GAMEPLAY MORPHING

ROGER PLANES CAMPRODON ENRIC MARTÍ GODIA FEBRUARY 2010

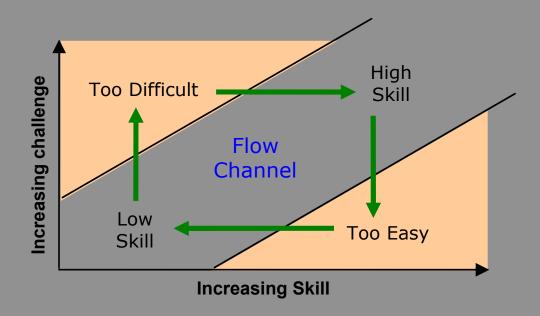
CONTENTS

- 1. INTRODUCTION
- 2. GAMEPLAY MORPHING REQUIREMENTS
- 3. PROJECT DEVELOPMENT
- 4. RESULTS
- 5. CONCLUSIONS & IMPROVEMENTS

index | introduction | gameplay morphing | implementation | results | conclusions difficulty levels | project goals

1. INTRODUCTION

- DIFFICULTY ON GAMES
 - SETTABLE DIFFICULTY LEVELS
 - DYNAMIC DIFFICULTY ADJUSTMENT



index | **introduction** | gameplay morphing | implementation | results | conclusions difficulty levels | **project goals**

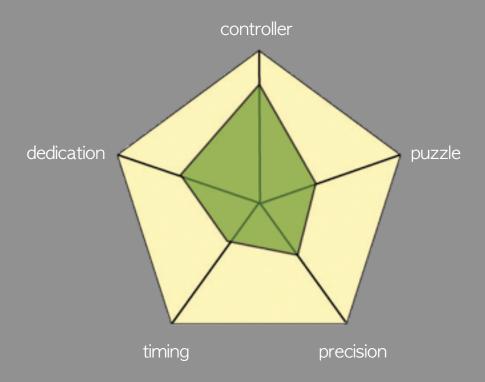
PROJECT GOALS

- DEFINE RÉQUIRED SKILLS TO PLAY VIDEOGAMES
- CREATE A GRAPHICAL WAY TO DISPLAY THE SKILLS
- DESIGN A TEST TO EVALUATE THESE SKILLS
- IMPLEMENT THIS TEST FOR THE NINTENDO DS SYSTEM

2. GAMEPLAY MORPHING

- SKILLS :
 - CONTROLLER
 - PRECISION
 - PUZZLE SOLVING
 - TIMING
 - DEDICATION

GAMERSHAPE



index | introduction | **gameplay morphing** | implementation | results | conclusions gamershape | **balancing games**

GAMEPLAY MORPHING

• SINGLE PLAYER

- MULTIPLAYER
- COOPERATIVE
- VERSUS

test design | application

3. PROJECT DEVELOPING

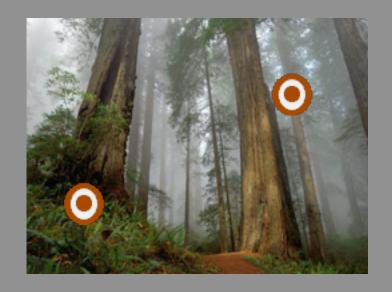
EVALUATE SKILLS

- PRECISION: THE SHOOTING TARGETS
- CONTROLLER: COMBO MAKING & BUTTON TAPPING
- PUZZLE SOLVING: THE DOOR, HIDDEN NUMBERS & MEMORY TEST
- TIMING: RESPONSE TIME
- DEDICATION : POSSIBLE USE OF HINTS IN THE PUZZLES

test design | application

SHOOTING TARGETS

- USE OF SPRITES
- THREE ROUNDS
- OUTPUT = NUMBER OF TOUCHED TARGETS



test design | application

THE DOOR

- USER HAS TO FIND THE CORRECT SEQUENCE OF NUMBERS BY WATCHING THE PICTURE
- POSSIBILITY OF GETTING A HINT



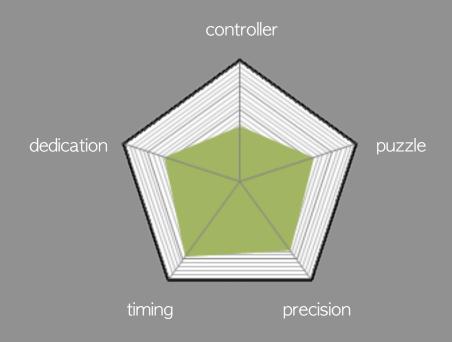
index | introduction | gameplay morphing | implementation | **results** | conclusions **expected results** | examples

4.RESULTS

• PEOPLE THAT PLAY VIDEOGAMES HAVE BETTER SKILLS (SURGEONS, ARMY, REACTION TIME).

