# APPROACHABILITY IN VIDEO GAMES
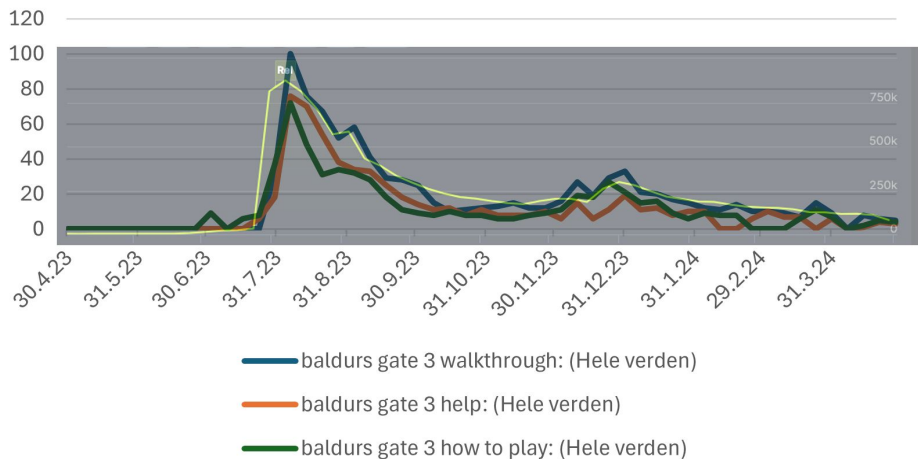
## How to best tutorialize non-gamers

BY MARTE VIK HÅVÅG & SUNNIVA JOHNSEN-BJØRHUSDAL

# Research problem & Research question
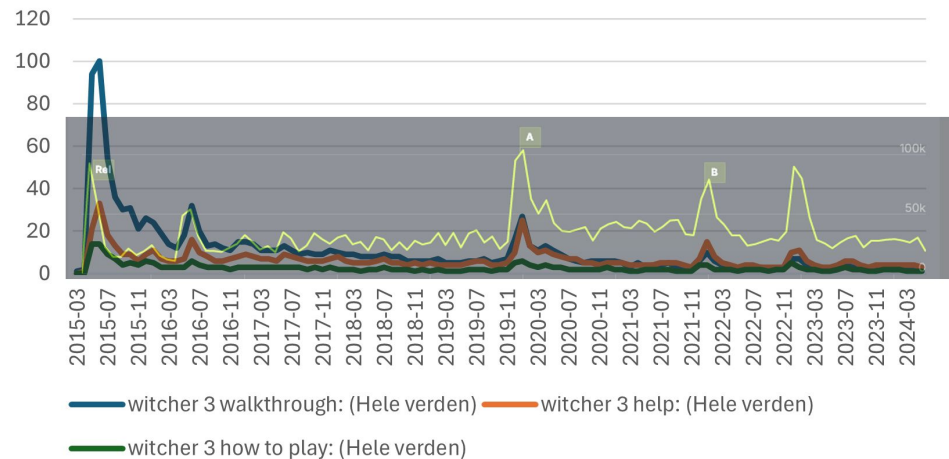
Casual games on mobile are way more accessible than PC games.

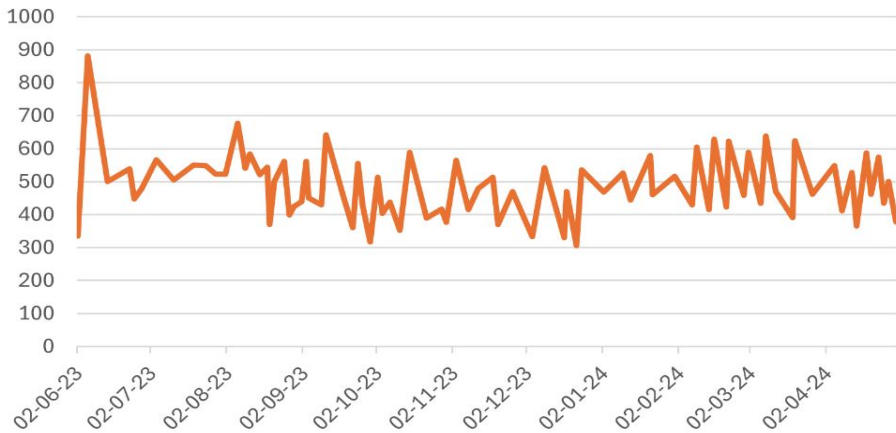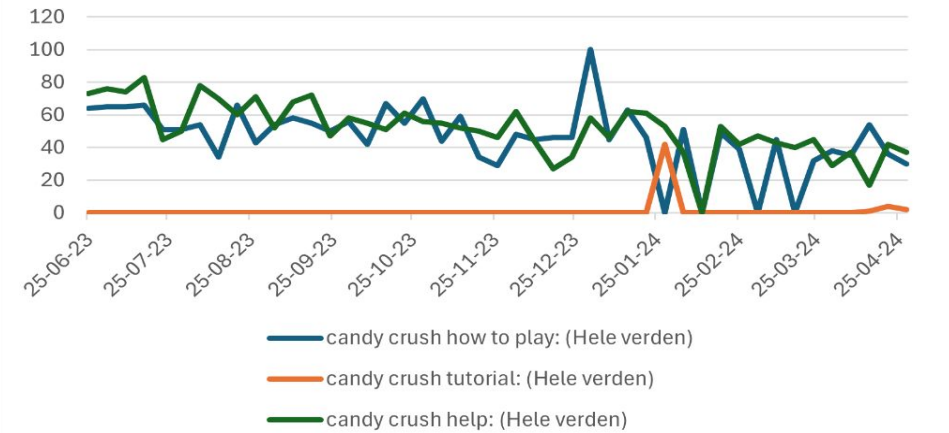We want to see how to best use tutorials to rectify this.

