

TAP! TAP!

COSTA Kimmy,
PATASHKEVICH Natallia,
SWAMINATHAN Jennifer





INTRODUCTION

Aim course project

01

PROBLEMATIC

Project description

02

SOLUTION

Use case

03

PROJECT ARCHITECTURE

Modalities

04



STATE MACHINE

Game system layout

05

SOFTWARE USED

Tools

06

USER EVALUATION

A/B testing, time and errors

07

CONCLUSION

Follow up, wrap up

08

01. INTRODUCTION

Grasp the combination of multiple modalities in a training rehabilitation task for visual impaired people





02.

PROBLEMATIC

02. PROBLEMATIC

Color blindness

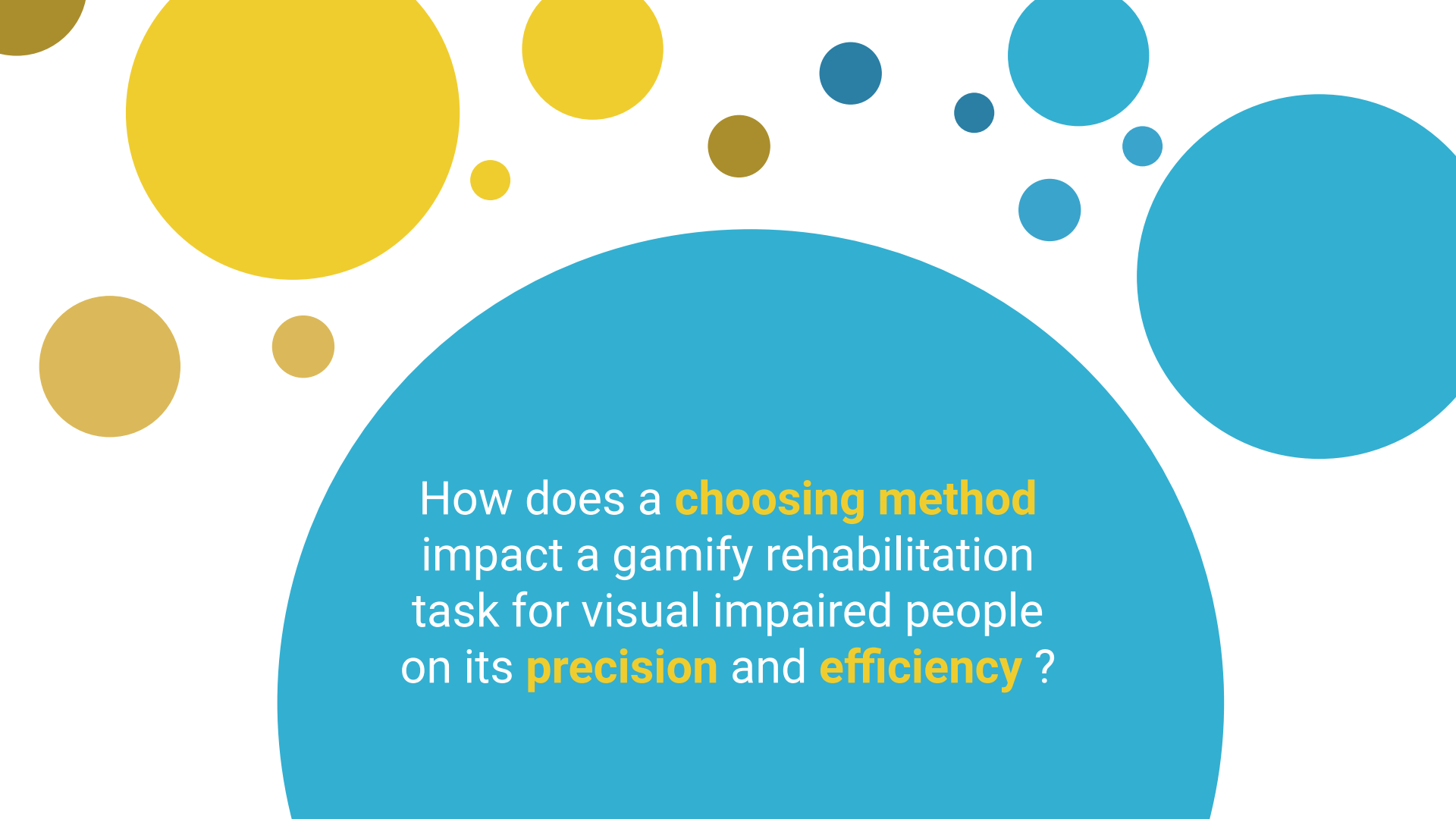
Monochromatic,
daltonia...



