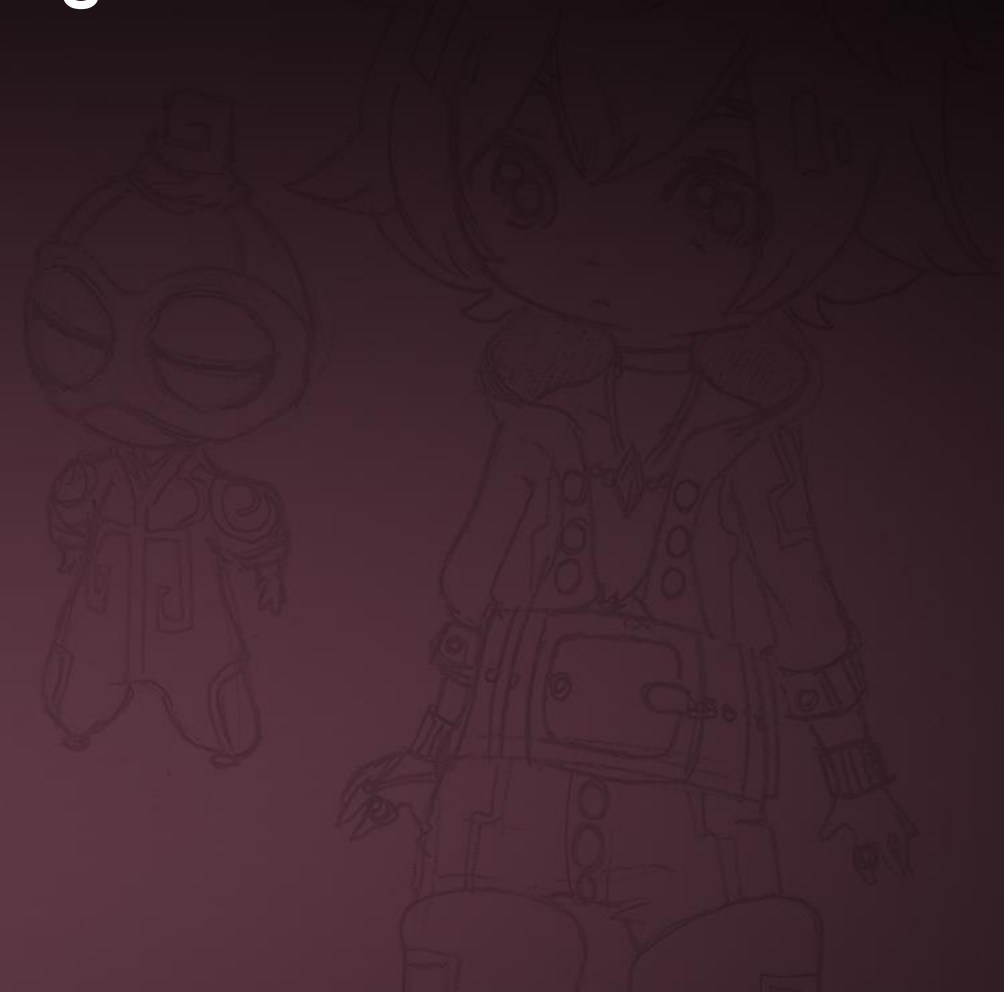
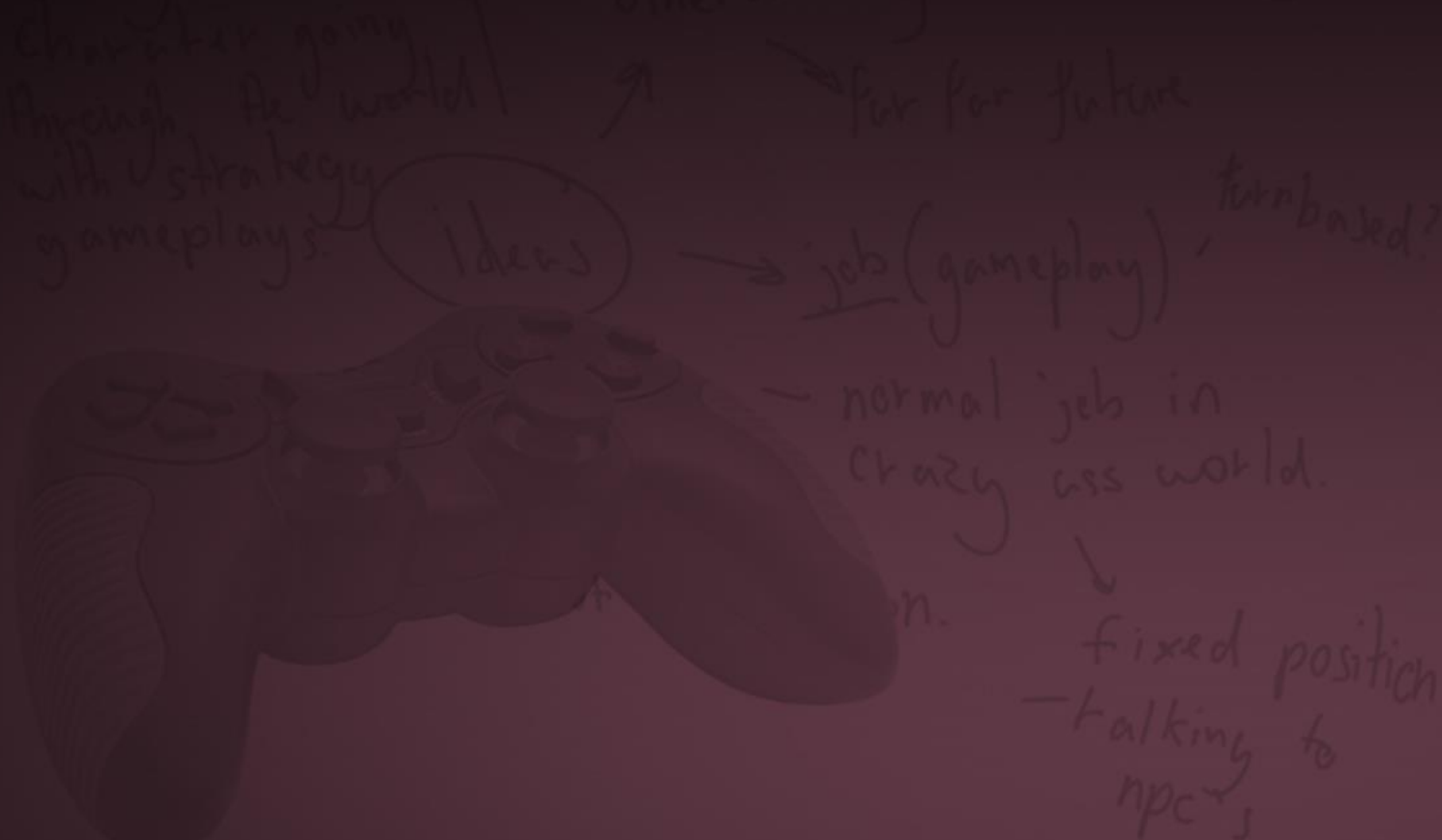
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Actions For Gameplay



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Try studying other games in the genre you have chosen to design and see what actions they support.

