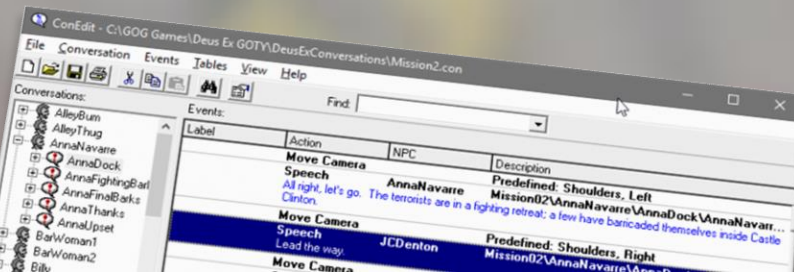# Tools Live Longer Than Games Do
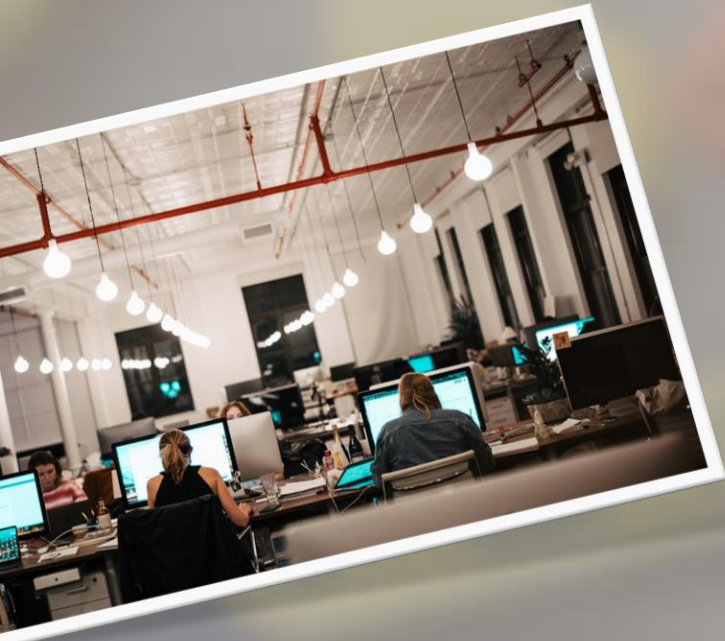
What I learned by interviewing John Romero, Tim Sweeney, and other legendary game tools developers

About Me

About Me

User Experience Director

Ubisoft Technology Group

About Me

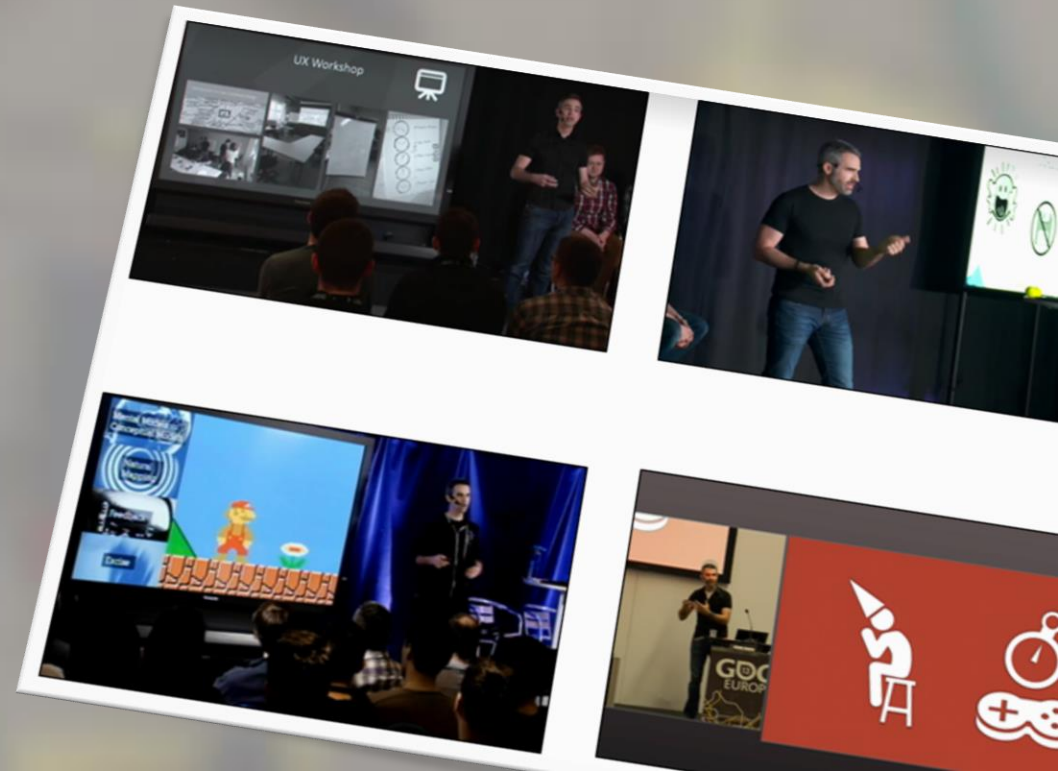1990s – **Web and motion design**
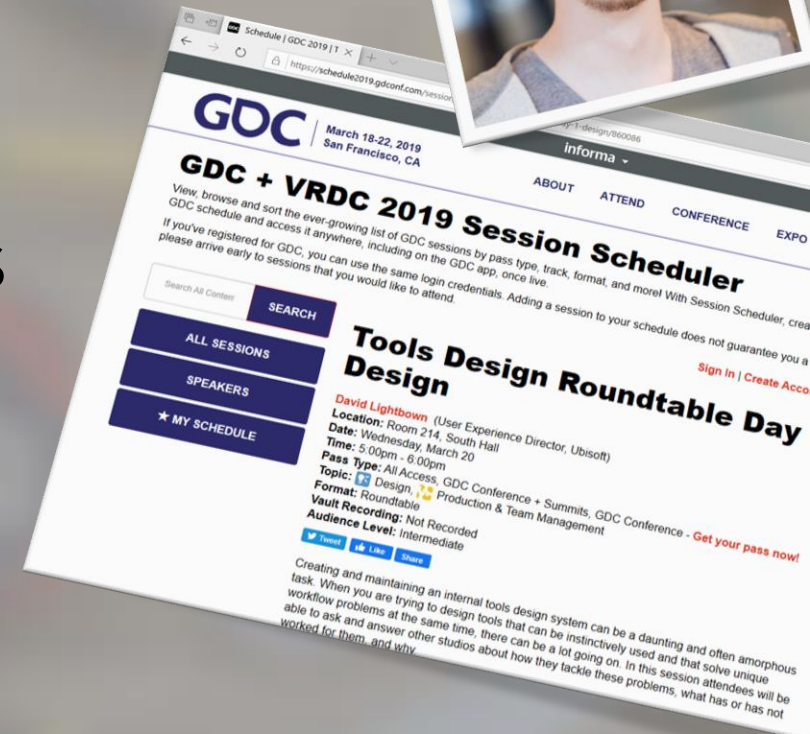
2001 – **Game development**
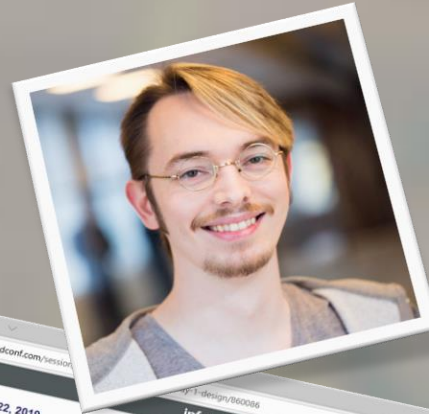
About Me

