

# ENGINEERING THE IMPOSSIBLE

Building *It's What's Inside: The Game*

AKQA | NETFLIX



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# IT'S WHAT'S INSIDE

[THE GAME]

NETFLIX

***LOADING***

0 %



2

The background is a collage of various people's faces and hands, overlaid with a large red and blue diagonal split. The red side is on the left and bottom-left, while the blue side is on the right and bottom-right. The text is centered across the split.

01

# HOW THE IDEA CAME ABOUT

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# BODY SWAP CALL

WHO'S IMITATING CLIFF?



**IDEA** \ On an innovative website, people will join their friends on a video call, swap bodies, and imitate one another. Then, in a cutting edge game of deception, players will vote on who is who.

"We love this body swap call creative. It's a jaw-dropping, viral, and naturally hilarious social game that leverages humor and tech all at once."

Note: The above is not a "real" video, and was generated using AI



“So..... how would it work?”

**NETFLIX**

# COULD WE DO REAL TIME?

Our three big rocks

**1.**  
**VIDEO  
CLONING**

**2.**  
**AUDIO  
CLONING**

**3.**  
**VIDEO  
CONFERENCING**

# 1. VIDEO CLONING

## Live Portrait

We tried several options including face-swap and portrait animation, but **Live Portrait** was the best for our needs

To run smoothly at 24 FPS required massive compute power!

Trial with an NVIDIA 4090 GPU (24GB)



