FOCUS

# **Introduction**

*Focus* is a single-player puzzle-adventure game meant to assist children diagnosed with ADD/ADHD in overcoming everyday difficulties commonly encountered due to these disorders.

The game has been designed as a supporting activity to the methods set forth in the book *Organizational Skills Training for Children with ADHD*, by Richard Gallagher, Howard B. Abikoff and Elana G. Spira (Guilford Press, 2014). In this book the authors detail a set of behavioral tools designed to assist parents and therapists in guiding children towards the construction and maintenance of healthy daily routines.

The game mechanic is based on a persistent-world ‘virtual pet’ scheme, in which the player is tasked with maintaining their avatar’s well-being via methodically overcoming level-based challenges.

*Focus* is a game meant to be used as a supplementary tool in therapy sessions for children diagnosed with ADD/ADHD. Its conceptual design is based on the activities and tasks described in the book – Organizational Skills Training for Children with ADHD : An Empirically Supported Treatment - by Richard Gallagher, Howard B. Abikoff and Elana G. Spira. Since the book serves as a treatment manual for Organizational Skills Training (OST), the game *Focus* is also aimed to teach and reinforce those skills for ADD/ADHD children undergoing therapy.

# **Background**

## Ø ***Target Audience***

The primary target audiencefor this game are children aged 8-12 who are are currently working with a therapist using the methods outlined in this book. While the common symptoms of ADD/ ADHD affect children in various ways, this game aligns itself with the ones focused on by this book; namely, difficulties with organization, time management, and planning (referred to as OTMP), which often have an adverse effect on school and home functioning.

## Ø ***Learning Objectives***

The Educational Objectives include:

1. Recognize examples of common “glitches” in their own attention.

2. Implement and uphold the strategies being provided by the therapist for dealing with these “glitches”, including

a. Goal planning

b. Complete a task without getting distracted

c. Avoid distracting locations and scenarios

3. Increase players self-efficacy regarding their ability to overcome “glitches” in their own life.

The above-mentioned learning objectives corresponds to the following dimensions of Bloom’s Taxonomy (Bloom et al., 1956):

● Evaluating (Objective 1)

● Analyzing (Objective 1)

● Applying (Objective 2)

● Understanding (Objective 2 & 3)

● Remembering (Objective 3)

# **Design**

## Ø ***Overall Game Idea***

*Focus* is a level-based puzzle-quest game set in the third person, designed to be played on any tablet device or personal computer. It shares similarities to a tamagotchi-type game, evoking a persistent-world parallel timeline in the gameworld. It follows as story-driven plot based around an avatar who is navigating situations similar to the child’s and is faced with similar problems.

By utilizing engaging, affective design considerations, we aim to make *focus* intrinsically motivating to an extent that the player will seek to succeed without needing the therapist/a parent to ‘look over their shoulder.’

## Ø ***Mechanics + Walkthrough***

\*\*2\*\*

***Aesthetic + Narrative Design***

***1. Humor***

***The animated sequences will be rendered in an exaggerated cartoon fashion to facilitate player engagement and enjoyment.***

***2. Variation in outcome animations***

***In order to allow for the player to be engaged despite being asked to do the same tasks again and again, the animations will often vary even when the scenario is the same.***

***3. Deviation from naturalistic narrative***

***On the whole, the representation of the routine tasks faced by the avatar will be rendered in a relatively naturalistic cartoon fashion, in order to avoid obfuscating the relation between the strategies used by the player in real-life and in the game-world.***

## *Ø* ***Imagery Design***

***Focus leverages both 2D cartoon and 3D graphics for same scene but different difficulty levels. For younger players or children with more severe ADHD symptoms, 2D version would be shown first, while other players would have the option to skip to the 3D graphics directly upon their choice.***

***\*\*1\*\****

## *Ø* ***Theory of Change***

***\*\*3\*\****

# ***Evaluation***

***Effectiveness evaluation of the game should follow the standard evaluation used by experts in the area of counseling and skill assessment for children with ADD/ADHD. It should also involve additional playtests, interviews, and questionnaires with players, parents, and counselors in order to evaluate what does and doesn’t work in the game in order to improve it.***

***\*\*4&5\*\****