GDC

Siggraph

CEDEC

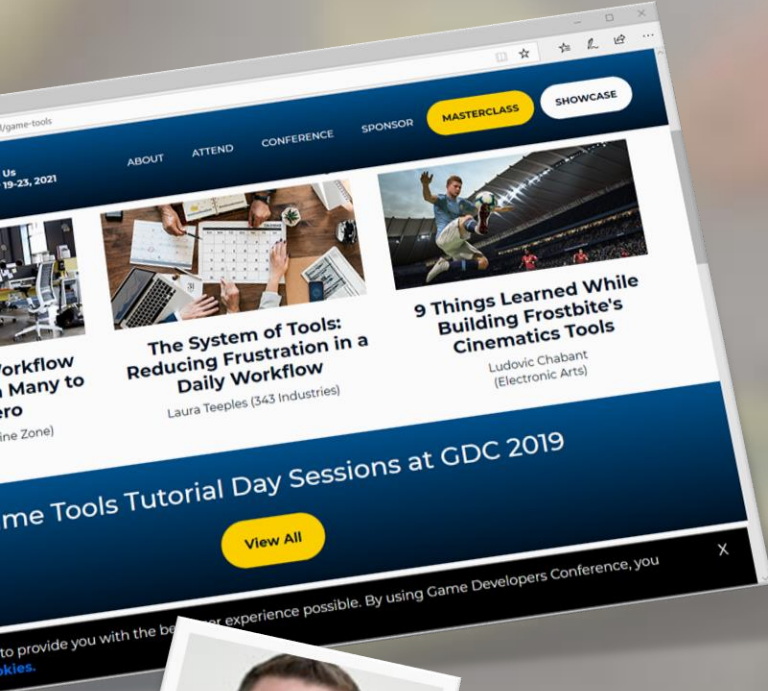# About Me

Game Tools Summit

Tools Design Roundtables

About This Talk

About This Talk

Game Post-Mortems at GDC
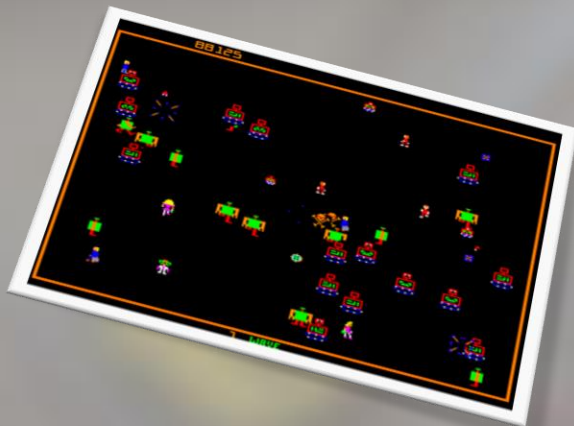
About This Talk
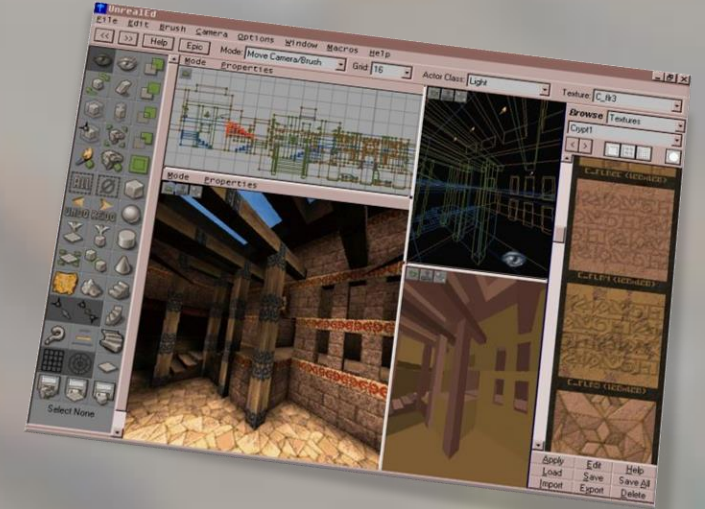
Tools Post-Mortems?

Preserving the **history**
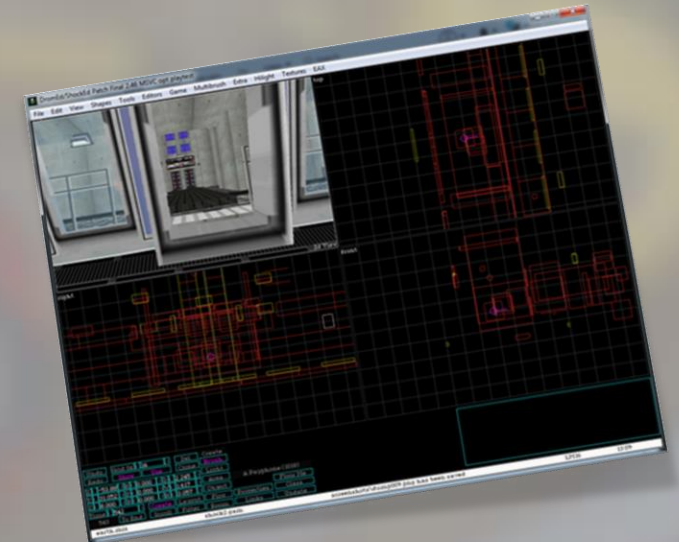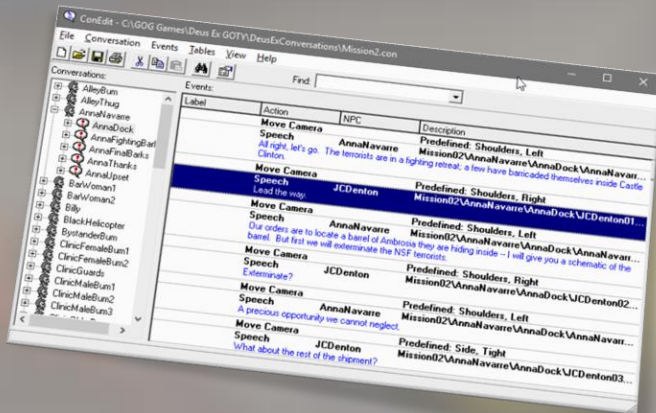
About This Talk

"People who forget the
history of game tools development
are doomed to repeat it"

About This Talk

**"People who forget the
history of game tools development
are doomed to repeat it"**

- Fix-it Felix, probably

About This Talk

Interview **key people**

History of game development tools

About This Talk

John Romero

TEd (Tile Editor)

About This Talk

Tim Sweeney

Unreal Editor 1

About This Talk

Chris Norden

Deus Ex Tools

About This Talk

John Austin

Tim Preston

Dan Amerson

Mike Daly

Gamebryo

About This Talk

Marc Leblanc

DromEd / ShockEd

About This Talk

Unreal Editor 1

TEd (Tile Editor)

Gamebryo

Deus Ex Tools

ShockEd / DromEd

About This Talk

Most of these tools are **still used today**

Hobbyists

Professionals

Main Message

Main Message

"Tools Live Longer Than Games Do"

Main Message

"Tools Live Longer Than Games Do"
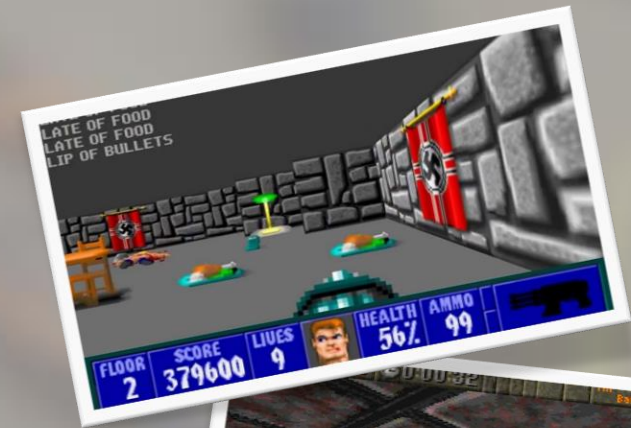
- John Romero

