# Mobile **Games for** the Visually Impaired

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#### Introduction

Objectives, Research Question, Hypothesis

Methodology

Guideline Analysis,

App Development,

**User Testing** 

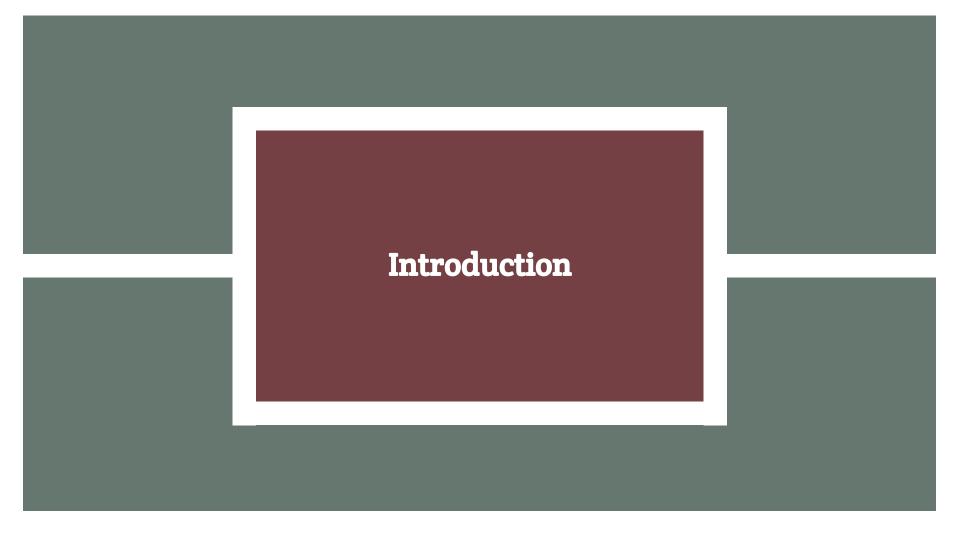
#### Results

Data Analysis, Representations, Publishing

#### Conclusions

Tendencies, Representations, Publishing 03

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### **Objectives**







Determine if
increasing the
activation of the
human senses in
mobile games can
enhance the
experience for people
with vision
impairment.

Develop a small mobile game that will activate the senses of touch and hearing during the usage of the game.

Conduct user testing of the developed mobile game on a small group of 25 individuals to evaluate the effectiveness of different combinations of senses.

#### Research Question

"To what extent does incorporating multiple senses in mobile game design impact player engagement and enjoyment, and should mobile game designers focus more on multisensory experiences to enhance player experience, especially for people suffering from vision impairments?"



#### Hypothesis

Incorporating multiple sensory modalities in mobile games enhances overall player engagement and enjoyment for people with vision impairment.

## Methodology





Guidelines from literature Improving features Extreme cases Few improve extremes





25 participants 5 groups All followed the same steps Data issues

#### **App Development**



Unity 3 leves Activates touch and hearing

#### Changes



Hidden Playermodel Movement Another screen No Preparation

#### Conclusions

- Current guidelines improve accessibility
- Does not focus on activating other senses

- Too little data
- Increasing difficulty
- Significant standard tendencies
- Difficult to confirm hypothesis

- 10 times larger dataset
- Acceptable range
- Divide into 30 second groups
- Compare percentage of data within range

# Thanks!

Do you have any questions?

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