Visual impaired

E.g glaucoma, legal blindness,
macula degeneration...





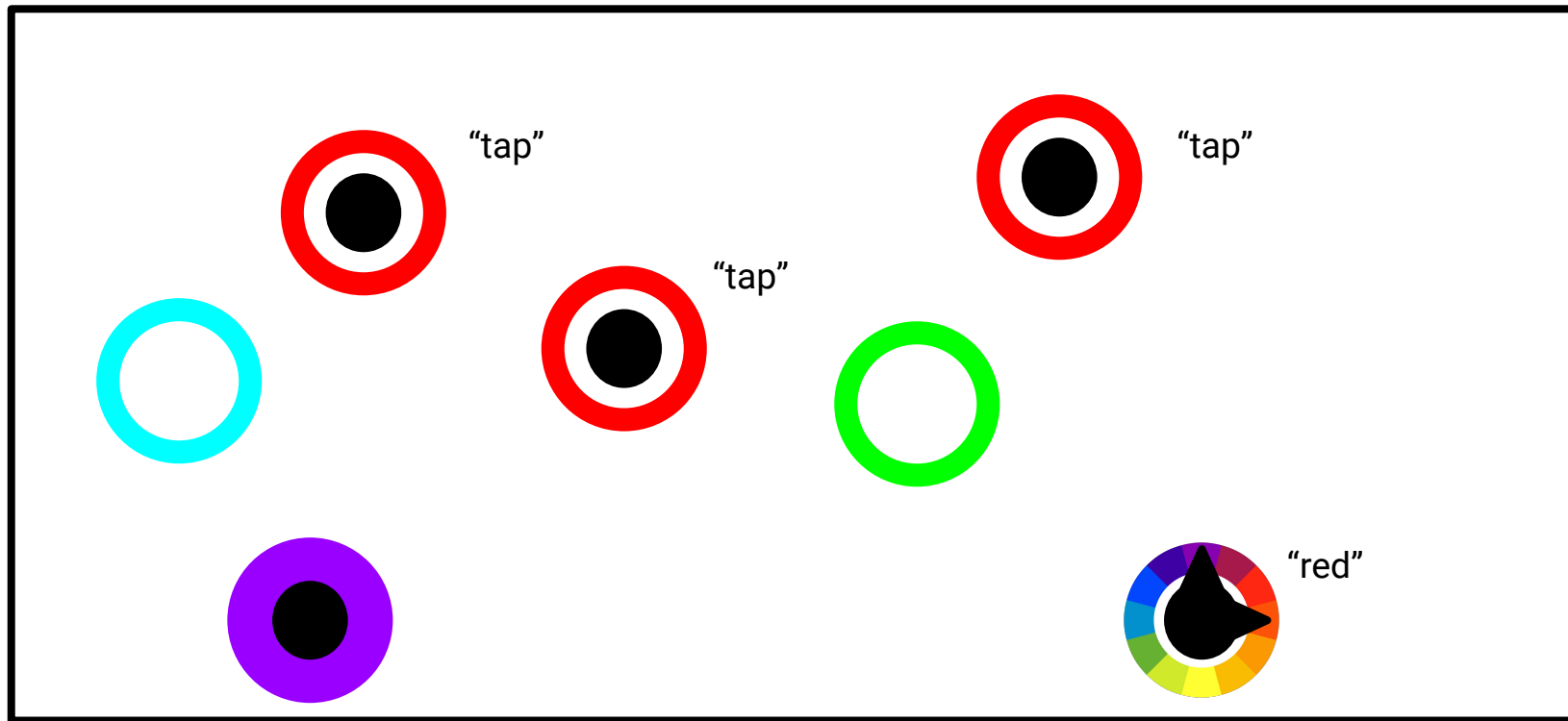
How does a **choosing method**
impact a gamify rehabilitation
task for visual impaired people
on its **precision** and **efficiency** ?