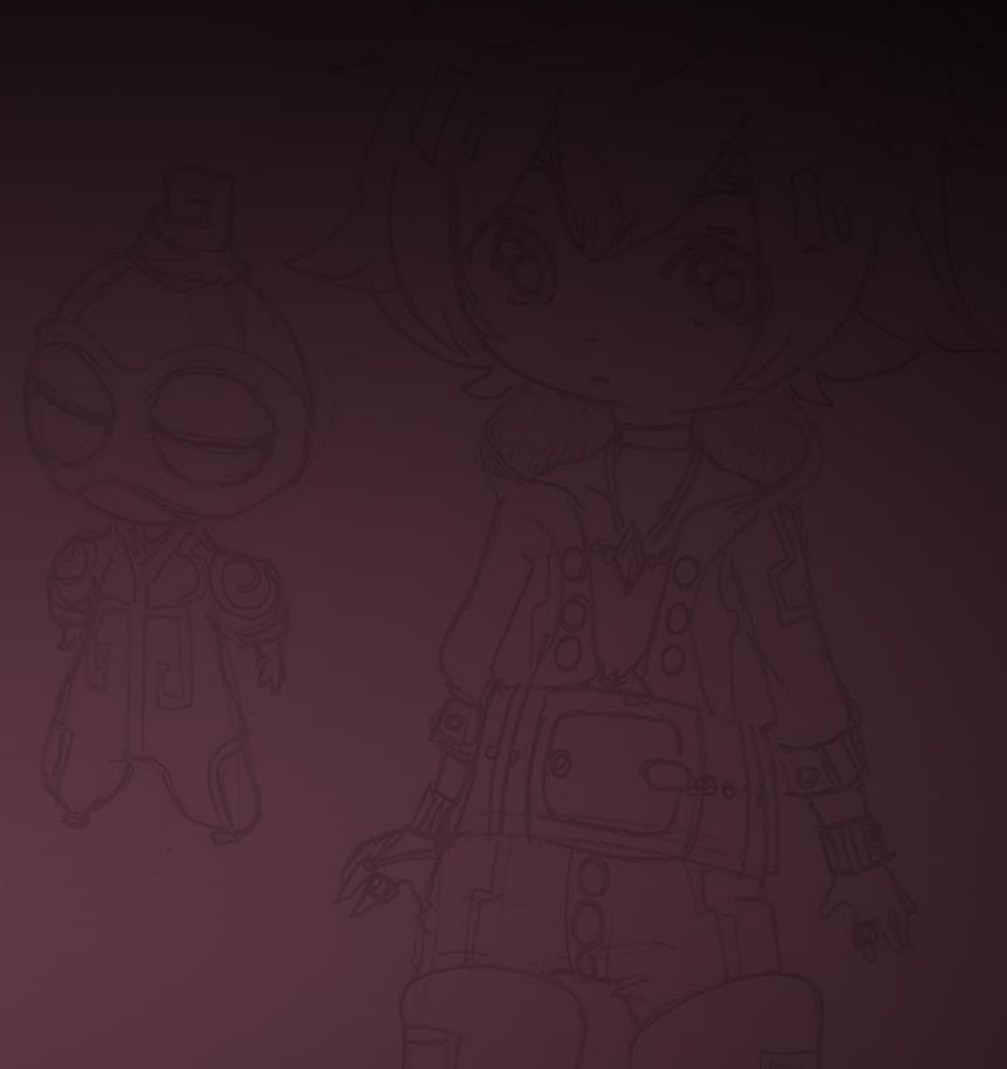
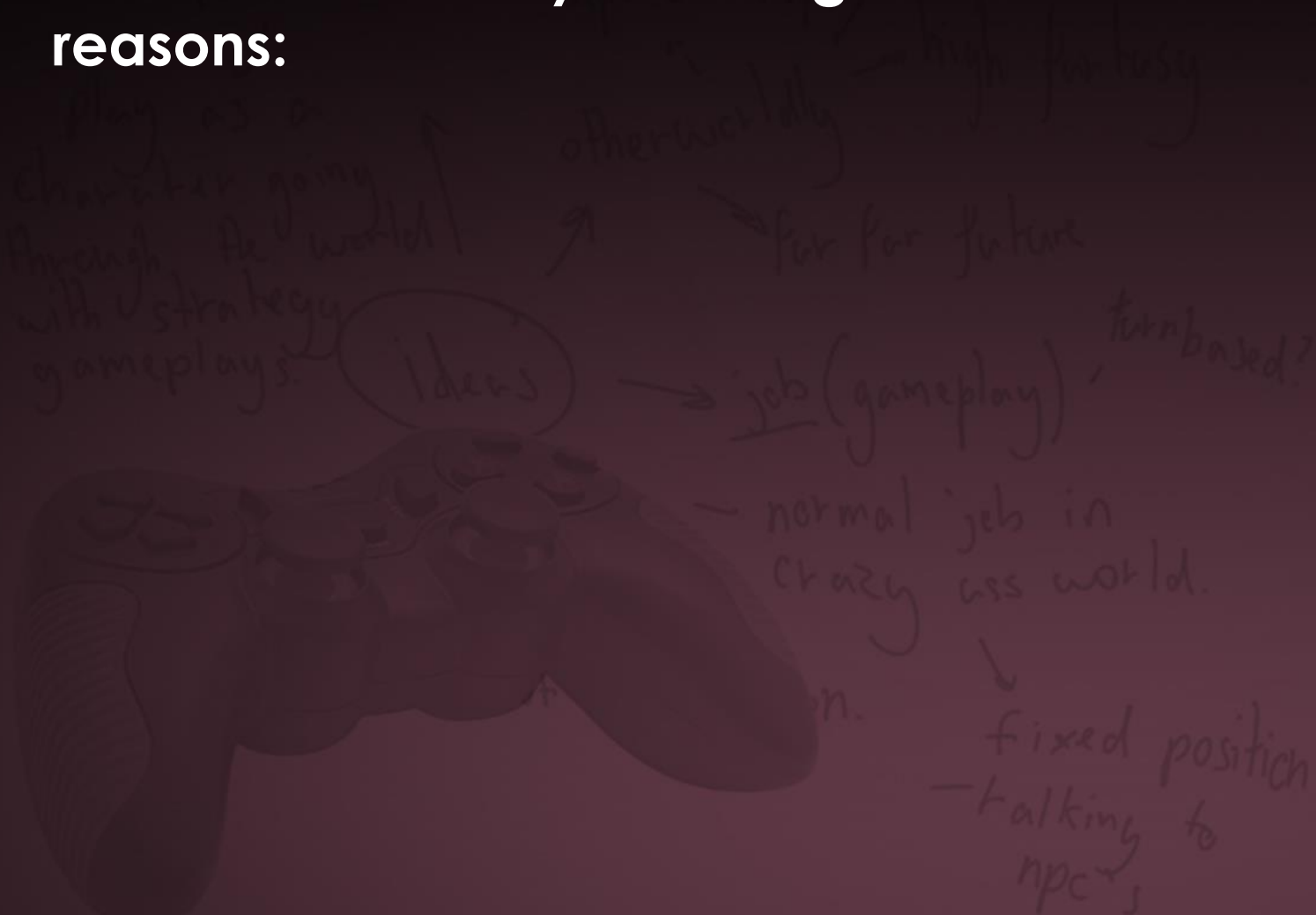