Main Message

John Romero

Main Message

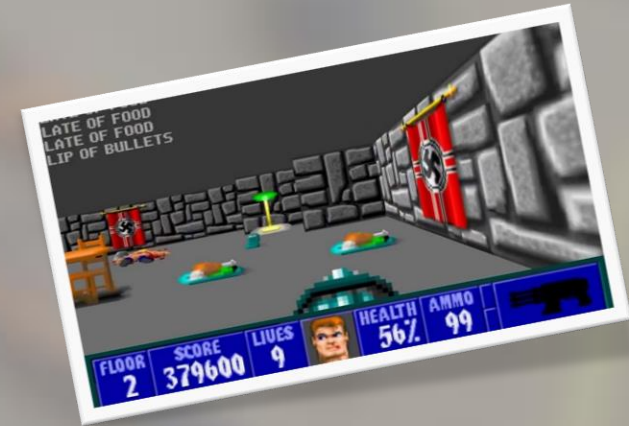**TEd** (Tile Editor)

Main Message

TEd (Tile Editor)

Main Message

TEd is **still used today!**
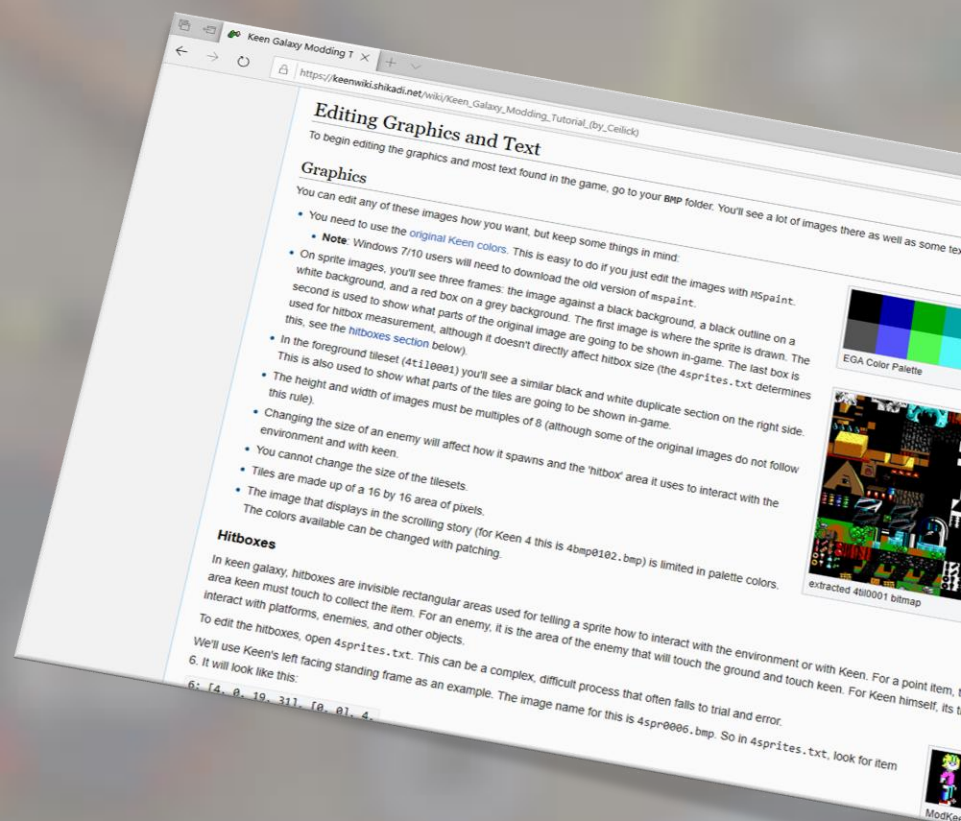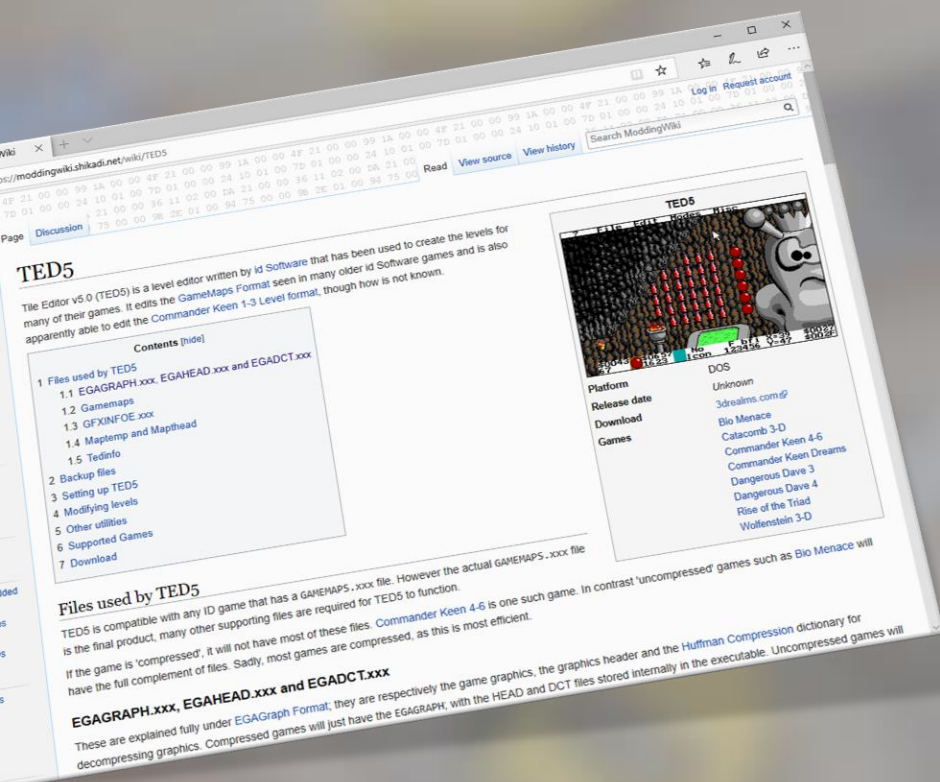
Main Message

"Tools Live Longer Than Games Do"

- John Romero

Main Message

Why is it important to **remember** that?

