



Introduction

Dyscalculia is a learning disability, which is “having difficulties in understanding the concept of numbers, in perceiving them intuitively” [1]. The technology allows learners to be self-reliant and confident in their learning, in addition, the visualization helps them perceive mathematical facts better [2].

Abstract

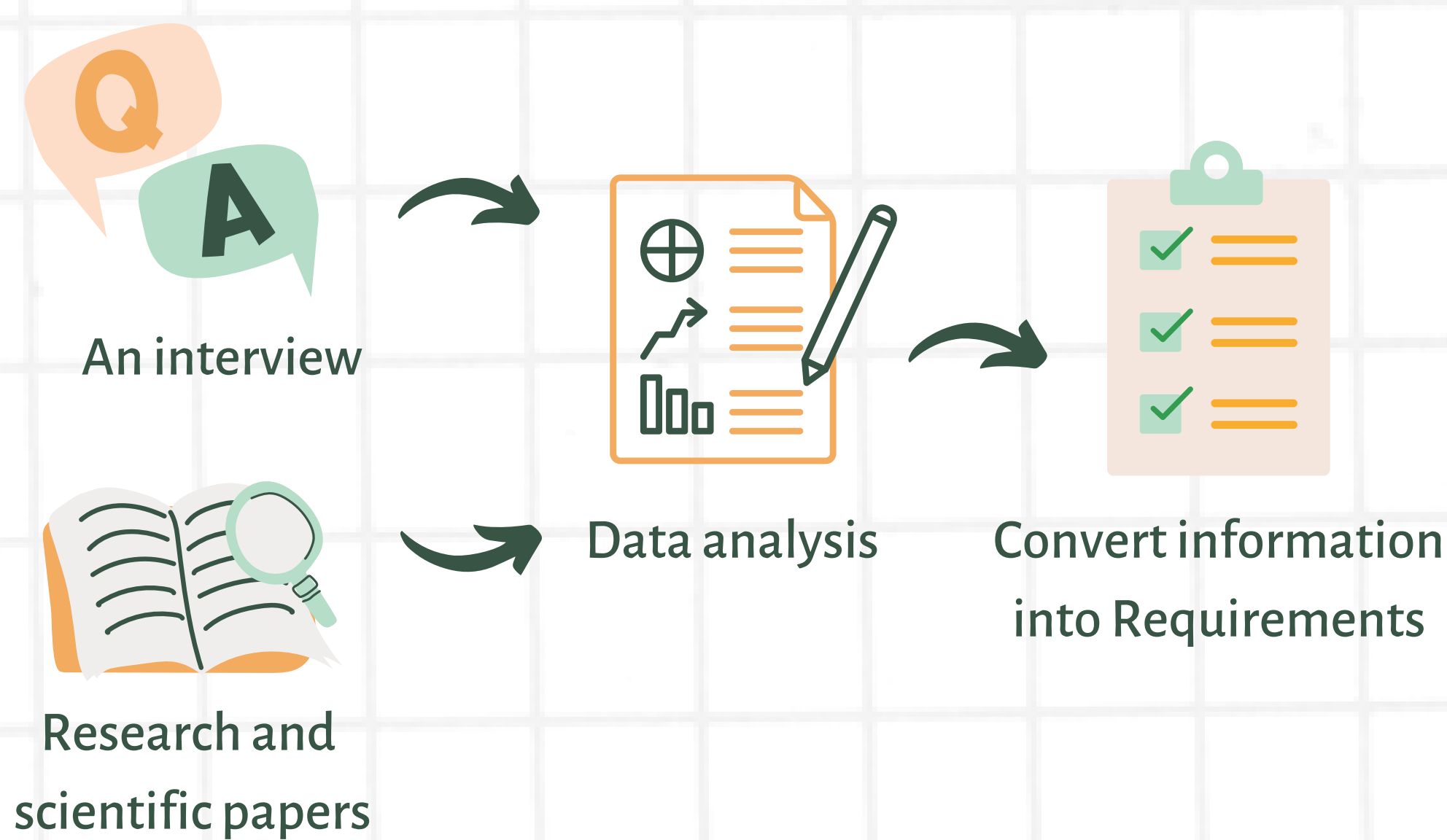
The project presents an Augmented Reality (AR) game called Zaeid that aims to promote learning math for kids with dyscalculia using Arabic content.

The user interacts with a character throughout the game using a cartoon atmosphere that will evoke the focus of the dyscalculia child in a very joyful environment.