Many games include a **large number of types of challenges** but only a **small number of actions**, leaving the player to figure out how to use the actions in various **combinations** to surmount each challenge.

fixed position
- talking to
npc's



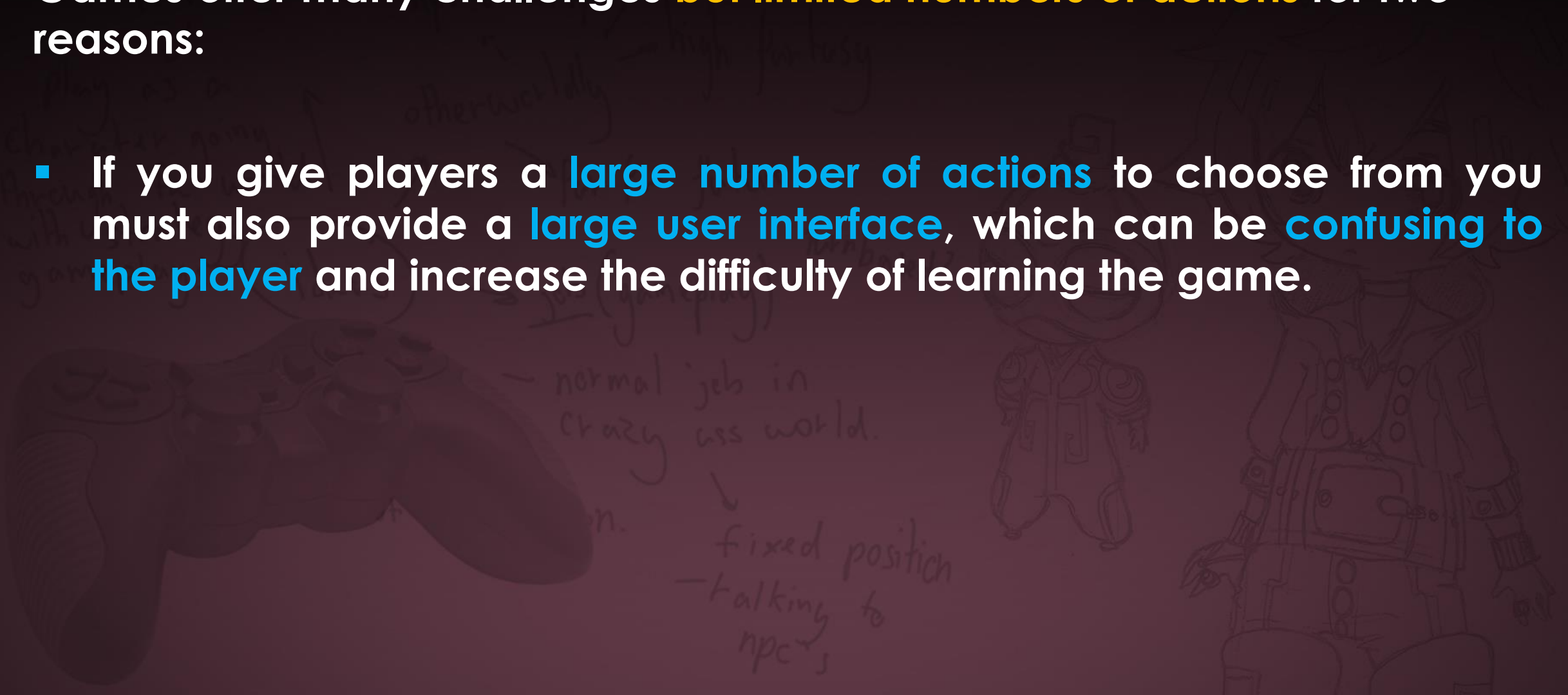
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Games offer many challenges **but limited numbers of actions** for two reasons:

- If you give players a **large number of actions** to choose from you must also provide a **large user interface**, which can be **confusing to the player** and increase the difficulty of learning the game.
- A large number of actions usually requires a **large number of animations** to display them all. This makes a game **expensive** to develop.



“Many great games implement only a **small number of actions** but still let the player use them to overcome a **wide variety of challenges**.“

If you are imaginative enough, the challenges will be so interesting that the player will never notice."

(Adams & Rollings 2007: 304)



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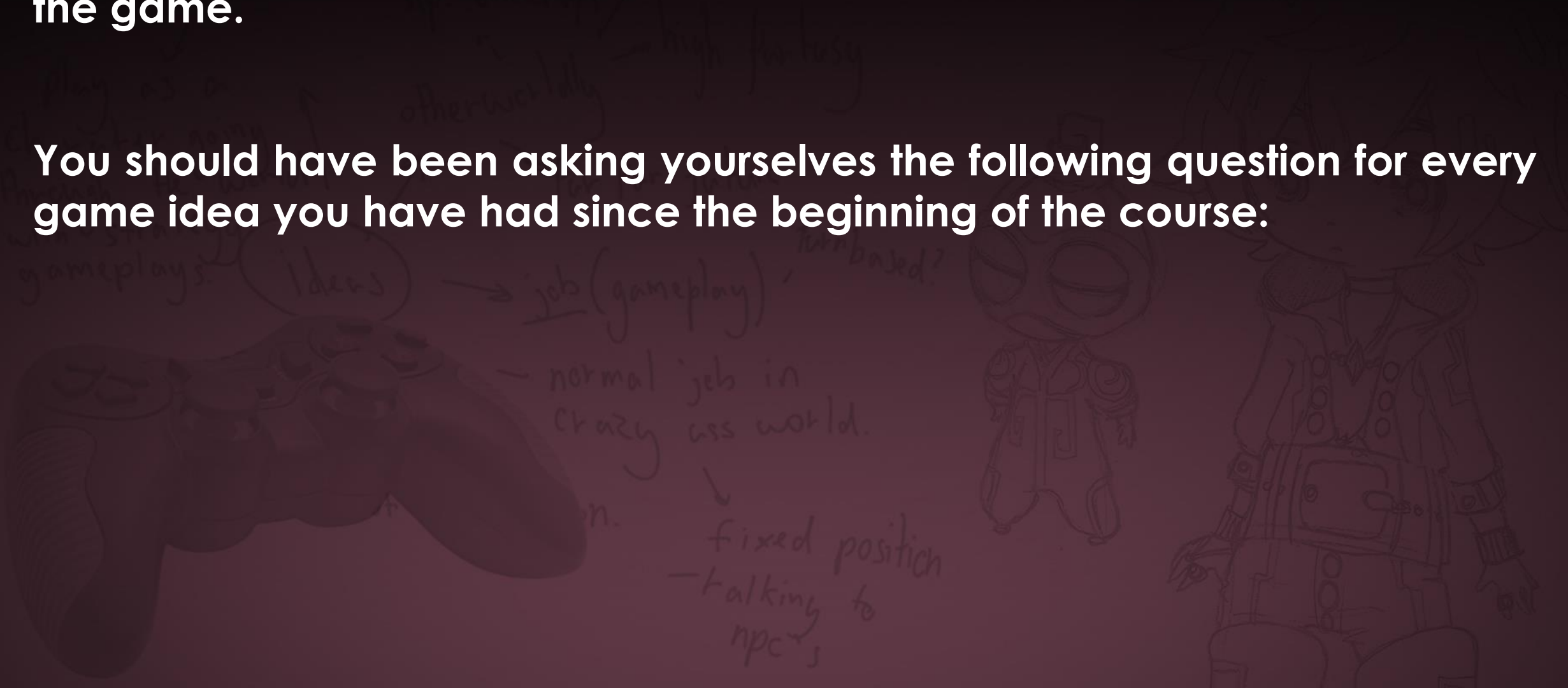
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Commonly Used Challenges