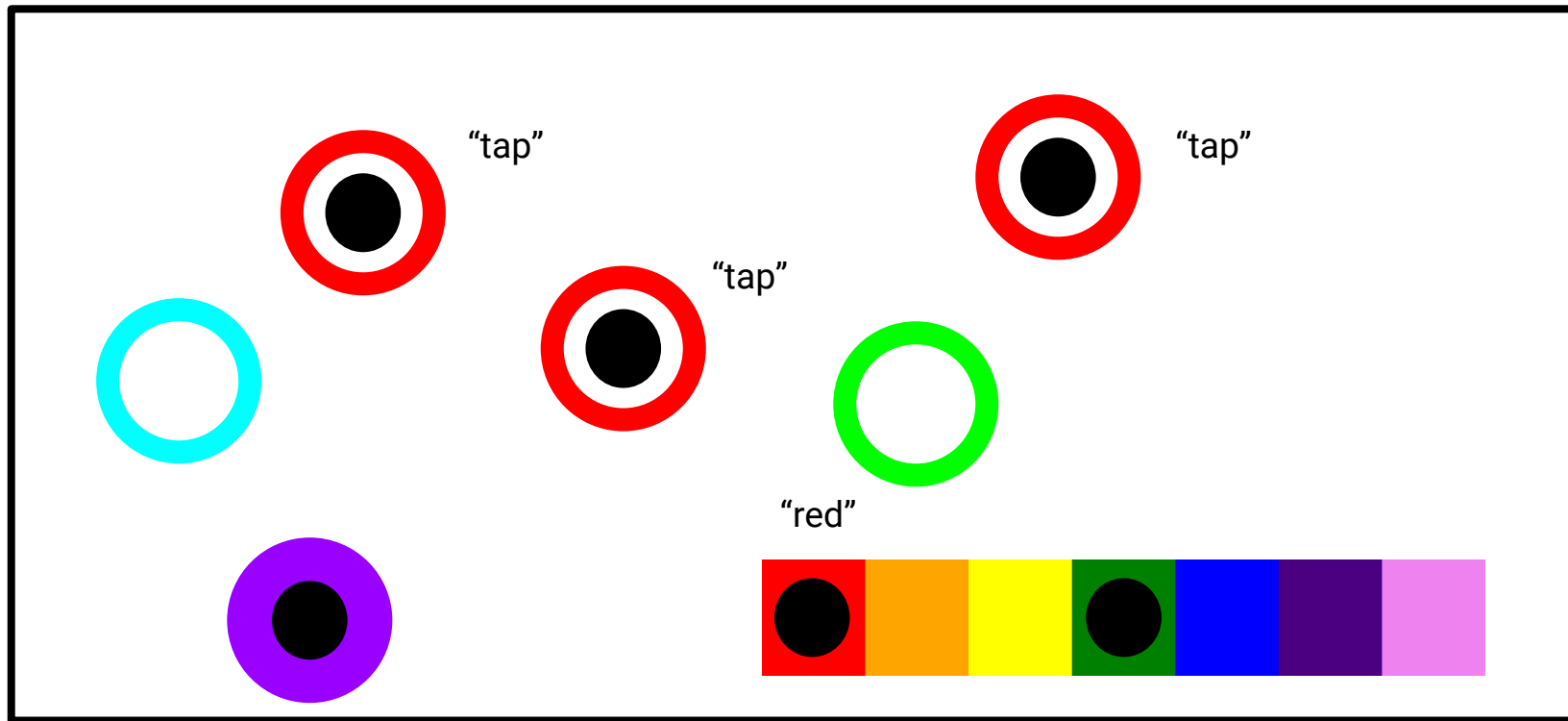
03.