Google searches

- baldurs gate 3 walkthrough: (Hele verden)
- baldurs gate 3 help: (Hele verden)
- baldurs gate 3 how to play: (Hele verden)

Google searches

- witcher 3 walkthrough: (Hele verden)
- witcher 3 help: (Hele verden)
- witcher 3 how to play: (Hele verden)

Daily Downloads

Google searches

- candy crush how to play: (Hele verden)
- candy crush tutorial: (Hele verden)
- candy crush help: (Hele verden)

# Related works

*Co-experience: User Experience as interaction* (Battarbee & Koskinen, 2005)

*Human Experience and product usability: Principles to assist the design of user–product interactions.* (Chamorro-Koc, 2009)

*Master of the Game: Assessing Approachability in Future Game Design* (H. Desurvire, C. Wiberg, 2008)

*Improving games with user testing: Getting better data earlier* (Federoff, 2003)

*The impact of tutorials on games of varying complexity* (Andersen et al, 2012)

*An Approach to Assess the Impact of Tutorials in Video Games* (Benvenuti et al., 2023)

# Why is our research needed?

There are blank spots.

# Concepts

Approachability

Usability

Accessibility

# Project

# Purpose

# Key findings

| Week | Dates | Capstone |
|---|---|---|
| 1 | 15 Jan - 21 Jan | |
| 2 | 22 Jan - 28 Jan | |
| 3 | 29 Jan - 4 Feb | |
| 4 | 5 Feb - 11 Feb | Introduction |
| 5 | 12 Feb - 18 Feb | |
| 6 | 19 Feb - 25 Feb | Related work |
| 7 | 26 Feb - 3 March | |
| 8 | 4 March - 10 March | |
| 9 | 11 March - 17 March | Description of project |
| 10 | 18 March - 24 March | |
| 11 | 25 March - 31 March | |
| 12 | 1 April - 7 April | Project evaluation |
| 13 | 8 April - 14 April | |
| 14 | 15 April - 21 April | |
| 15 | 22 April - 28 April | |
| 16 | 29 April - 5 May | Conclusions |
| 17 | 6 May - 12 May | |
| 18 | 13 May - 19 May | First draft due the 15th |
| 19 | 20 May - 26 May | Project presentation due 22nd |
| 20 | 27 May - 2 June | |
| 21 | 3 June - 9 June | Final submission due 7th |