Main Message

Time to do
just enough
tools development
to **ship the game**

Main Message

"the game"
becomes
the next game
and
the next game

Main Message

You might **change teams**

You might **change companies**

Someone might **keep it alive**

Main Message
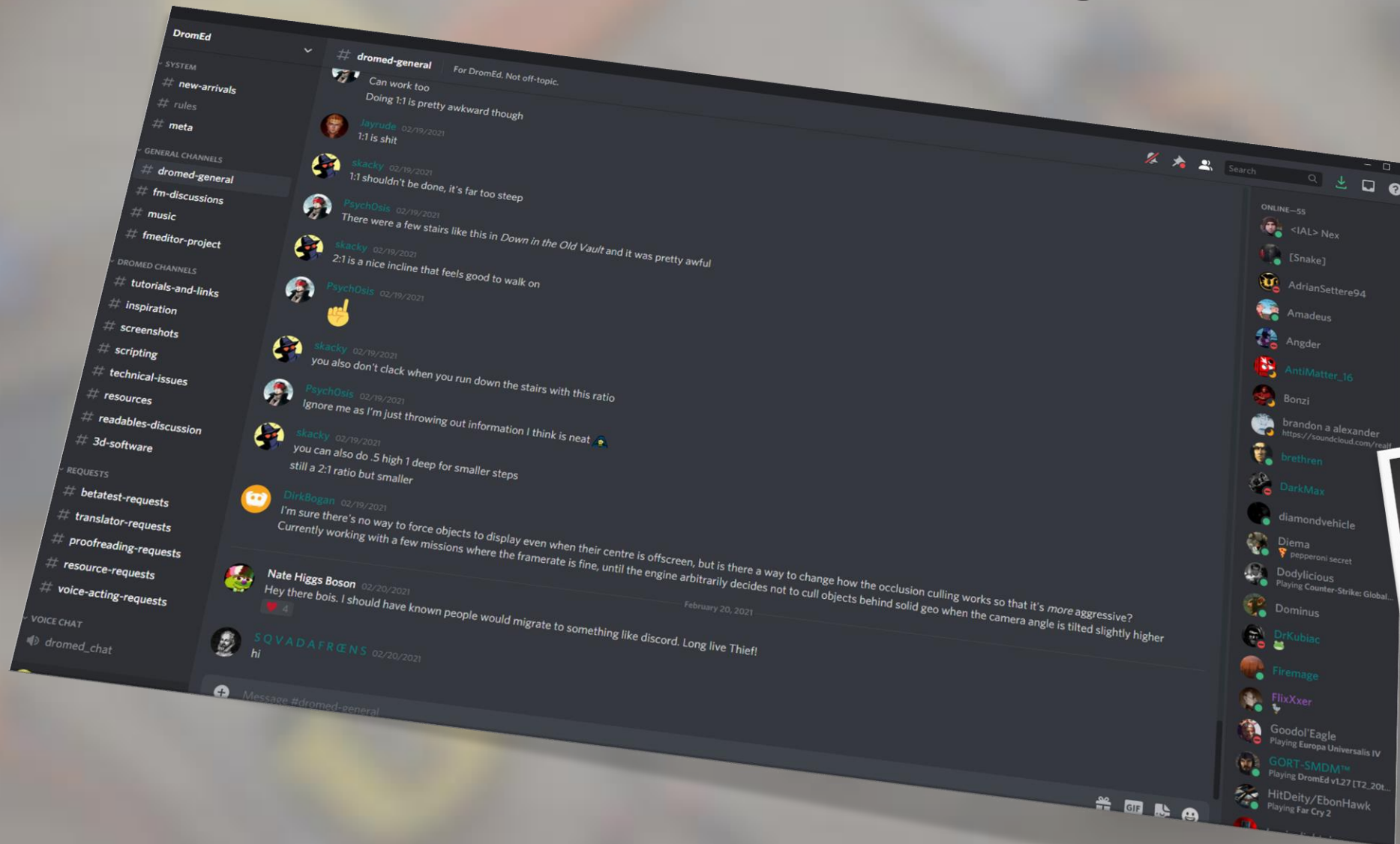
Main Message

"Tools Live Longer Than Games Do"

- John Romero

Main Message

An accelerator**, not a hinderance**

Stand the **test of time**

Learning from **Tools Development History**

Main Message

**"What advice would you give
to tools developers today?"**

Three Questions

Three Questions

1

What is the **problem** that
the users want to **solve**?

Three Questions

2

What can you **learn** from **other tools**
that **solve the same problem**?

Three Questions

3

How do people **use your tools**,
and how do they **fit in** with their **other tools**?

1

What is the problem that the users want to solve?

What is the problem that the users want to solve?

What is the problem that the users want to solve?

It's **not always** the user's **responsibility** to tell you **how they want the tool to work**

What is the problem that the users want to solve?

But it is the user's **responsibility** to

tell you what **problem** they **want to solve**

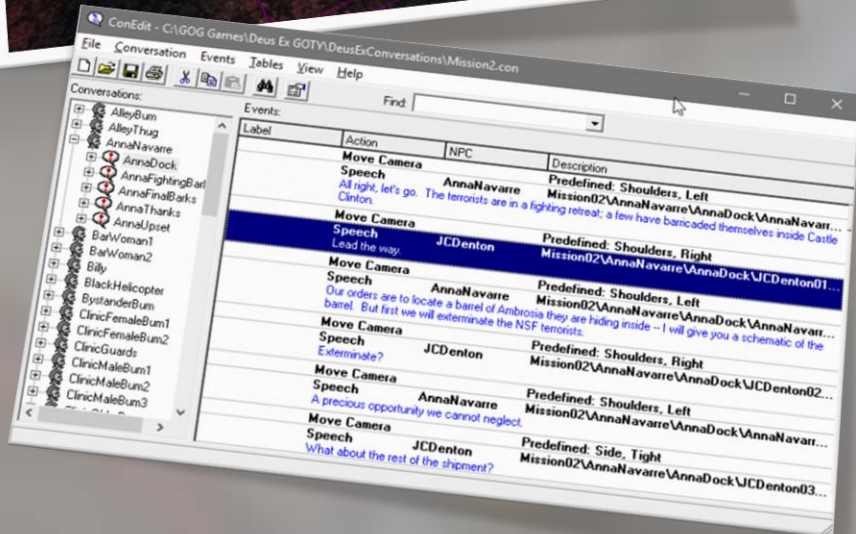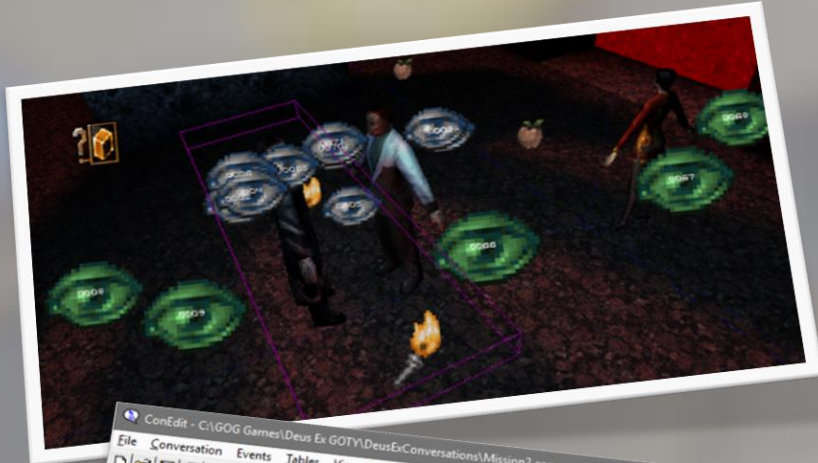# What is the problem that the users want to solve?

Chris Norden

What is the problem that the users want to solve?

Deus Ex

Tools

What is the problem that the users want to solve?

"Listen to your customer.

Don't ever write tools in a vacuum."

What is the problem that the users want to solve?

"A lot of times, tools programmers
don't go far enough asking the questions
about 'Why do you want that?
What is it that you're actually trying to do?'"

What is the problem that the users want to solve?

Yes No

What is the problem that the users want to solve?

Yes **No**

Why? → Why? → Why?

1

What is the problem that the users want to solve?

2

What can you learn from other tools that solve the same problem?

What can you learn from other tools that solve the same problem?

What can you learn from other tools that solve the same problem?

Looking at **other tools**

that **solve the same problem**

can **make your tools better**

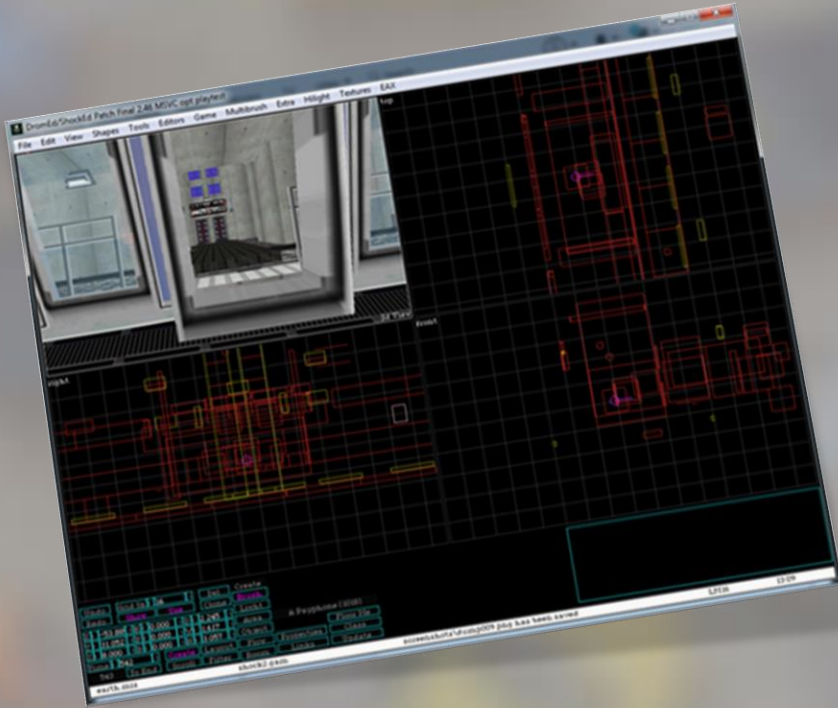# What can you learn from other tools that solve the same problem?
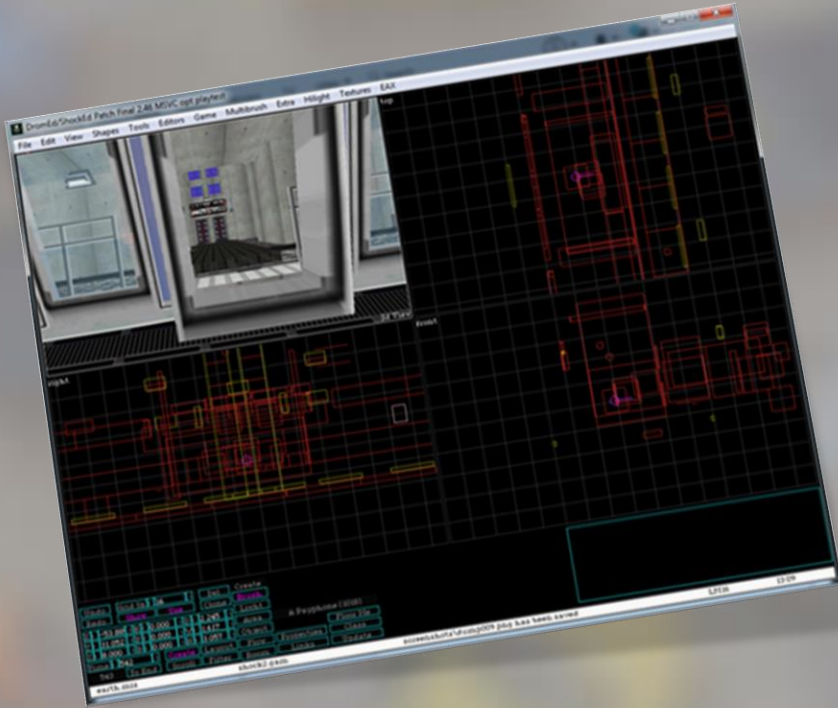
Marc Leblanc