Defining Your Actions



To **define actions** that you will implement think about **the player's role** in the game.

You should have been asking yourselves the following question for every game idea you have had since the beginning of the course:





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WHAT DOES THE PLAYER DO?



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EXERCISE:

Think about your idea and write down some general answers to this question.



WHAT DOES THE PLAYER DO?

EXERCISE:

Next, look at the challenges you designed for the **primary gameplay mode**.

Begin with the **atomic challenges** you plan to offer. For each atomic challenge, write down **how you expect the player to overcome it**.



WHAT DOES THE PLAYER DO?

EXERCISE:

After you define the actions that will meet the atomic challenges, consider the **intermediate** and **higher-level challenges** in the gameplay mode.

Can they all be met with the actions you've defined or will they require **additional** ones? **If not, add any additional actions to the list.**



WHAT DOES THE PLAYER DO?

EXERCISE:

Finally, **consider actions unrelated to gameplay** that you may want to make available to the player.

Once you have been through this process for the primary gameplay mode, **do it all again for each of the other modes.**



WHAT DOES THE PLAYER DO?

EXERCISE:

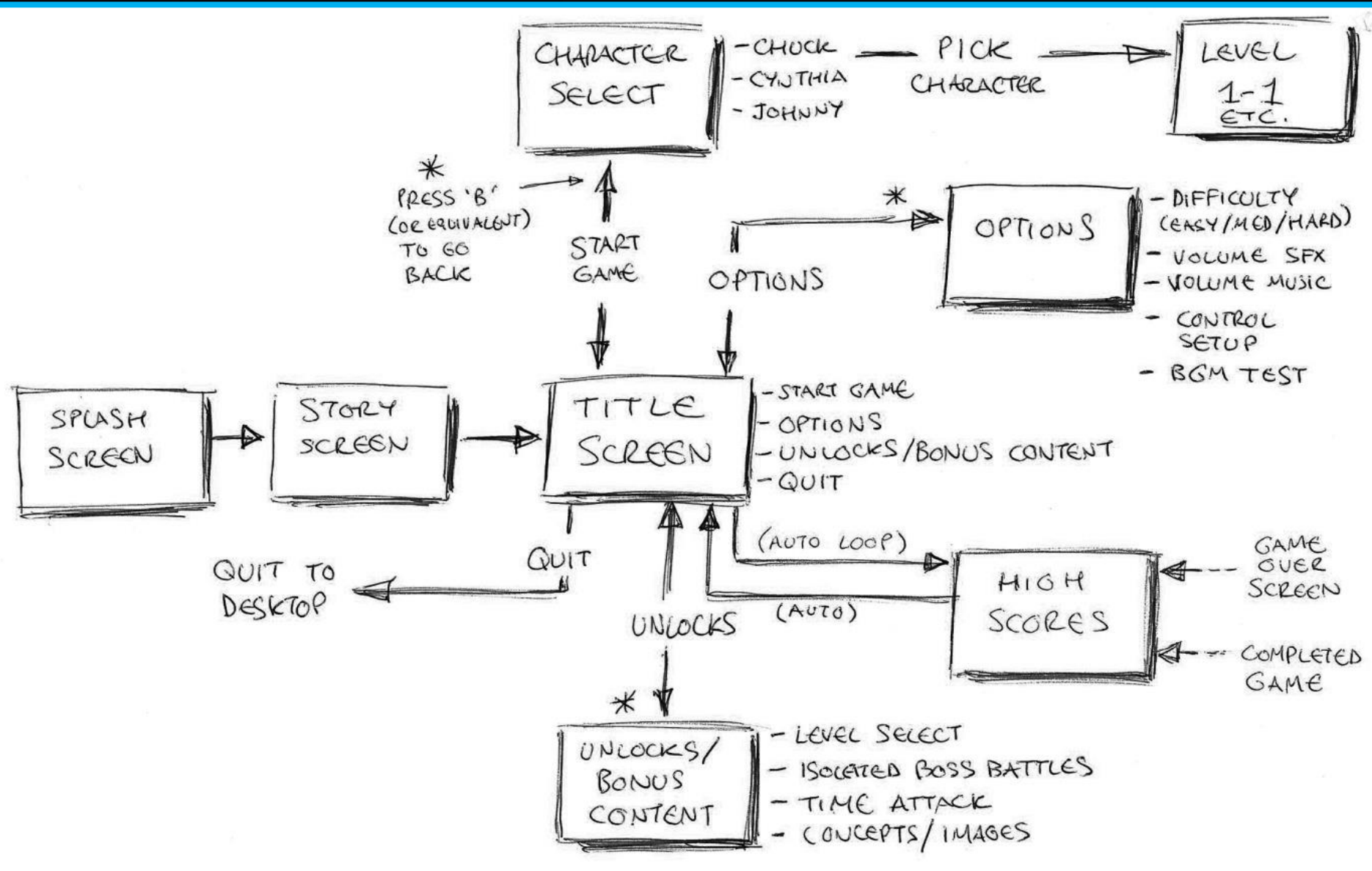
When you believe you have comprehensive lists of all the actions that you want to include in each mode you will be ready to **start defining the user interfaces** for the different modes.