# Concepts

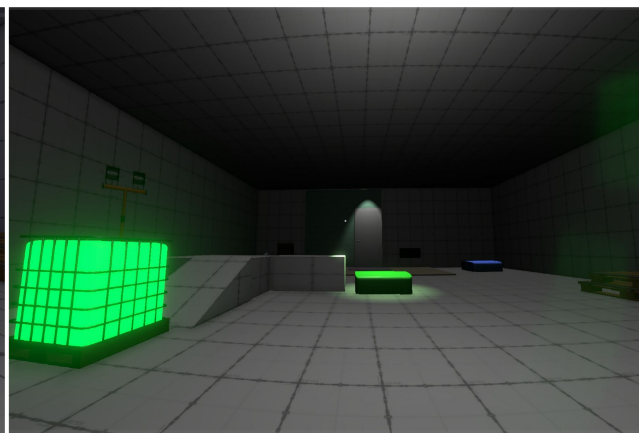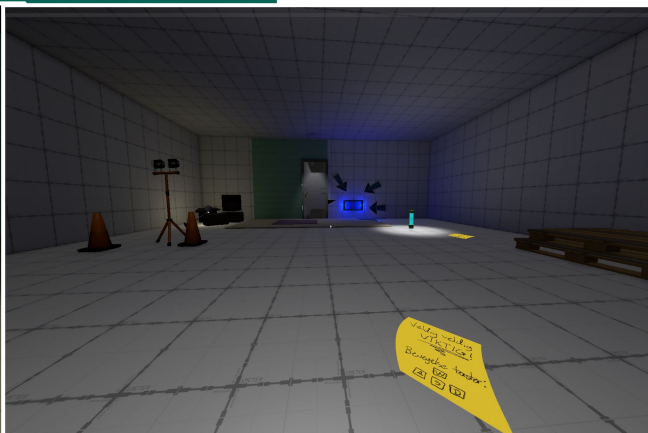## Watsonian, Doylist and Non-explicit tutorials

# The artifact

3 tutorials

Watsonian

Doylist

Non-explicit

# Process

Selection process

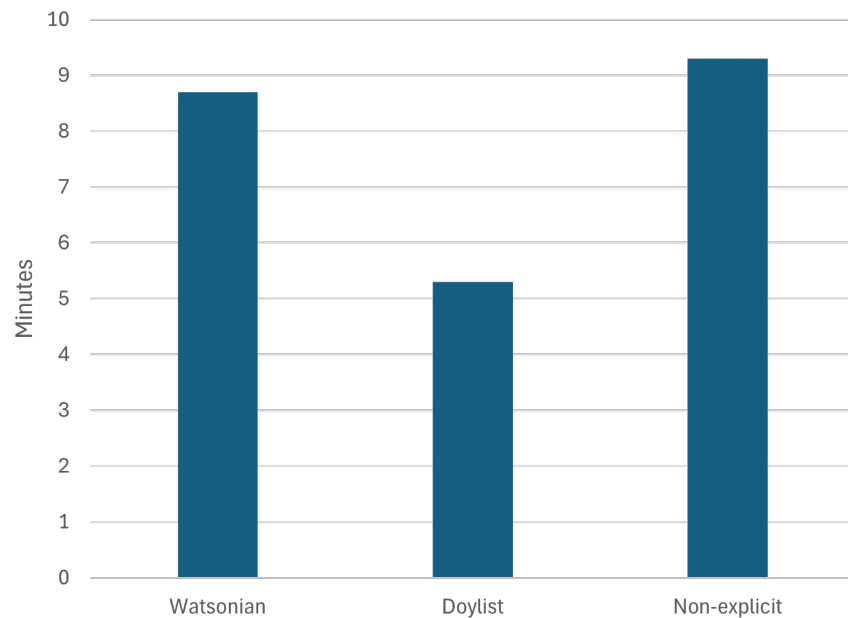Recording

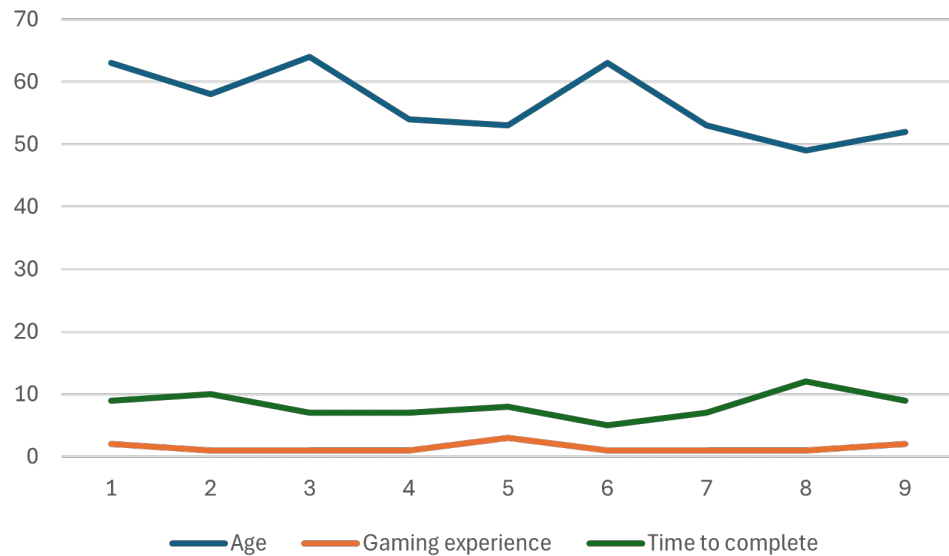Post-play interview
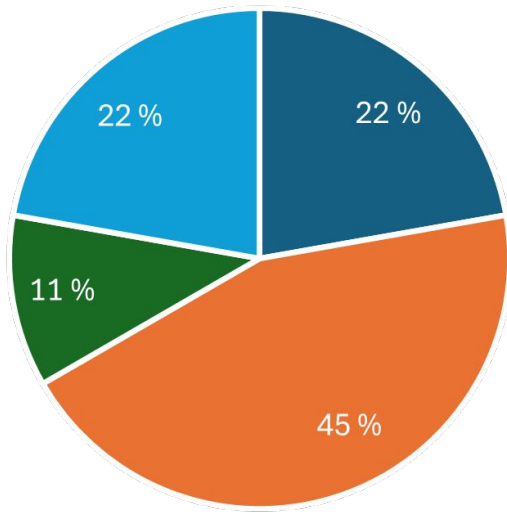
# Results