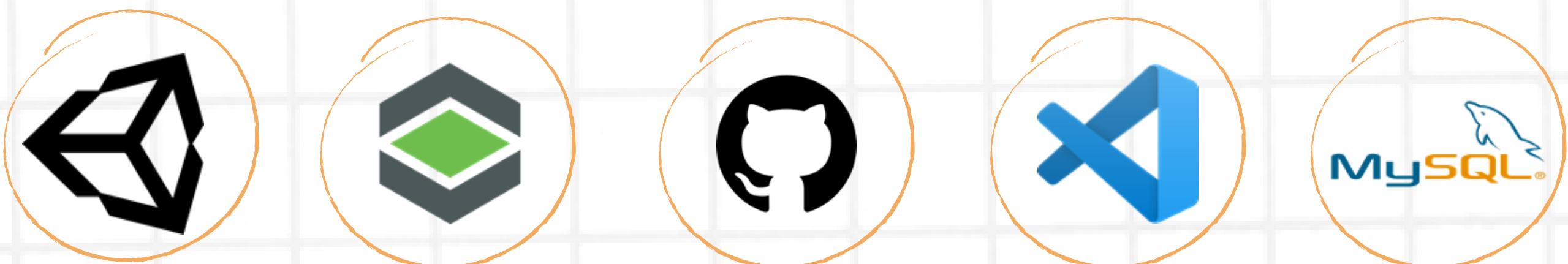
Objectives

- 1 Develop an AR application for dyscalculia kids.
- 2 Transform the ordinary learning experience into entertaining suitable strategies-based stories with augmented reality.
- 3 Help dyscalculia children to build math skills and let them keep on track with peers who don't suffer from dyscalculia.
- 4 pose and define the problem as the familiarity with it is uncommon

Data collection



Programming Tools



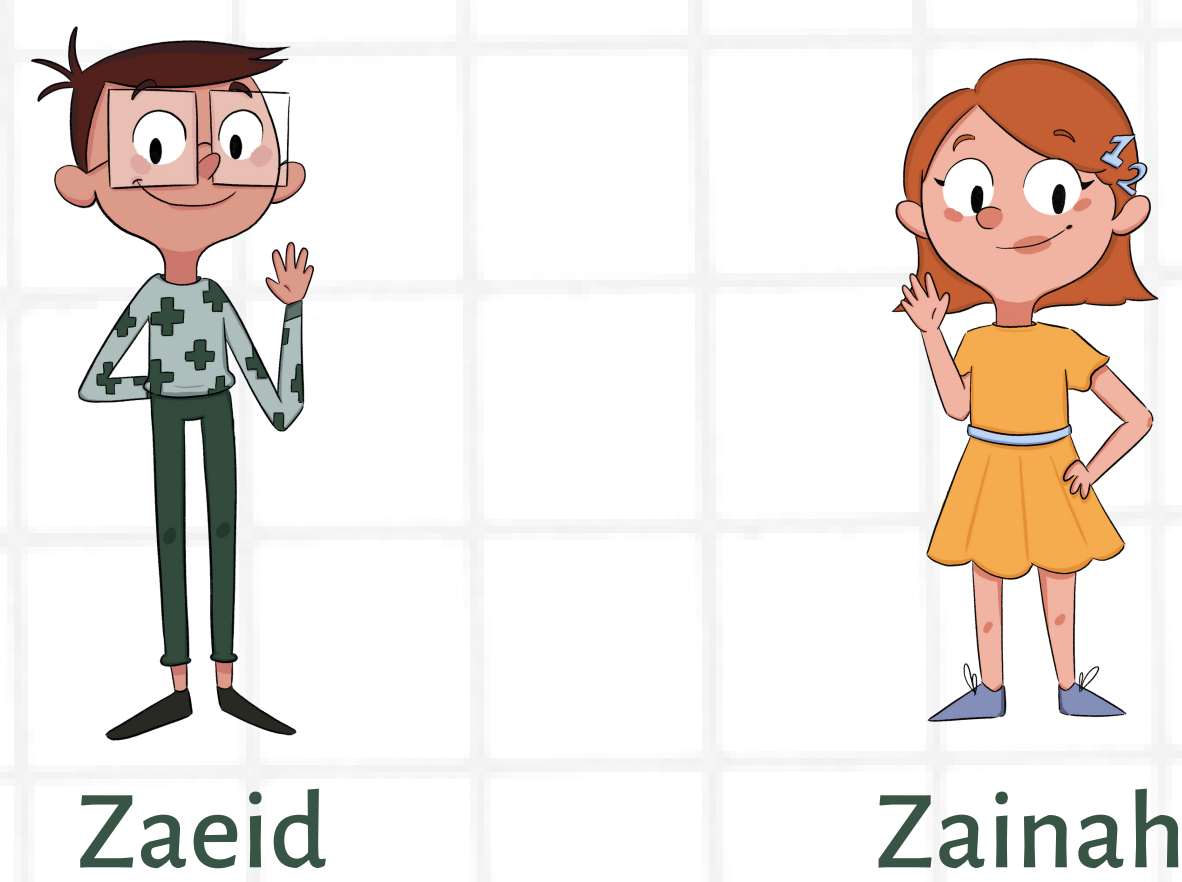
Existing system

doesn't support Arabic language.	used in a classroom only (disMAT)	Not intended for dyscalculia (Math Ninja AR)