What can you learn from other tools that solve the same problem?

DromEd / ShockEd

What can you learn from other tools that solve the same problem?

DromEd / ShockEd
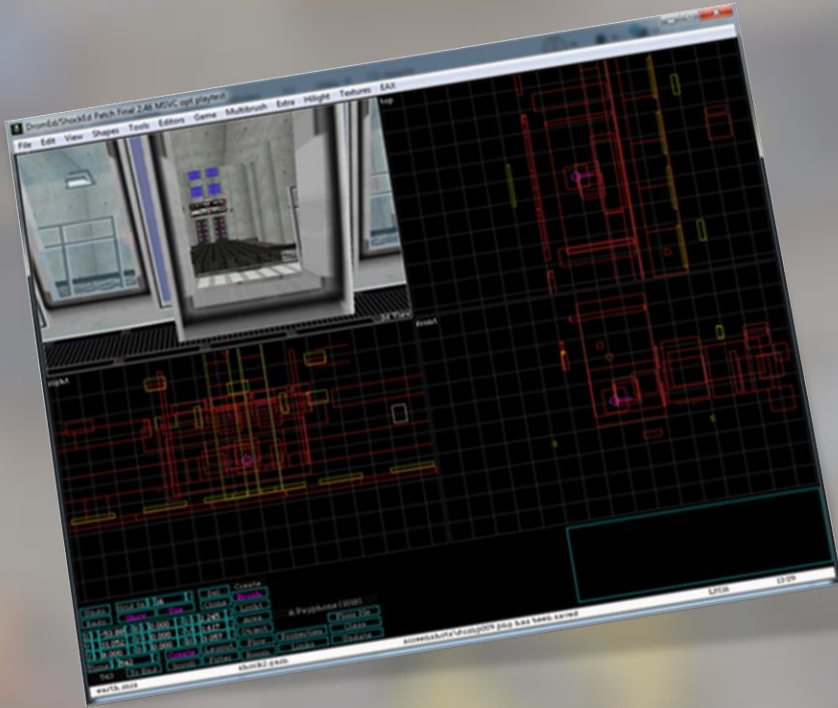
What can you learn from other tools that solve the same problem?

DromEd / ShockEd

What can you learn from other tools that solve the same problem?

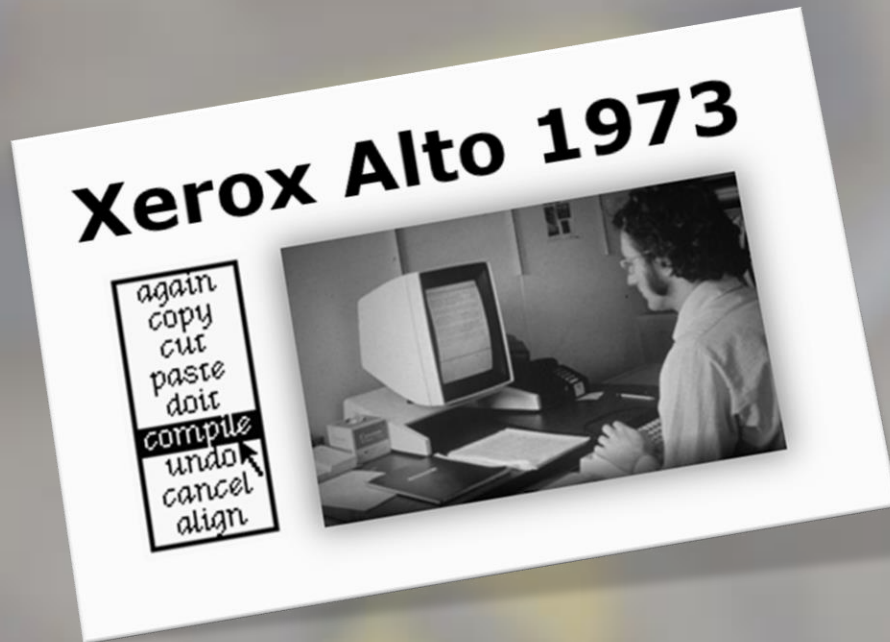**"Look at the old tools and ask why people were doing what they were doing"**

What can you learn from other tools that solve the same problem?
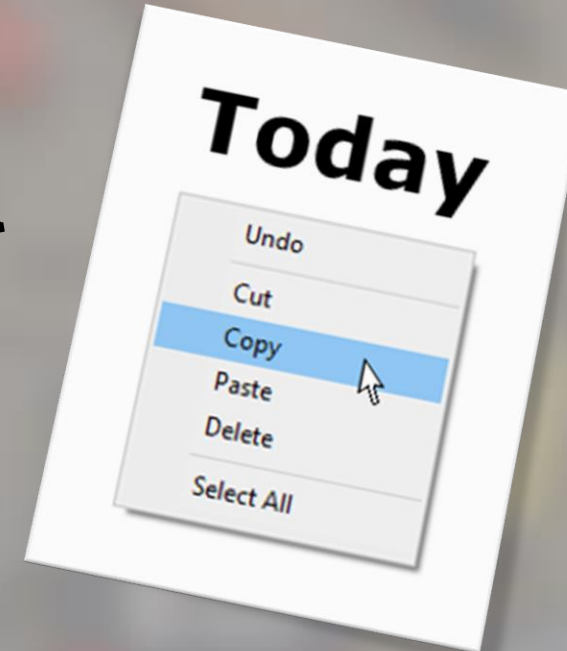

"**Natural Selection**"

in game tools

What can you learn from other tools that solve the same problem?