part 1

# Limitations
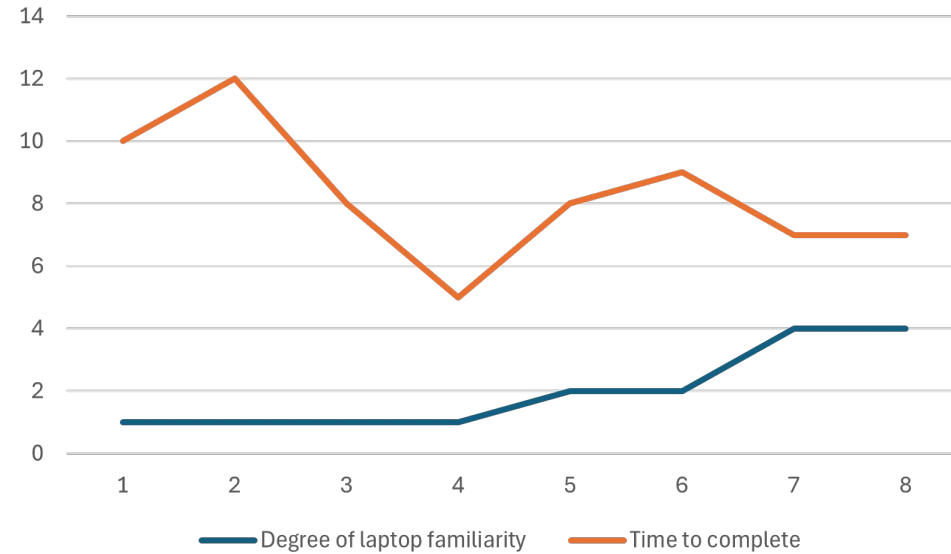
Age of participants

Availability of participants

Engagement of participants

Age and gaming experience had no correlation to time of completion. Tutorial type had.

**Pie chart legend:**
- Owns a laptop, rarely uses
- Does not own a laptop
- Owns a desktop
- Owns and uses a laptop

Pie chart values: 22 %, 22 %, 11 %, 45 %

**Line chart legend:**
- Degree of laptop familiarity
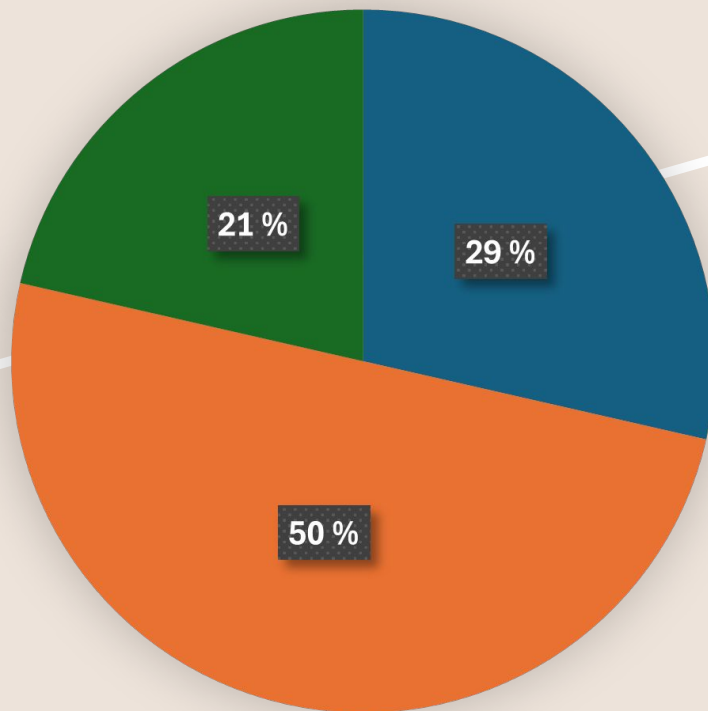- Time to complete

Being familiar with a keyboard was less important than which tutorial they played.