SOLUTION

03. USE CASE A



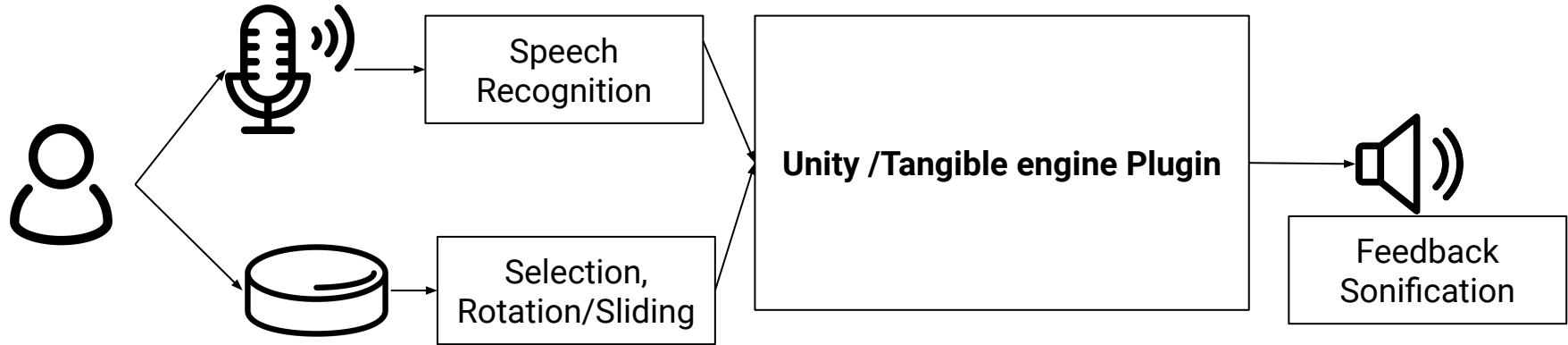
03. USE CASE B





04. PROJECT ARCHITECTURE

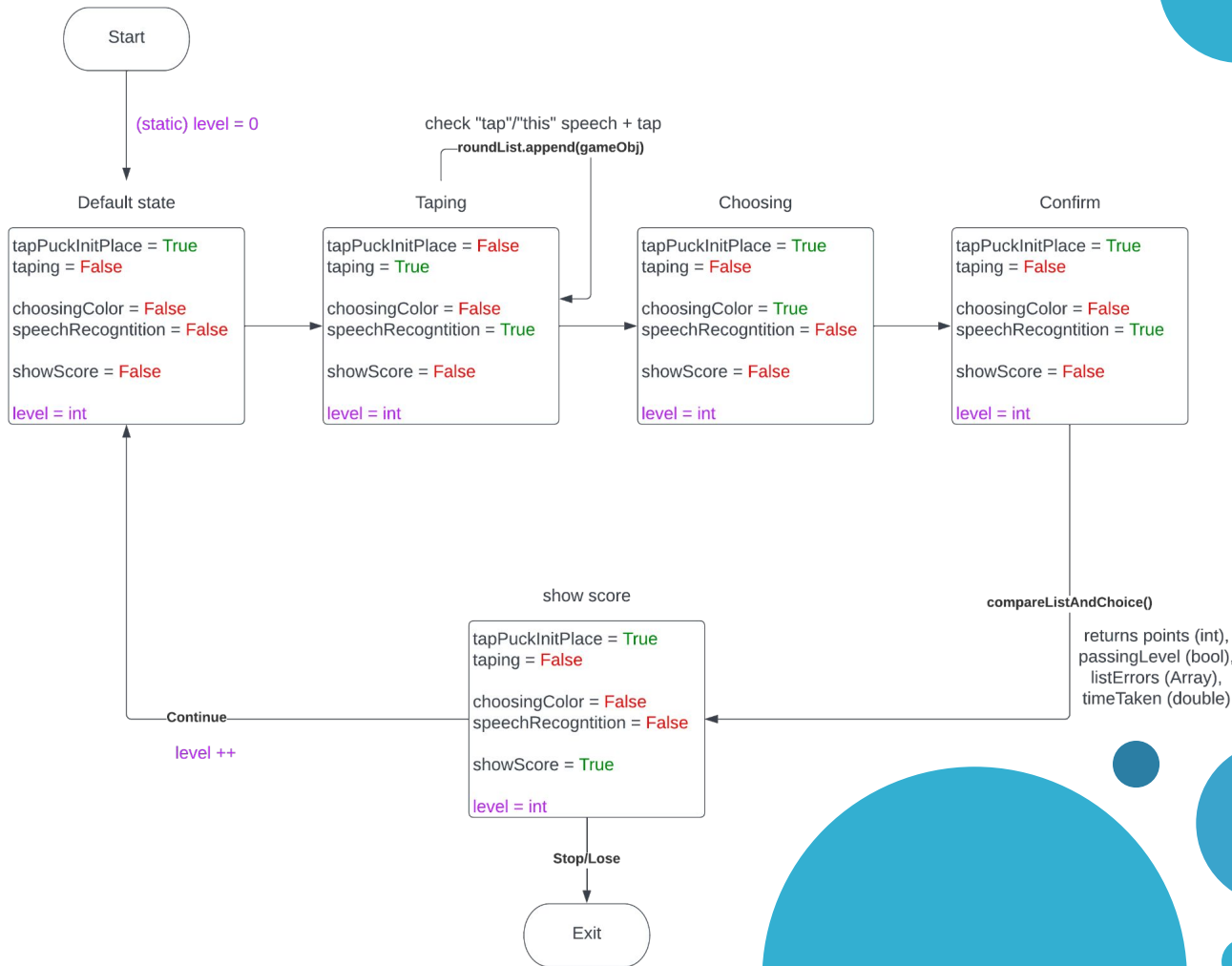
04. PROJECT ARCHITECTURE





05. STATE MACHINE

05. STATE MACHINE





06. SOFTWARE USED

06. SOFTWARE USED



Unity

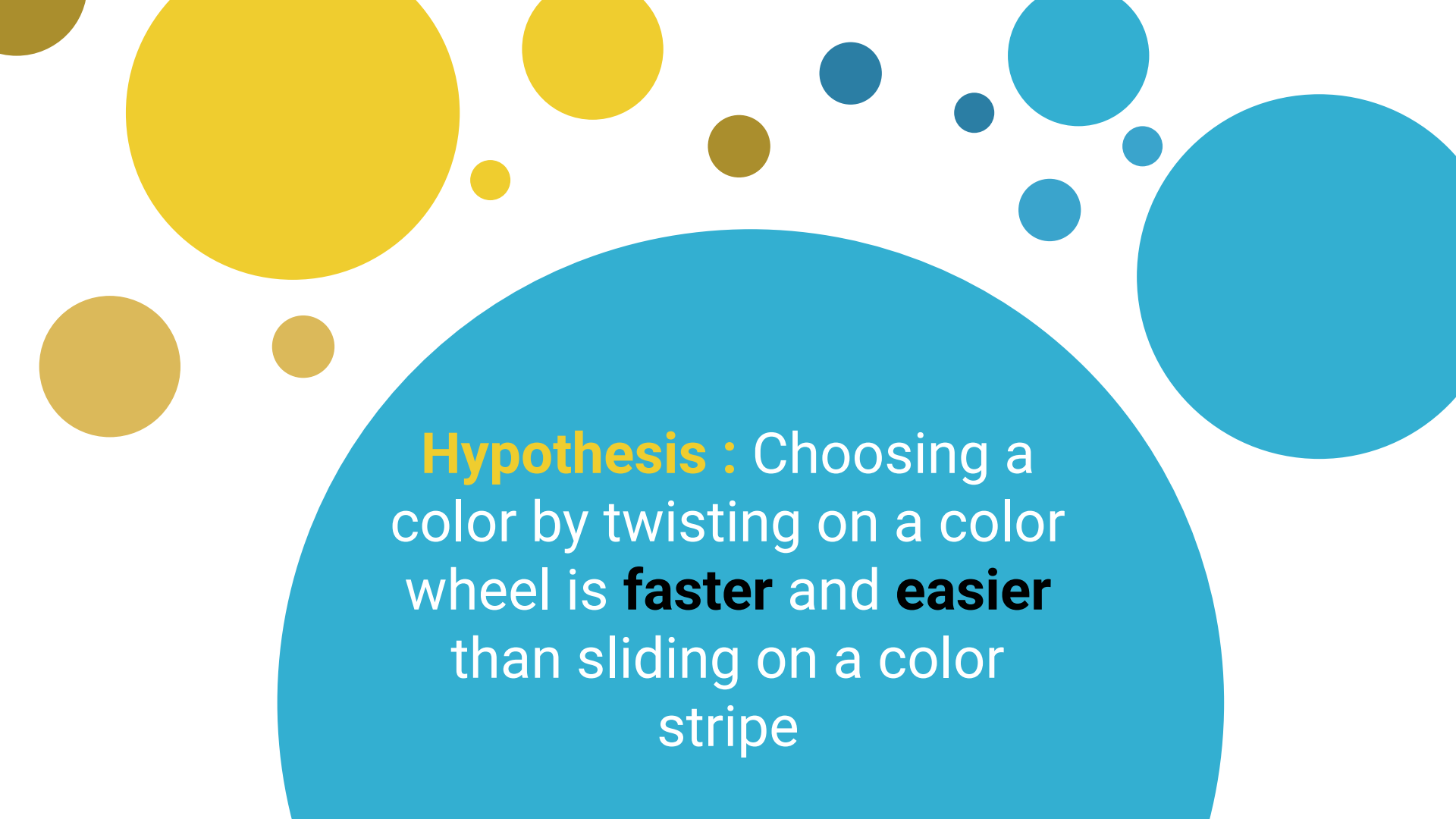
Software



Plug-in



07. USER EVALUATION



Hypothesis : Choosing a color by twisting on a color wheel is **faster** and **easier** than sliding on a color stripe




07. USER EVALUATION

H0 : Time

There's no significant difference in **time** between choosing a color on a color wheel or sliding on a color stripe

H1 : Errors

There's no significant difference in the **number of errors** between choosing a color on a color wheel or sliding on a color stripe





08.

CONCLUSION

08. CONCLUSION



Colorblind

Color differentiation



Visual impaired

Size, thickness differences, big surface



Multimodalities

Speech and tangible object



Gamification

Fun tap game : score, level → time + errors



Coding

Combine Tangible Engine + speech on Unity



Evaluation

A/B testing on time and errors for 2 variants



THANKS!

Do you have any questions?

CREDITS: This presentation template was created by Slidesgo, including icons by Flaticon, and infographics & images by Freepik.