Contextual Menus

Xerox Alto 1973

again
copy
cut
paste
doit
compile
undo
cancel
align

Today

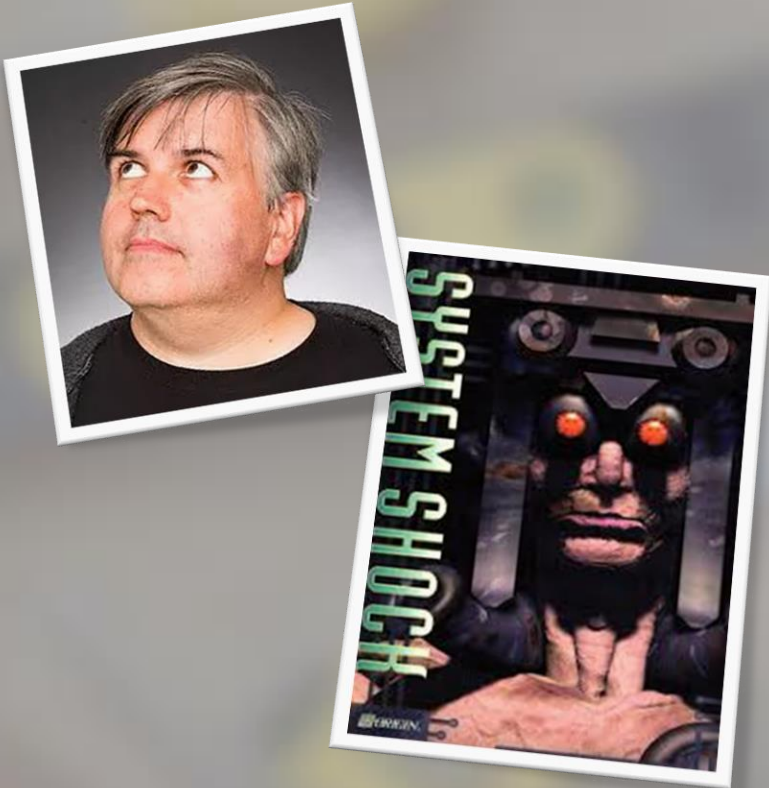Undo
Cut
Copy
Paste
Delete
Select All

What can you learn from other tools that solve the same problem?

WASD

VS

WXSD

What can you learn from other tools that solve the same problem?

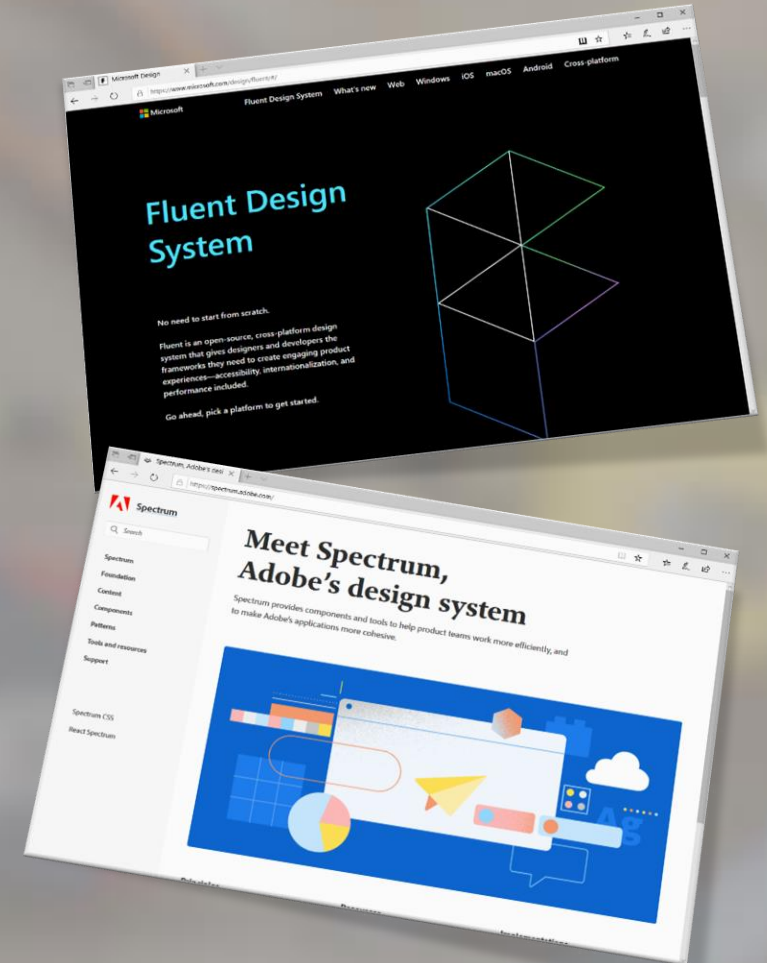"You look at a lot of the professionally designed tools and they're usually pretty consistent."

What can you learn from other tools that solve the same problem?

"There are design guidelines
for how those things should work."

What can you learn from other tools that solve the same problem?

Design
Guidelines

2

What can you learn from other tools that solve the same problem?

3

How do people use your tools, and how do they fit in with their other tools?

How do people use your tools, and how do they fit in with their other tools?

Other tools

at your studio

How do people use your tools, and how do they fit in with their other tools?

Tim Sweeney

How do people use your tools, and how do they fit in with their other tools?

Unreal Editor 1

How do people use your tools, and how do they fit in with their other tools?

"There's this iterative process where the engine team is out creating new ideas..."

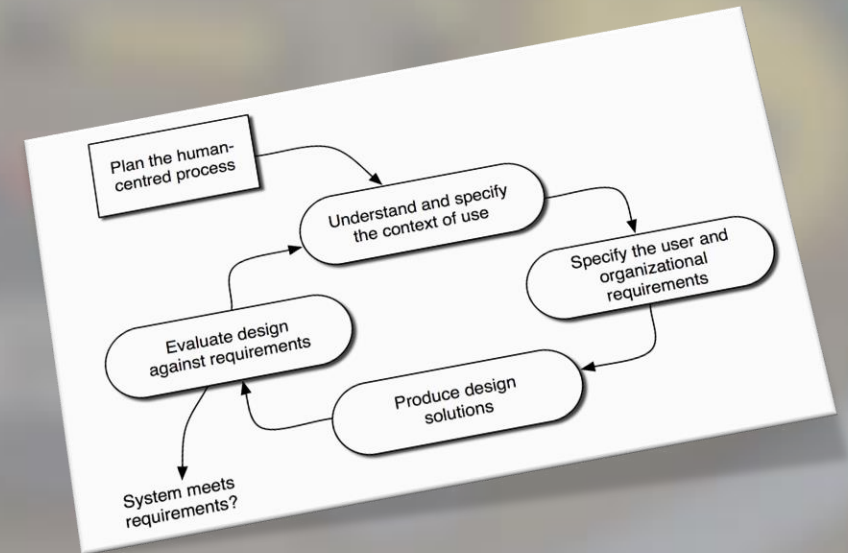# How do people use your tools, and how do they fit in with their other tools?

"…and then

sharing them with the

game teams and getting

constant feedback on what

works and what doesn't work"

How do people use your tools, and how do they fit in with their other tools?

Iterative Process

Constant Feedback

User-Centered Design Process

How do people use your tools, and how do they fit in with their other tools?

John Austin

Tim Preston

Dan Amerson

Mike Daly

Gamebryo

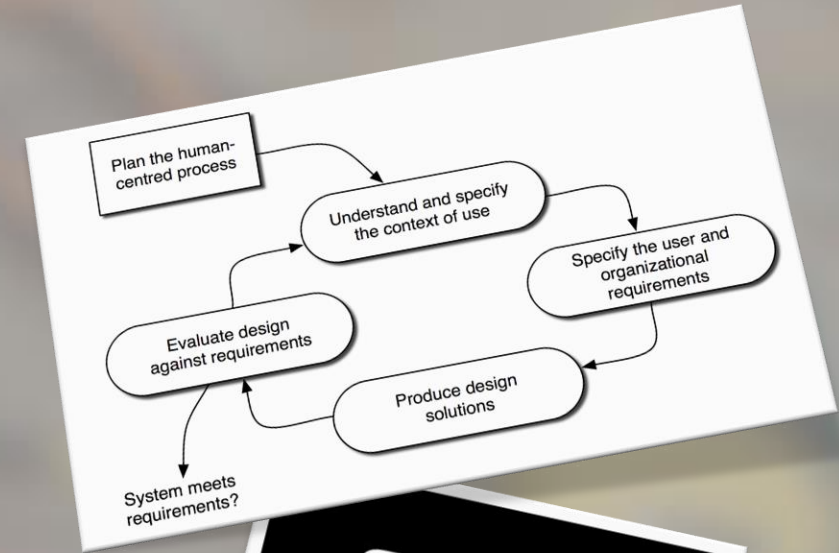# How do people use your tools, and how do they fit in with their other tools?