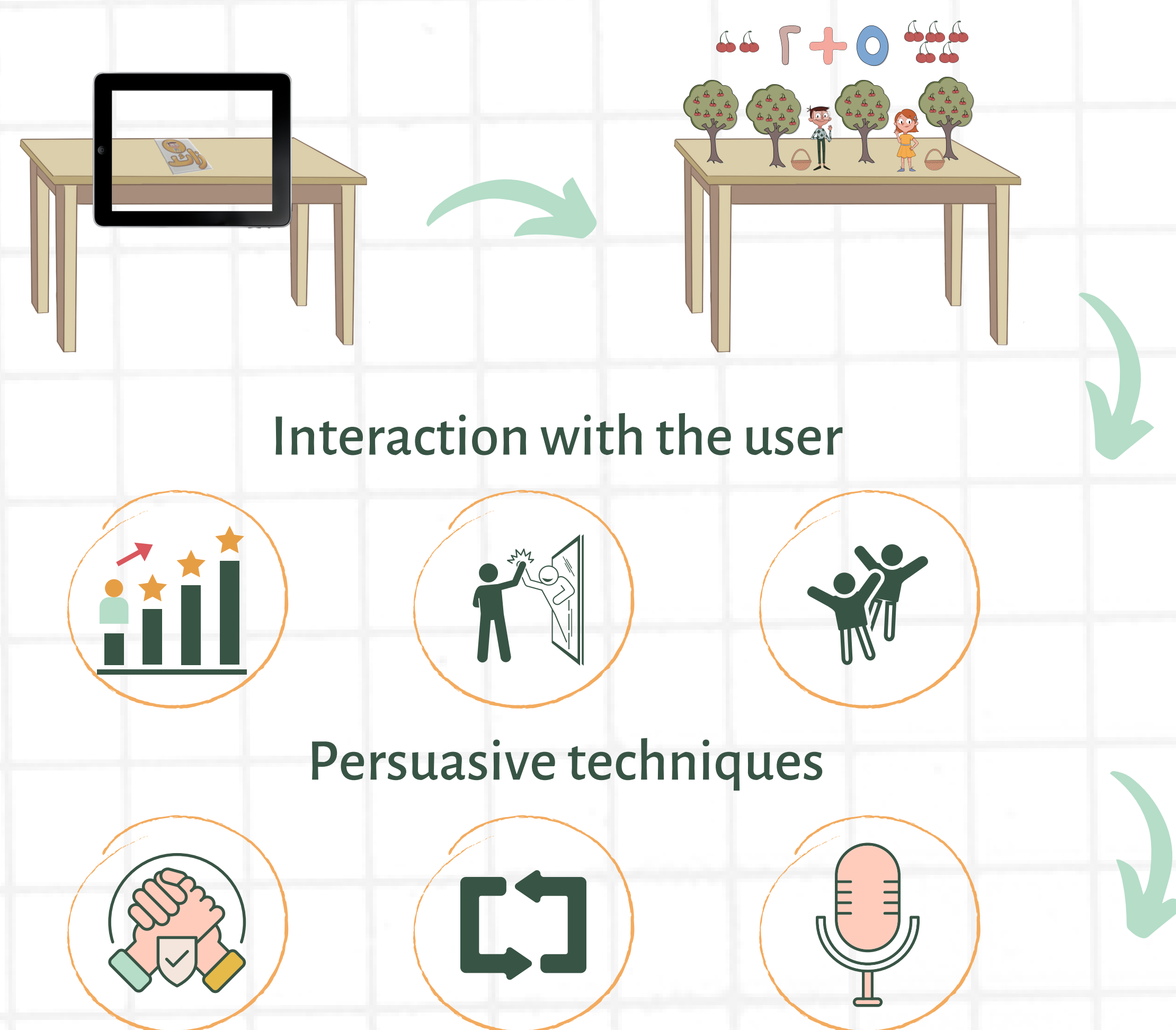
Methodology



Social actors



How the game works.



Conclusion

This project proposed and implemented an Educational AR environment for children with dyscalculia between 6 and 12 years old to help facilitate the math curriculum and make learning easier and more entertaining.



REFERENCES