A Primer on Tech Designers

About me

- Class of 2010
- Generalist designer
- 5 years @ Turbine
- 5 years @ Bungie
- Hired, trained, led tech designers
- Design teacher @ Champlain

Your takeaways:

- What “tech designer” means
- What we do
- What skills they need
- Answers to your questions
- A new lens for your work

Definitions

Nebulous

- Hard to pin down
- Many definitions
- Skillsets + responsibilities differ wildly

A “technical game designer” is…

A game designer

first, someone who understands the interplay between player and game.

A game designer first!

- Concerned with player/game interaction
- Strong understanding of player types
- Knows *how* and *why* games affect

- Core skills:
  - Communication
  - Empathy
  - Emotional intelligence
  - Systems thinking
  - Logic
  - Growth Mindset

A “technical game designer” is…

A game designer

…that displays technical excellence like coding ability or expertise in other areas.

Technical Excellence

- “A designer who codes”
- My take:
  - A designer who demonstrates technical skill or excellence
  - Often code or scripting
  - Sometimes other areas

A “technical game designer” is…

A game designer

…that displays technical excellence

…and champions project health

by improving efficiency, scalability, or tools.

Project Health

- “Design adds value faster than it adds costs” – Spolsky
- Long-term thinking
- An eye for project health
- Works to improve:
  - Scalability
  - Efficiency
  - Workflows

A “technical game designer” is…

A game designer

first, someone who understands the interaction between player and game.

…that displays technical excellence

like coding ability or expertise in other areas.

…and champions project health

by improving efficiency, scalability, or tools.

(…and likely has other specializations)

Design specialties

- Many ways to categorize “designers”
- “Tech designer” is just one axis

- Generalist <-> Specialized
- Individual Con. <-> Leadership
- Less technical <-> More technical

Tech Design examples

Case Study 1: Gambit

The situation:

- Unusual design space
- New tech
- Memory constraints
- Design for scalability

The tech designer:

- Set conventions
- Coordinated solving technical challenges
- Wrote script

Case Study 2: Designer Toolkit

The situation:

- Objects w/ mechanics
- Old way: Branch copies
- The problems:
  - Bad inheritance
  - Redundant work
  - Redundant assets
  - Necro'd bugs

The tech designer:

- Spotted the problem
- Built canonical objects
- Thoroughly documented
- Created processes to update

Case Study 3: Script Editor

The situation:

- Prop. script language
- NP++
- No auto-complete
- No function library

The tech designer:

- Led engineering team
- Goal: Fix script authoring
- Integrated the editor:
  - Error reporting
  - Auto-complete
  - Implicit declarations

Case Study 4: Training

The situation:

- Hiring 20 new tech designers
- Needed:
  - Fast onboard
  - Culture of doc
  - Strong conventions

The tech designer:

- Exercised new workflows
- Created doc framework
- Wrote bootcamps
- Defined support system

The path to tech design

So you wanna be a tech designer?

The advice everyone hates to hear...

Don’t wait, just do it:

1. Do game design
2. Learn technical skills
3. Apply both to a project’s health

Making it official

- Getting *hired* as one has extra steps
- Usually mid-career
- It's a young specialty
- Few entry-level roles

Selling yourself

- I've hired 21 + misc interviewing
- I advise demonstrating:

General:

- Game projects
- Design mindset
- Scale

Hard skills:

- Code/script
- Tech. Writing
- Workflow work

Soft skills:

- Growth Mindset
- Conflict Res.
- Communication

AAA vs Small Teams

The AAA-perspective

- “Tech Design” exists in contrast
- Scale is a factor:
  - Efforts multiplied across more

But flip that on its head…

- AAA isn't the whole world
- "Non-technical" designers are a luxury of scale
- Many fit my definition w/o title
- Maybe *most* small-team designers are…

THANKS!

ANY QUESTIONS?

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