John Austin

Tim Preston

Dan Amerson

Mike Daly

Gamebryo

How do people use your tools, and how do they fit in with their other tools?

"At Epic,
the artist was king.
Gamebryo was
very engineer-centric."

How do people use your tools, and how do they fit in with their other tools?

"We never had enough content and users in-house to know whether what we were making was going to be useful"
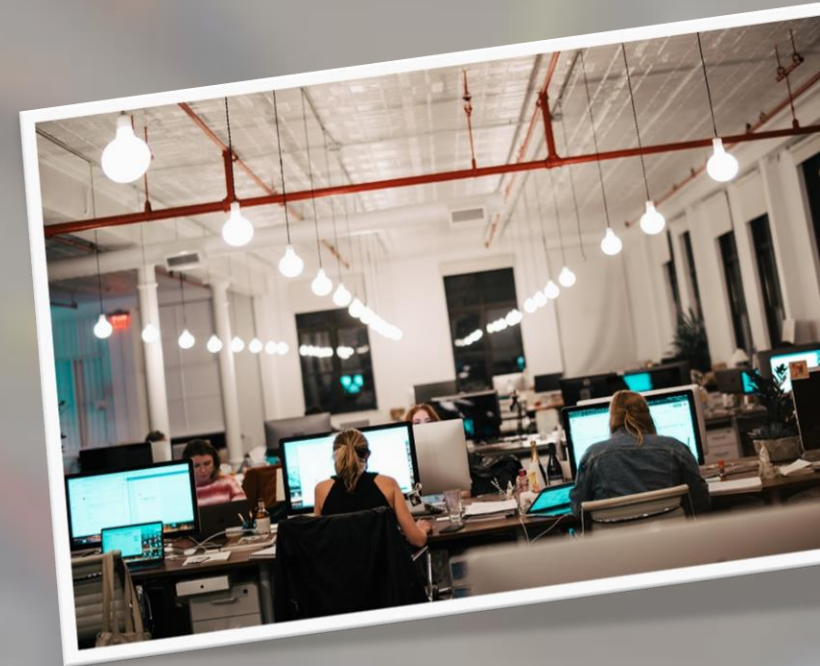
How do people use your tools, and how do they fit in with their other tools?
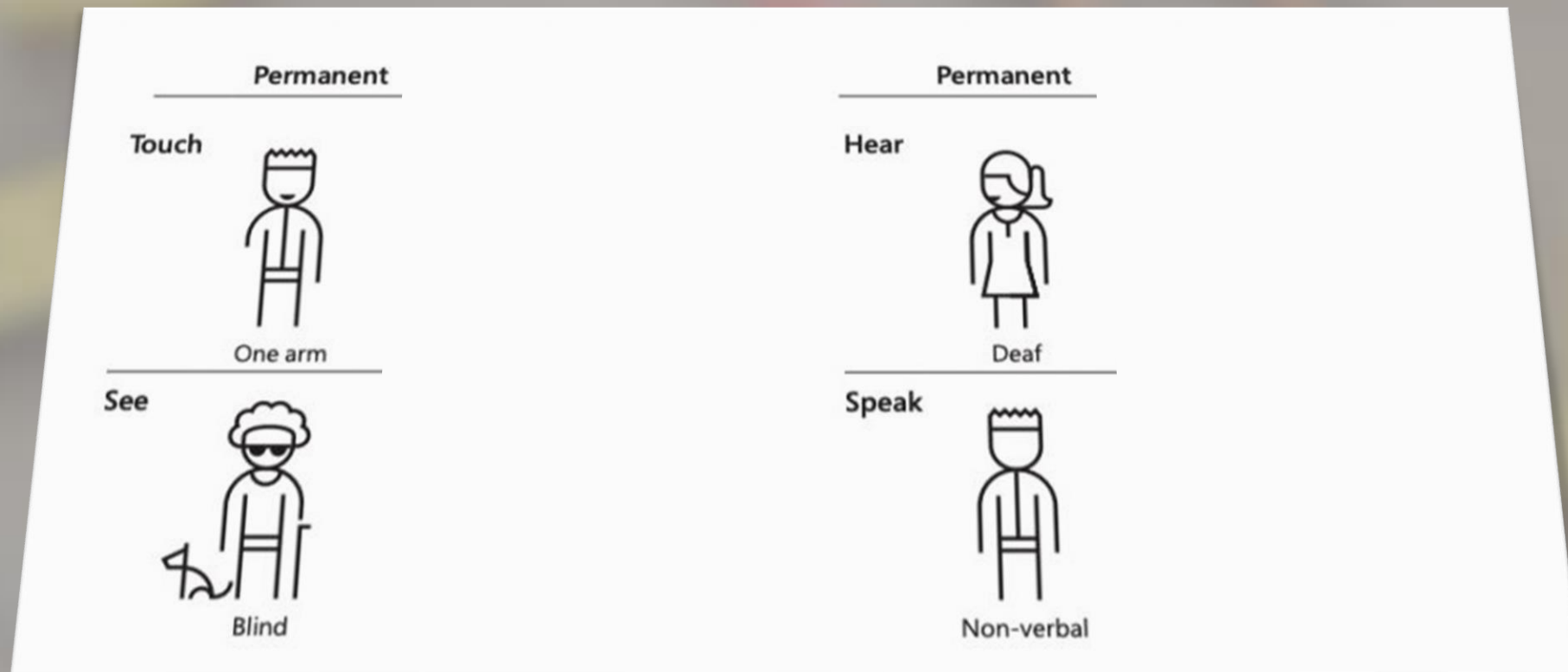
Conversation Editor

(ConEdit)

How do people use your tools, and how do they fit in with their other tools?

"[Lead Writer Sheldon Pacotti] had RSI (Repetitive Strain Injury), so he couldn't type. He did almost all of Deus Ex with Dragon Dictate voice transcription."

How do people use your tools, and how do they fit in with their other tools?

How do people use your tools, and how do they fit in with their other tools?

"As an engineer, you think

a certain way, and you think

'Oh, I can use the tool this way,

and that's the most efficient way,

so that's the way I'm going to write it.'

You're almost always wrong."

3

How do people use your tools, and how do they fit in with their other tools?

Your Take-Away

Three Questions

1

What is the **problem** that the users want to **solve**?

Three Questions

2

What can you **learn** from **other tools**
that **solve the same problem**?

Three Questions

3

How do people **use your tools**,
and how do they **fit in** with their **other tools**?
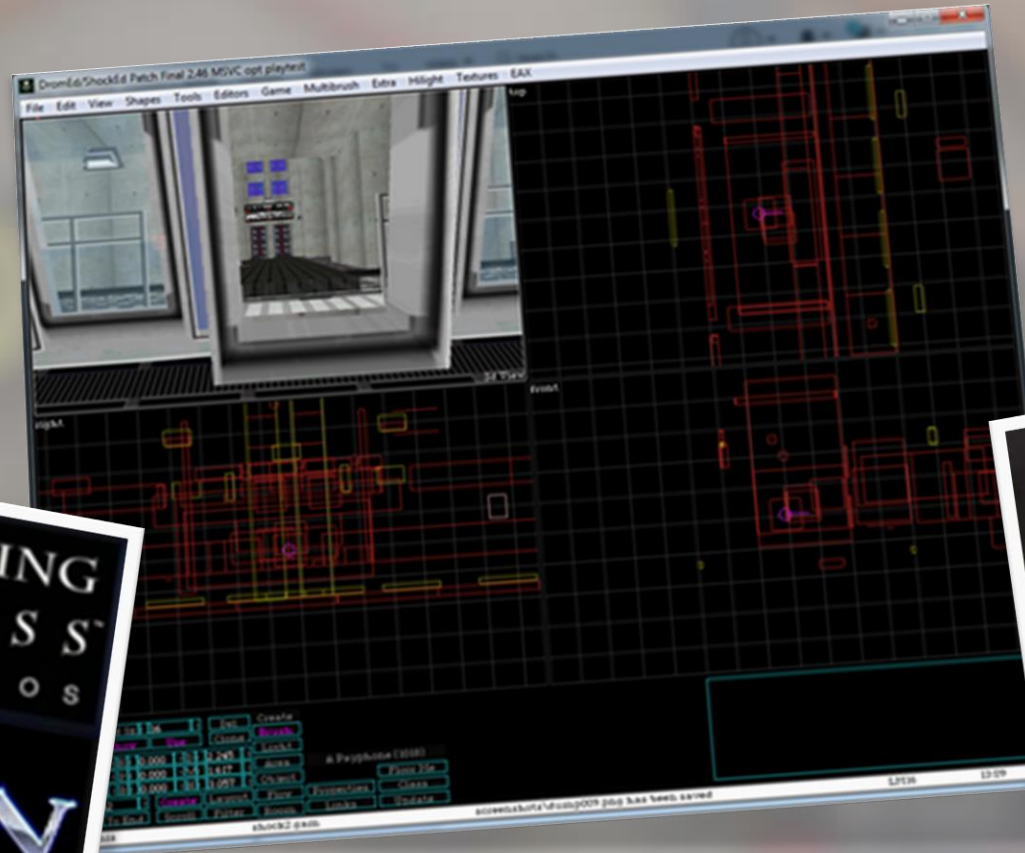
Main Message