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Defining Your Actions



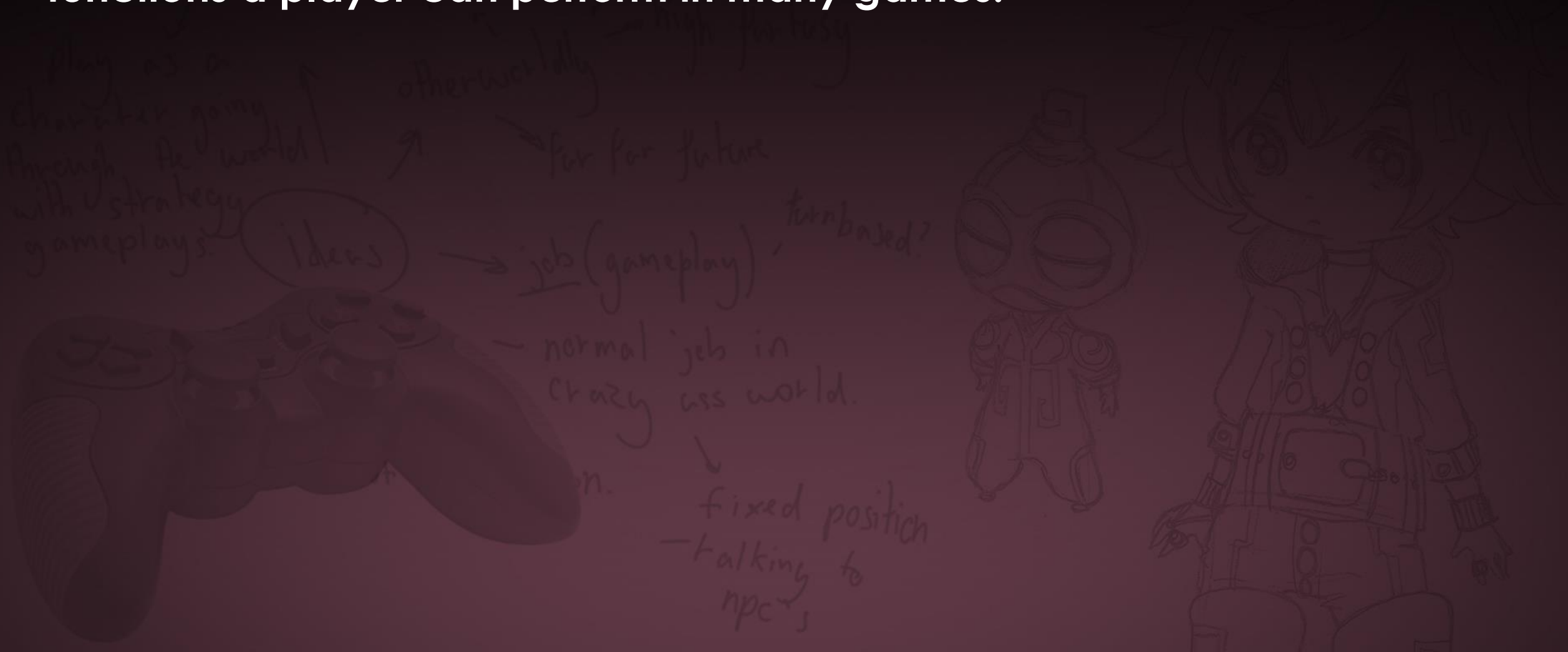


Ernest Adams & Andrew Rollings Commonly Used Challenges

Actions That Serve Other Functions



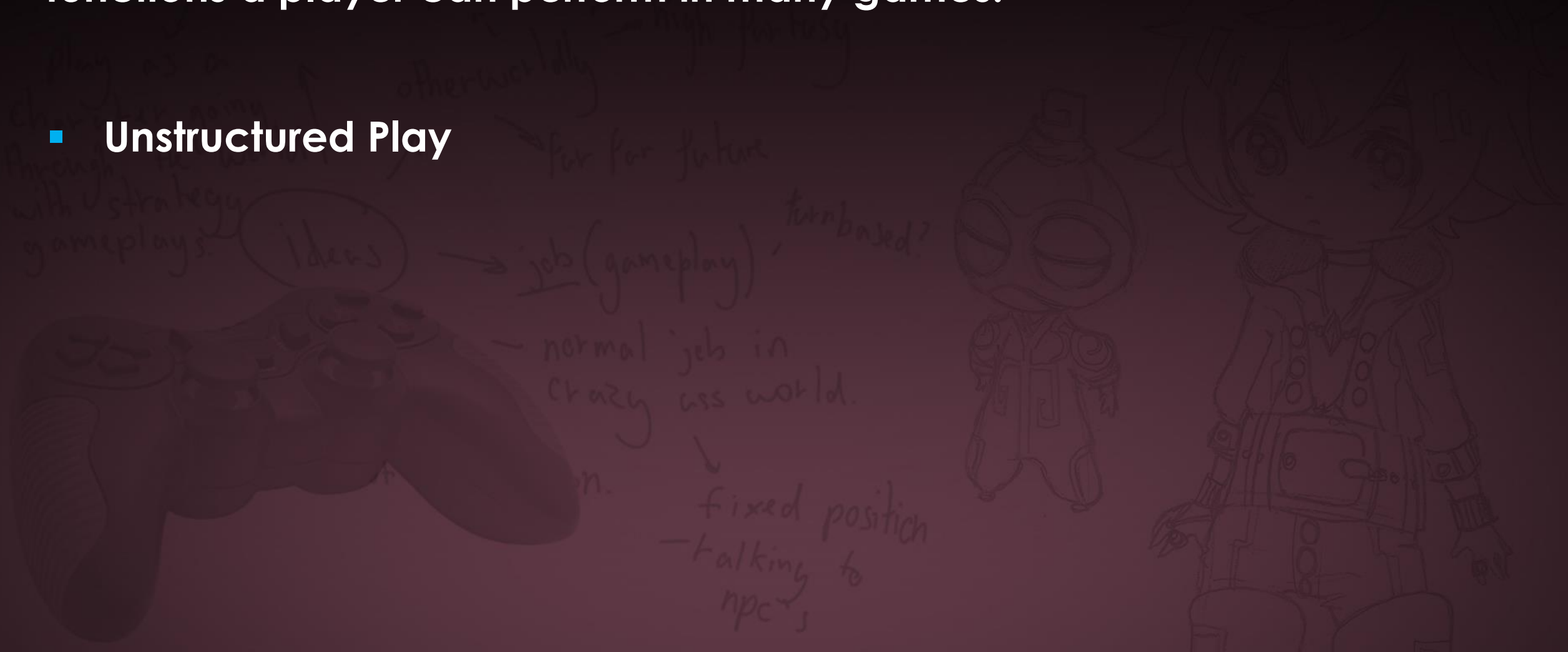
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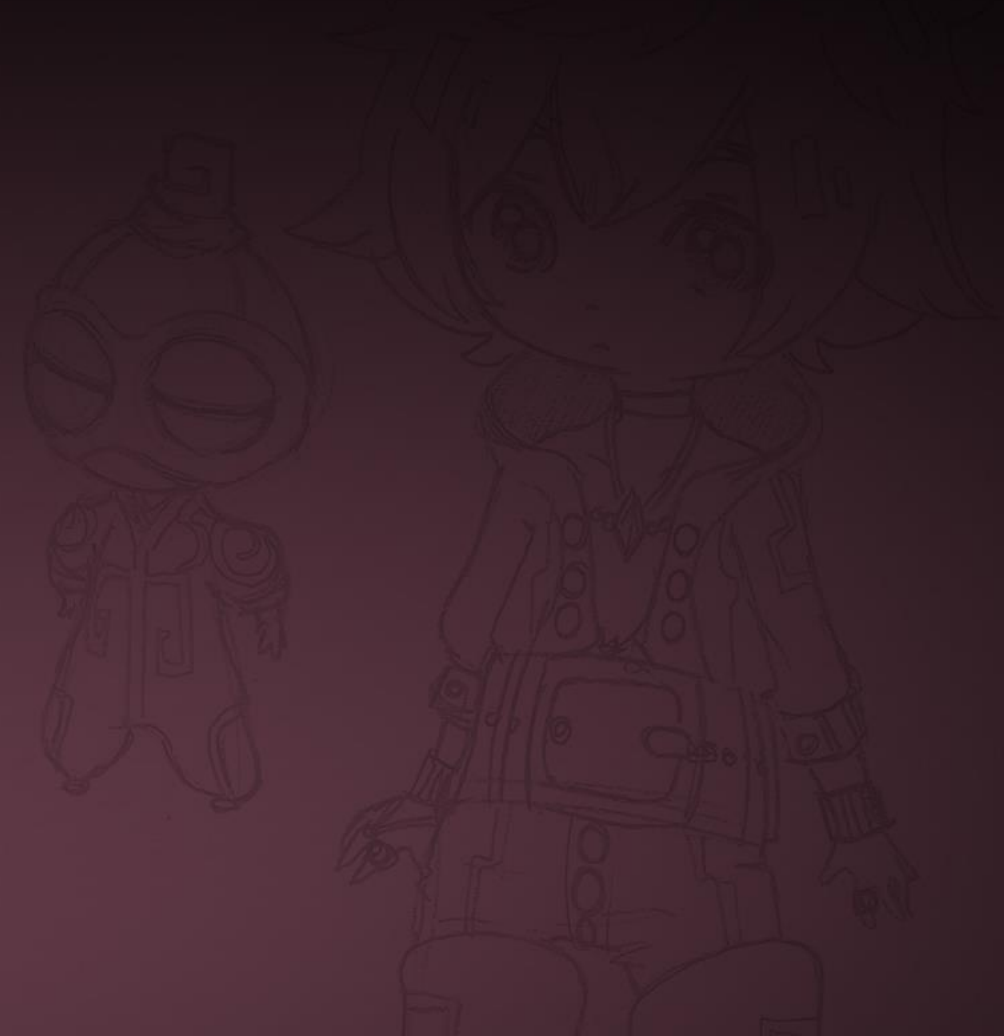
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- **Actions for Creation and Self Expression**