Real person

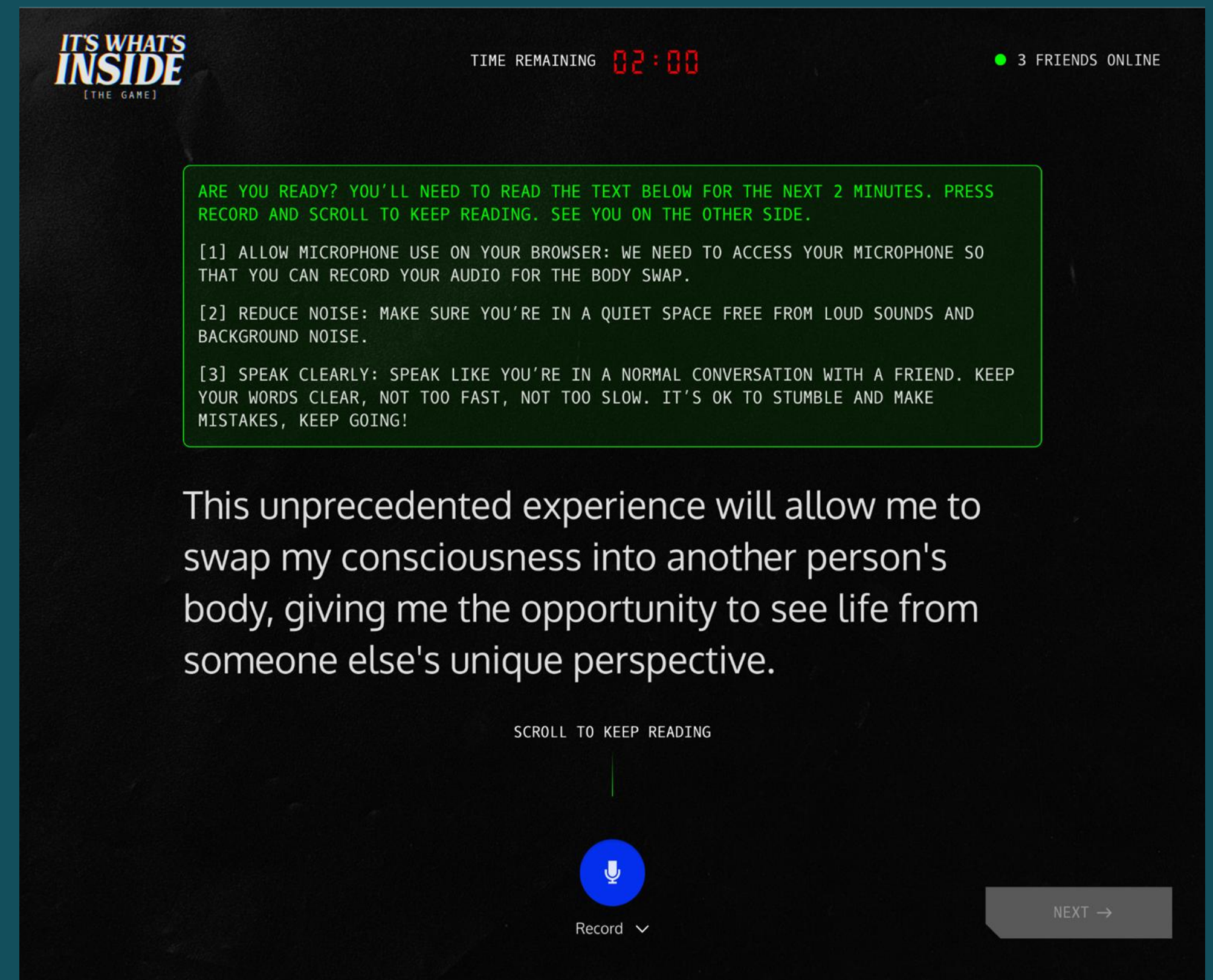
AI clone

## 2. AUDIO CLONING

### Retrieval based voice conversion (RVC)

- + Real-time speech-to-speech voice conversion with low latency
- + Preserves the original speaker's emotional tone and vocal attributes
- + Near-indistinguishable from “real life” - when supported by sufficient computational resources!

There was a start-up in this space, but they weren't ready for the scale we needed