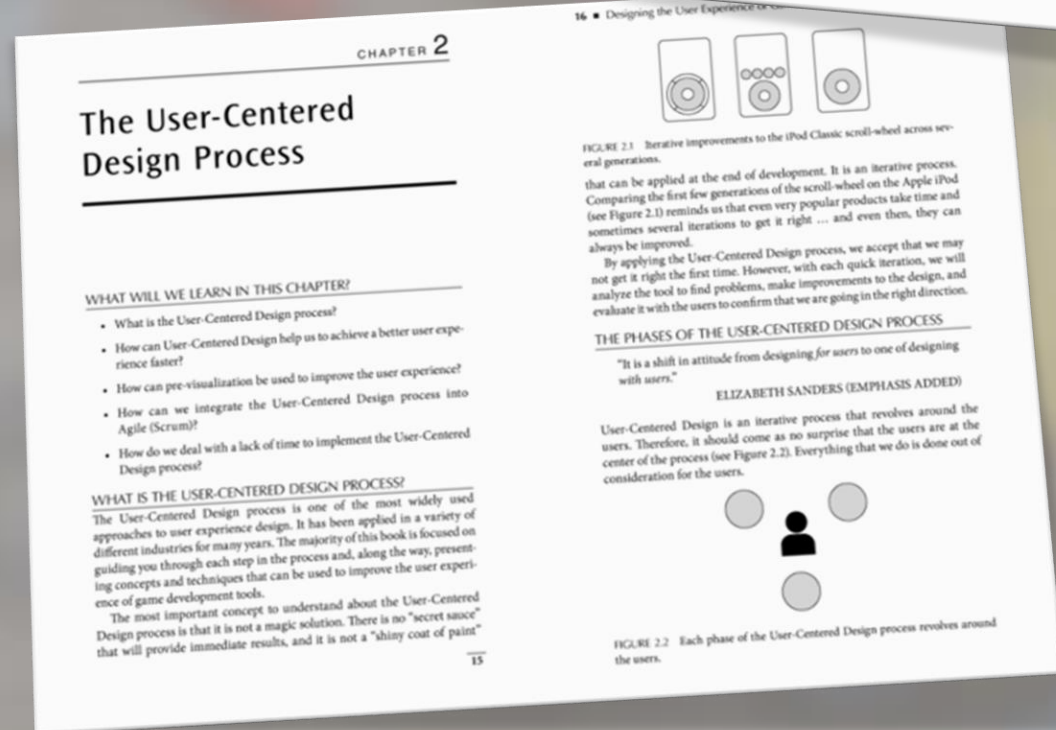"Tools Live Longer Than Games Do"
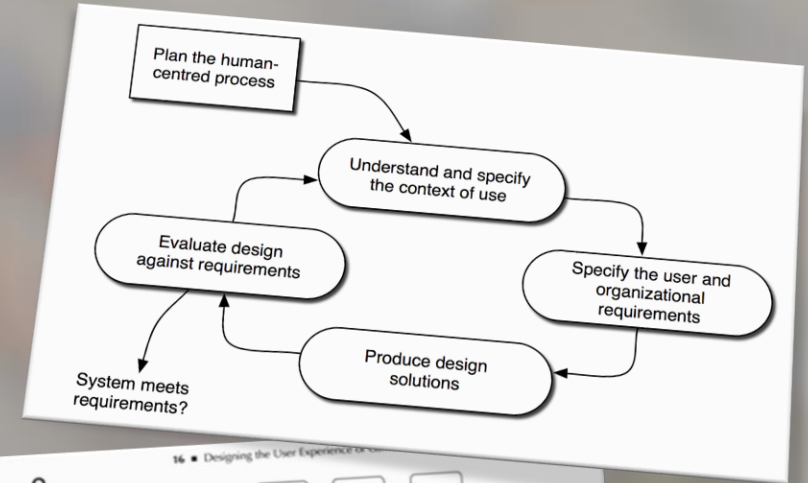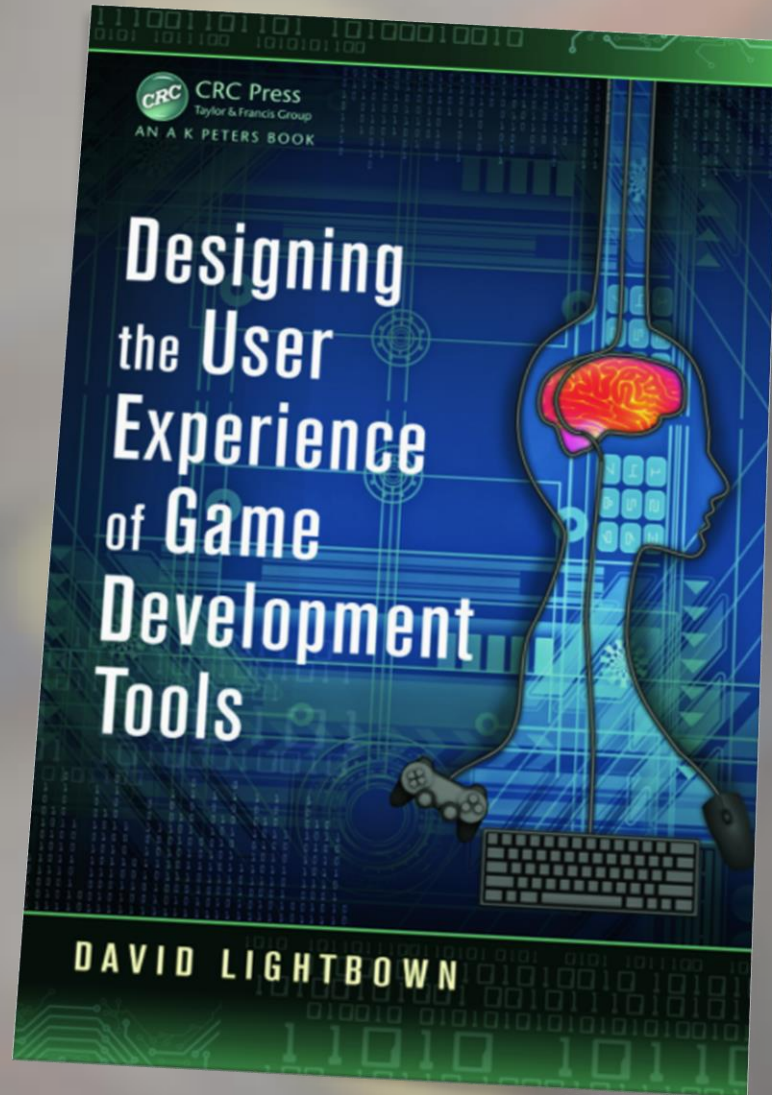
Thank you!

Interviews

https://www.gamasutra.com/blogs/author/DavidLightbown/1009234/

ShockEd / DromEd

My Book

Q&A