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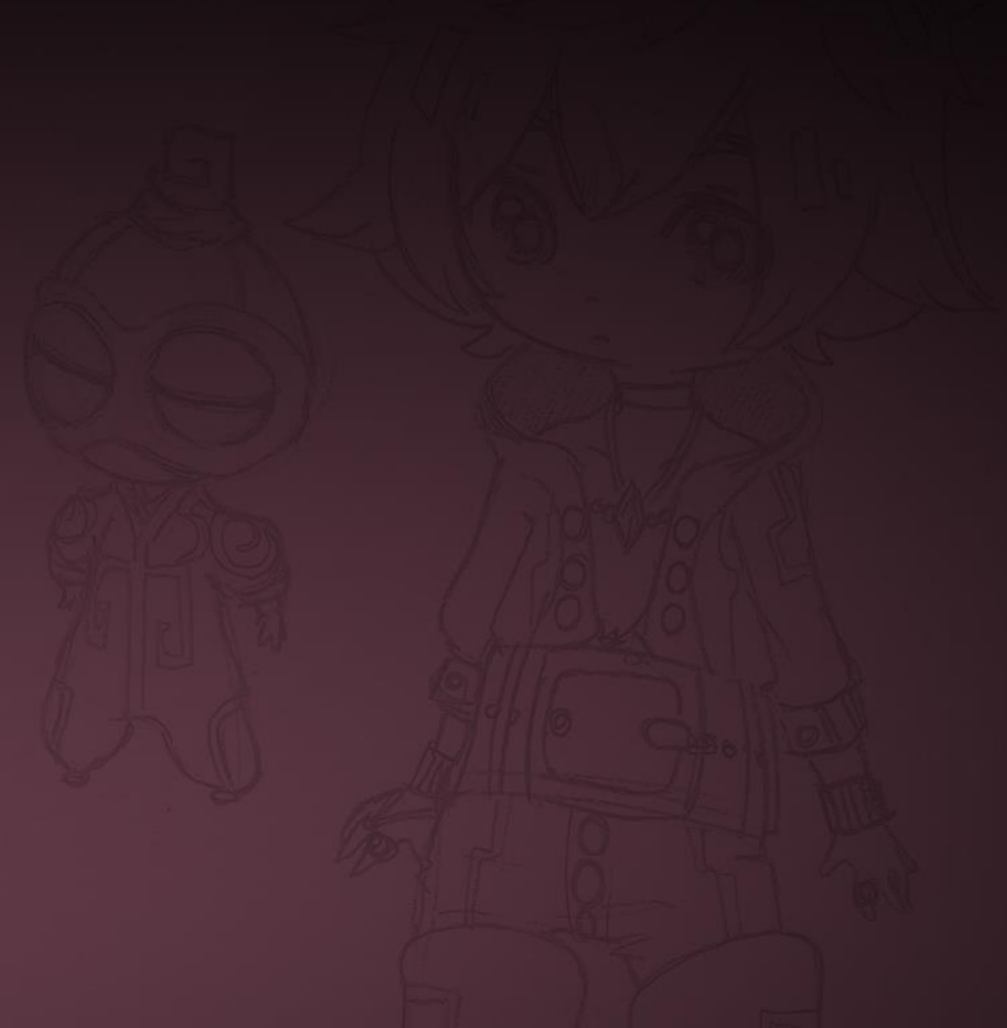
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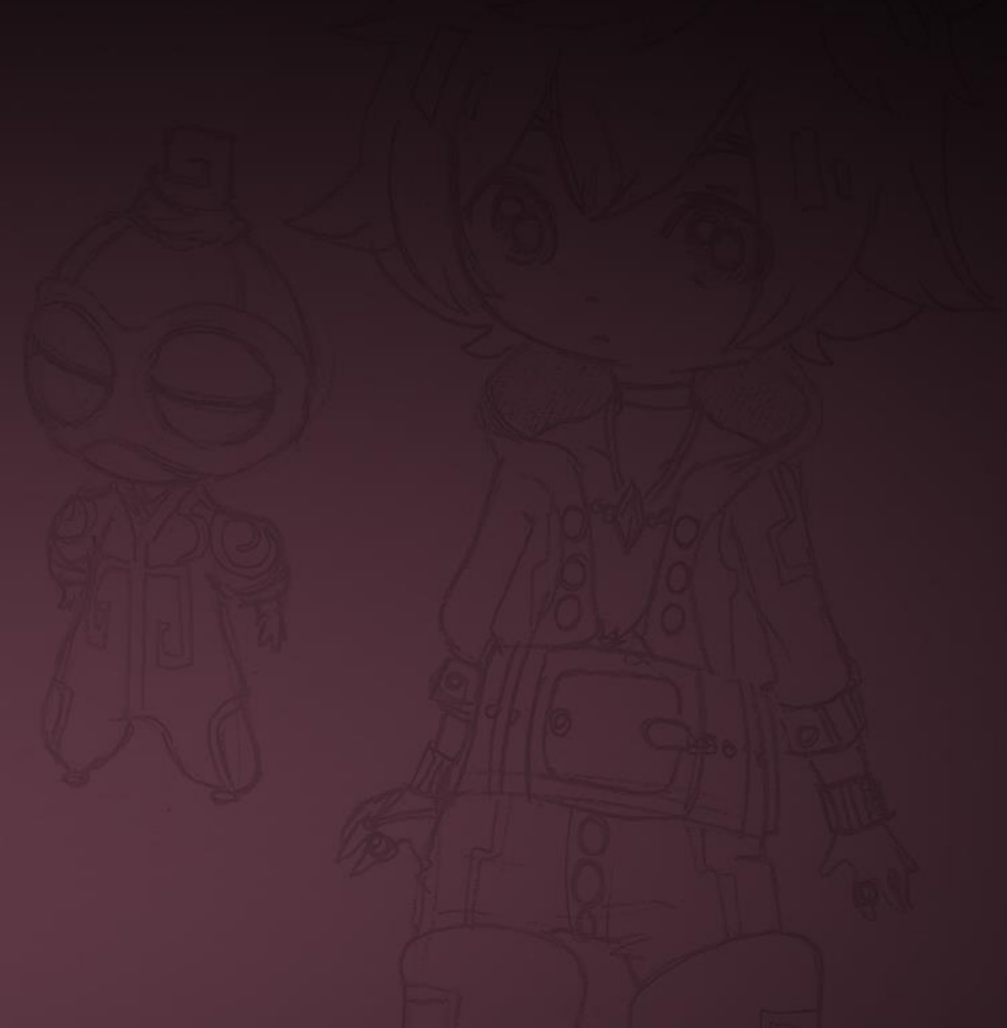
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- **Actions for Creation and Self Expression**
- **Actions for Socialization**
- **Actions to Participate in the Story**