# Results
part 2

## Three main themes



Legend:
- Difficulty in instruction-heavy environments
- Takeaways from level design
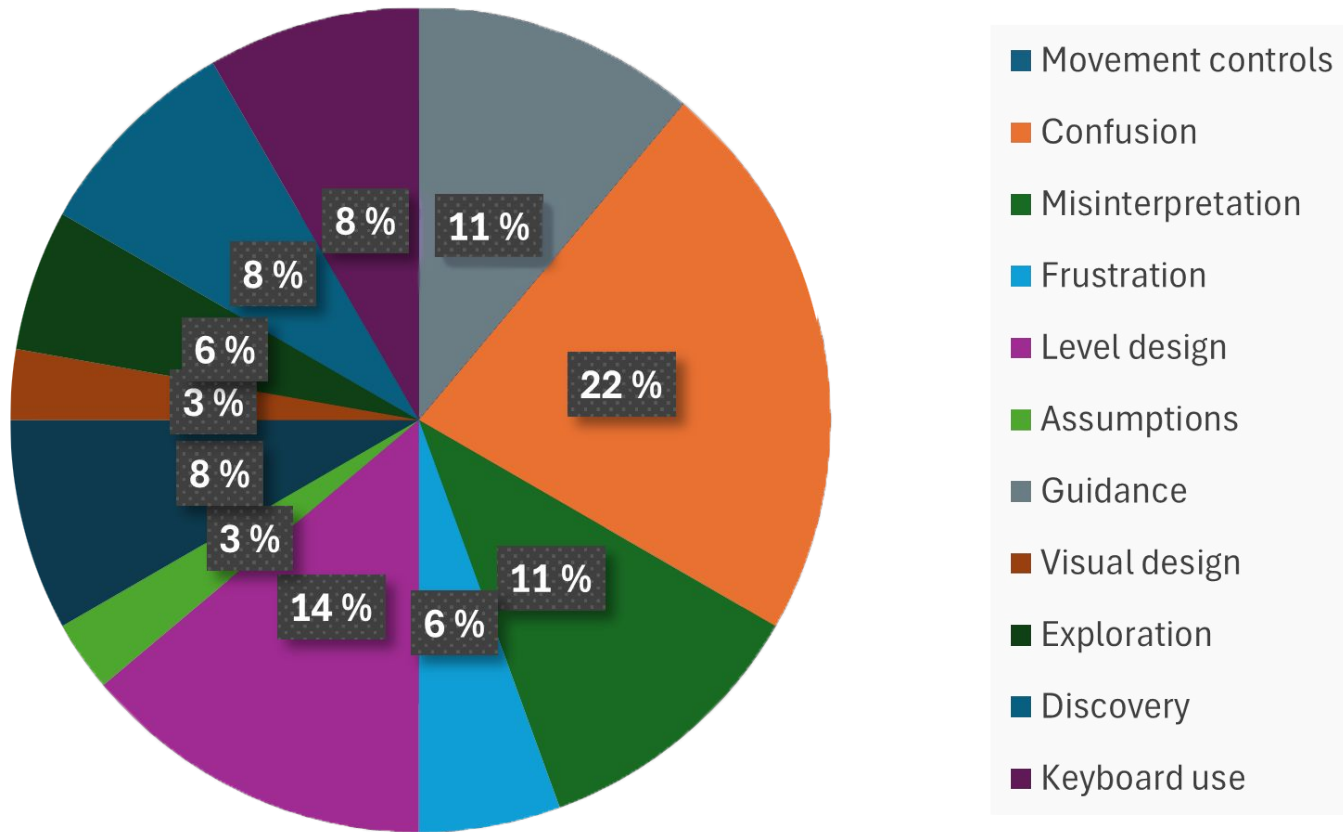- Difficulty with movement controls

29 %

50 %

21 %

Chart of codes (based on 14 quotes from playtesting)

# What does this tell us?

Instruction heavy tutorials don't perform the best

The ability to re-check instructions/goals was the most important

Level design can be *so* obvious that it actually gets confusing

Sound was important to the players, but secondary to the game development process

The divide between "game logic" and "real life logic" proved extremely important

# The road ahead

What are we planning to do between now and deadline

What will be different between this and final product

# Thank you for your time

Feedback welcome