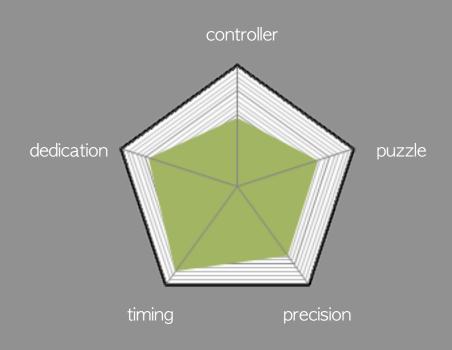
- RESULTS OBTAINED FROM 50 TEST
- 25 GAMERS & 25 NON-GAMERS
- 33 MEN & 17 WOMEN

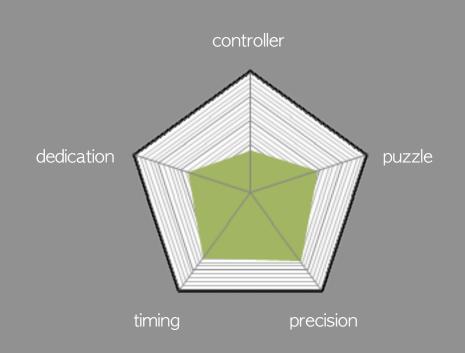
AVERAGE GAMERSHAPE



controller	puzzle	precision	timing	dedication
46	64	71	78	66

GAMERS & NON-GAMERS





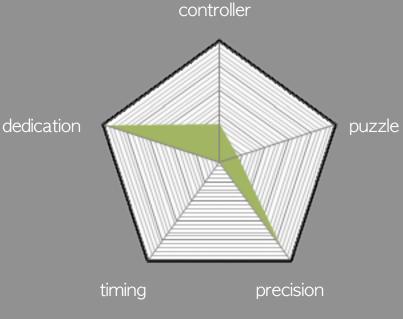
controller	puzzle	precision	timing	dedication
58	71	71	87	77

controller	puzzle	precision	timing	dedication
35	58	71	68	55

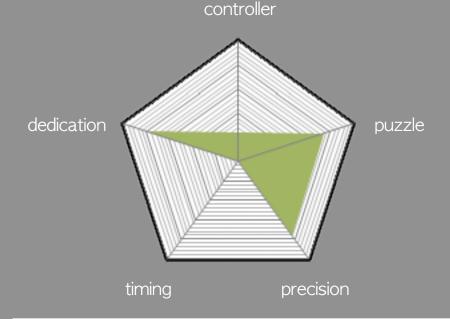
EXAMPLES OF OBTAINED GAMERSHAPES

Female 29 non-gamer

Male 34 non-gamer



controller	puzzle	precision	timing	dedication
32	16	87	0	100

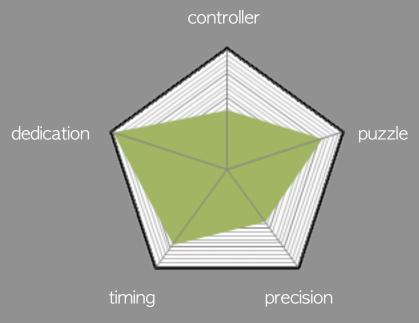


controller	puzzle	precision	timing	dedication
24	75	76	0	81

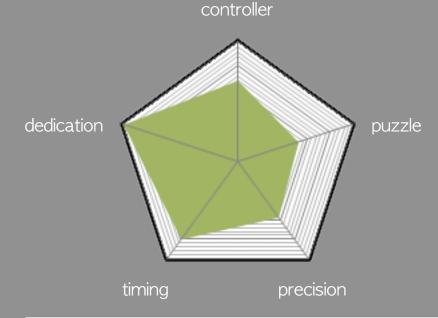
EXAMPLES OF OBTAINED GAMERSHAPES

Male 26 non-gamer

Male 24 gamer



controller	puzzle	precision	timing	dedication
49	83	53	77	100



controller	puzzle	precision	timing	dedication
68	53	58	80	100

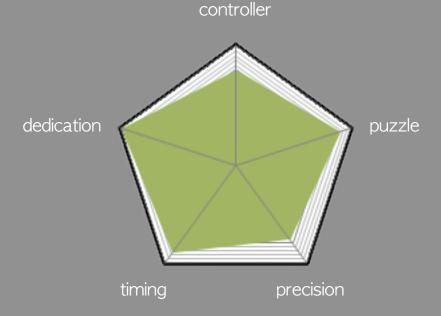
EXAMPLES OF OBTAINED GAMERSHAPES

Male 29 gamer

Male 24 gamer

dedication puzzle timing precision

controller	puzzle	precision	timing	dedication
67	56	65	90	58



controller	puzzle	precision	timing	dedication
80	91	76	90	100

5. CONCLUSIONS & IMPROVEMENTS

- THE RESULTS CONFIRM THE THEORIES
- GAMEPLAY MORPHING CAN BE A VALID OPTION

- HOW WE UPDATE THE GAMERSHAPE?
- HOW WE MIGRATE THE TEST TO HOME SYSTEMS?

THANK YOU!