In addition to gameplay actions, there are also actions that serve other functions a player can perform in many games:

- **Unstructured Play**
- **Actions for Creation and Self Expression**
- **Actions for Socialization**
- **Actions to Participate in the Story**
- **Actions to Control the Game Software**





Unstructured Play

These are fun-to-perform actions that don't address any challenge.





Actions for Creation and Self Expression

Much of the activity in construction and management simulations consists of **creative play** rather than gameplay, although the player's actions are often **constrained by limitations imposed by the game's internal economy.**





Actions for Creation and Self Expression

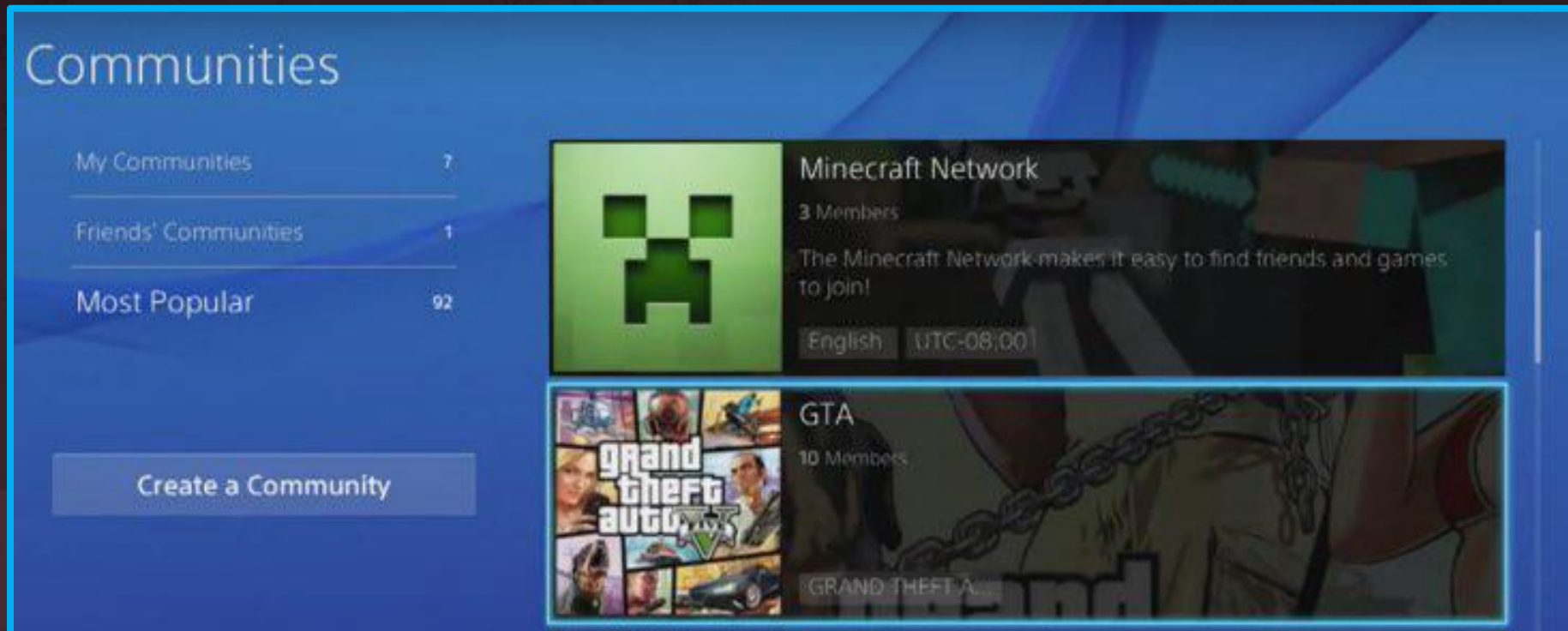
Many modern games offer **creative modes** that are separate from a game's internal economy, which allows players to engage in creative actions outside of core gameplay.





Actions for Socialization

Players in multiplayer games, especially online games, need ways to talk to each other, to form groups, to compare scores and to take part in other community activities.