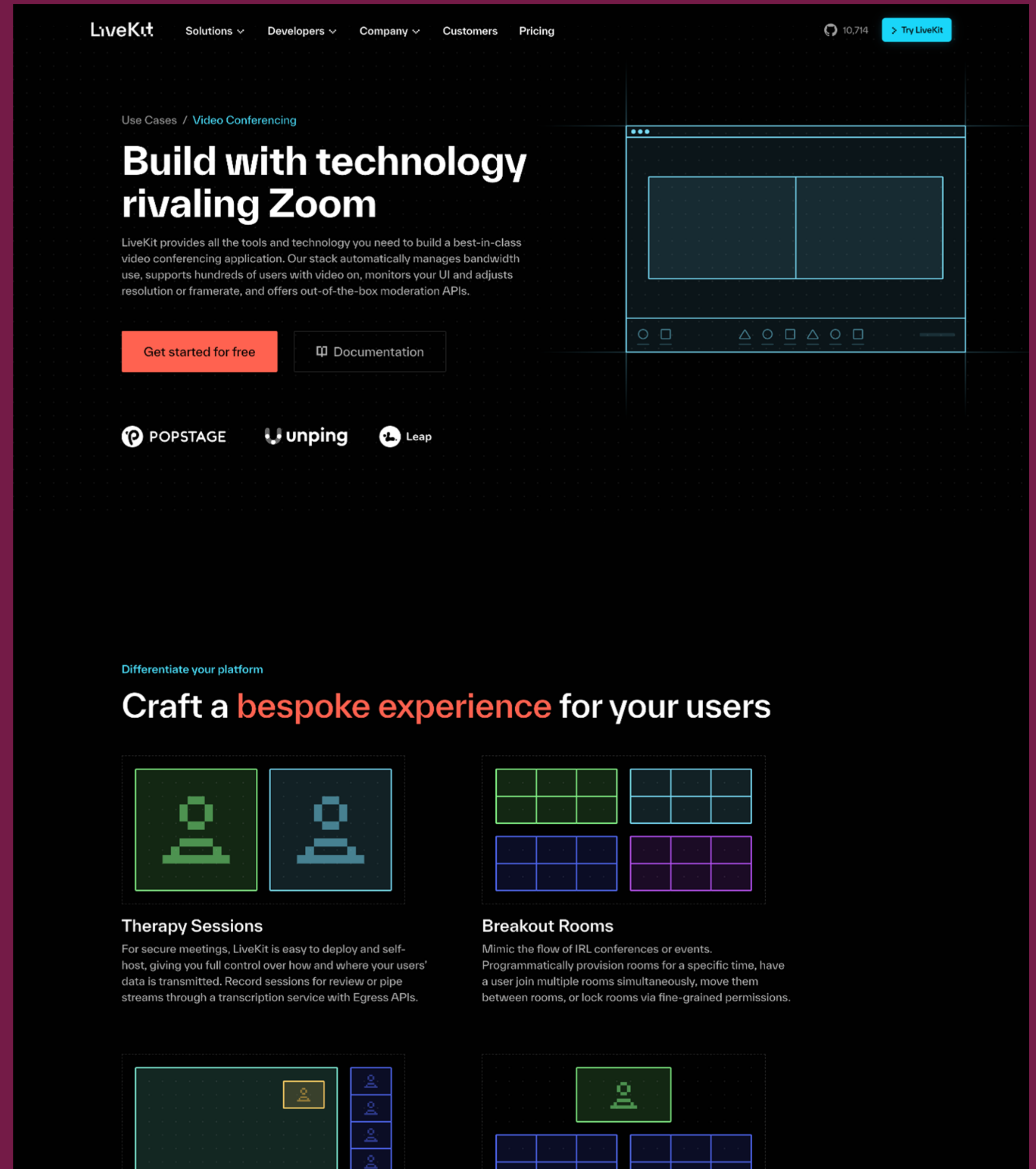


# 3. VIDEO CONFERENCING

## Live Kit

Bringing the audio & video together, into a Zoom-like experience

- + A video conferencing solution that can be completely customised on the frontend
- + Able to modify the streams for audio & video





**WE CAN DO REAL TIME!**

A collage of diverse young people, including a woman with bangs on the left, a man with a beard in the top right, and a woman with curly hair in the bottom right. The image is split diagonally with a red-to-blue color gradient.

02

# THE PROPOSAL

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# GAME SETUP



## JUMP ON YOUR COMPUTER

To make sure that we can swap you into your friends body, you'll need to use a laptop or desktop with a webcam and microphone for this experience.



## CREATE A ROOM

Create a room for you and your friends. Make sure they're available to play before starting a game.



## SHARE LINK WITH FRIENDS

Share a unique link with 3-5 friends to invite them to your room (make sure they're people you trust).



## RECORD YOUR VOICE + TAKE A PHOTO

You'll need to record 2 mins of your voice and take a photo of yourself to be able to body swap with your friends during the game.





## GAME PLAY



SWAP BODIES WITH  
YOUR FRIENDS



IMPERSONATE &  
GUESS WHO IS WHO



TAKE TURNS IN  
FAST-PACED Q&A



GAMES LAST FOR  
10-15 MINS

Start game →



03

# SCALING THE TECH

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# INFRASTRUCTURE

## Securing high-performance GPU infrastructure

Critical requirements:

- + NVIDIA A100 GPUs
- + Guaranteed capacity

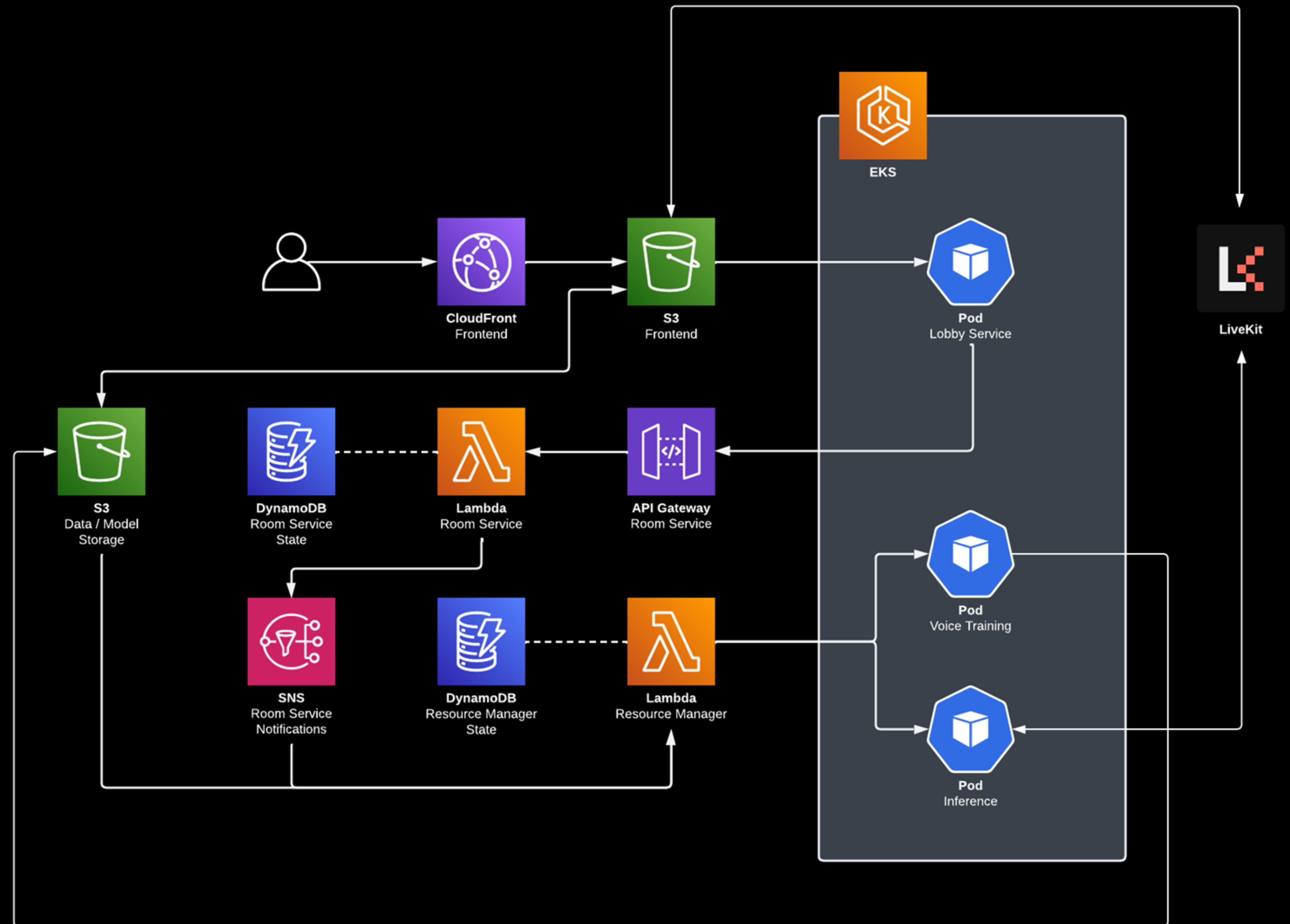


# ARCHITECTURE

 Claude

+ 40% of infrastructure & orchestration code

+ 95% of our backend room service code





04

# THE RESULTS

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# THE PRESS

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Home > Entertainment > Games

Exclusive: Play 'It's What's Inside' with friends through Netflix's online game

Body-swapping has never been so easy.

By [Kristy Puchko](#) on October 9, 2024

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Credit: Netflix

COLLIDER

'It's What's Inside: The Game' Invites Players To Live Out Netflix's Body Swapping Movie

By Britta DeVore

Oct 9, 2024

Image via Netflix

Movie News

Thread

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Are you ready to learn more about your closest friends? Or perhaps find out exactly what they know about you? Today you can gather a group of four to six people and dip into the trippy sci-fi world of Netflix's new hit film, **It's What's Inside**. If you've already seen the movie, then you might have some questions like "How am I going



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- DatModz** 3.2K  
Diablo IV
- Agent00** 12.1K  
IRL

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Fortnite
- Taacts** 146  
Fortnite

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IT'S WHAT'S  
INSIDE



Mute

FINDING YOU A ROOM...

Don't exit the lobby, we'll have room for you soon! Estimated time: (30 mins)



Share Link

Start the game



LEGIQN

IT'S WHAT'S INSIDE [The Game] #NetflixPartner

Just Chatting

LEGIQN

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Chat



Sign up to experience the best of LEGIQN Chat, follow or subscribe – Twitch is your oyster.

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STREAM CHAT



20



MindSetM...

6



TheCallOfD...

Pinned by LEGIQN

Watch IT'S WHAT'S INSID...

CareReMe:

ohbeOne: My eyes

kazersolos: What's it's on the inside chat

TIGERvBEAR\_: next slide

CareReMe: lo

lady\_marsss: lmaooo 1fps

Miss\_Arachu: Hi Teo!!!!

ohbeOne: Nah jk looks good

CareReMe: lol

Nightbot: Join the COOLEST community on Twitch with the best vibes today!  
<http://bit.ly/2gtuURw>

Miss\_Arachu: Omg lmao

Salvatore\_R: You should walk off screen and come back dressed as Peely

xNightHuntress: the 1p is wild



05

# Q&A

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**Merci beaucoup**  
Thank you

The future. Faster