Actions to Participate in the Story

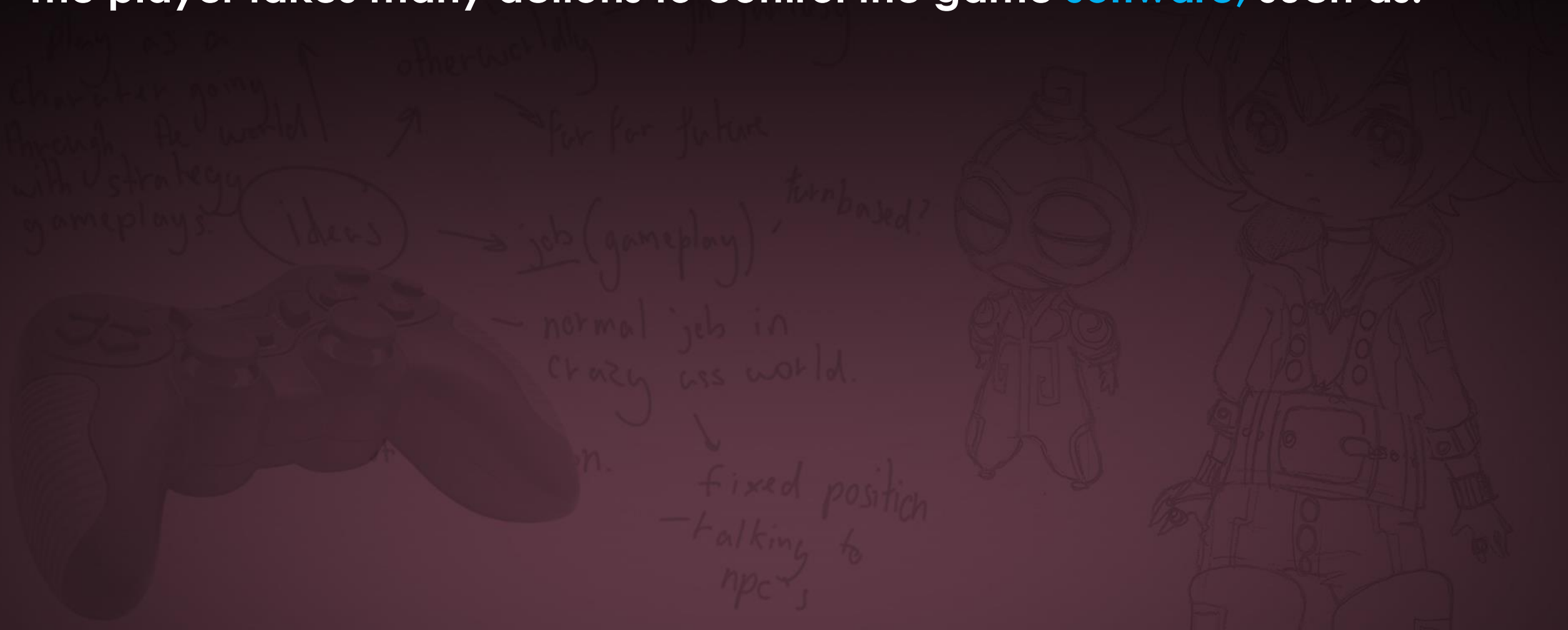
Participating in interactive dialogue, interacting with NPCs or making decisions that affect the plot all constitute actions that allow the player to participate in a story even if those actions don't directly address a challenge.





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- Choosing a difficulty level
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- **Adjusting the virtual camera**
- **Pausing and saving the game**
- **Choosing a difficulty level**
- **Setting the audio volume**

Some actions may affect the game's challenges, but the player **doesn't take them specifically to address a challenge.**



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Summary



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Any questions?



Game Examples (Steam Library / Epic Games Library)

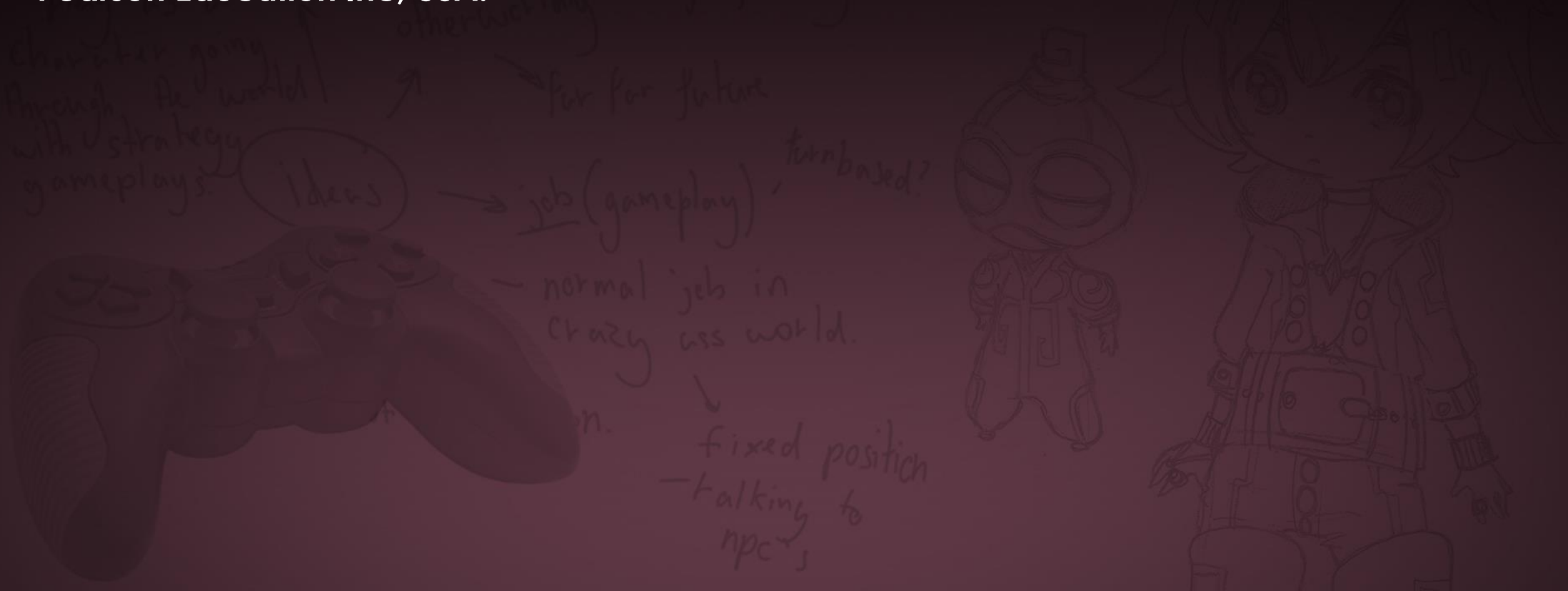
Examples of Actions in Games

- *Fallout 3* (Bethesda Softworks, 2008) – **Gameplay, Story, Software Functions**
- *The Sims 4* (Maxis, 2014) – **Gameplay, Socialising, Creative**



Books

**Adams, E. & Rollings, A. (2007). *Fundamentals of Game Design*.
Pearson Education Inc, USA.**





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