Green Siesta Quiz

AR-BASED
SERIOUS GAME

Augmented Reality (**AR**) is a technology that overlays digital content onto the real world in real time, enhancing the user's perception and interaction with their environment.

In the **Green Siesta Quiz**, AR is used to provide a **new experience for the user**, who is represented as a **cartoon avatar that can be customized** (skin, hair, eyes etc.). Additionally, AR offers an **extra form of interaction** with the device through **hand gesture recognition**.

MULTILINGUAL
SERIOUS GAME

The game is implemented as a multilingual game. All text within the game has been translated into five EU languages: **English**, **Croatian**, **Spanish**, **Hungarian** and **French**.
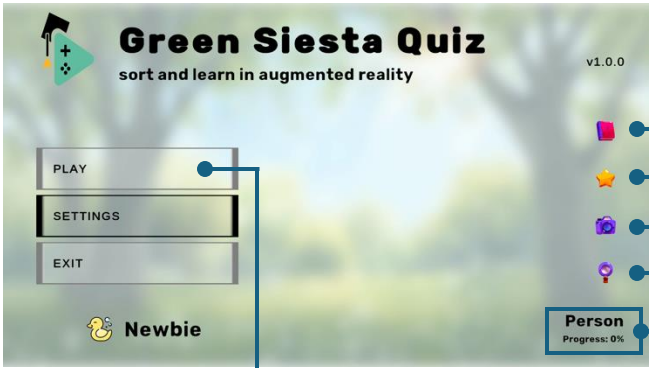
GREEN –THEMED
SERIOUS GAME
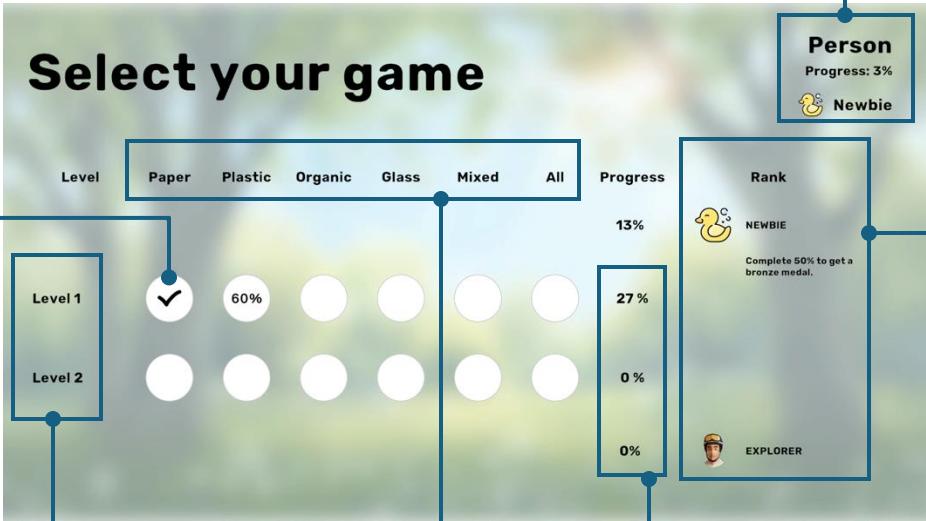### Paper, plastic, organic, glass and municipal waste management

In **Green Siesta Quiz**, players test their knowledge through two types of quizzes: a **multiple-choice quiz** featuring **fun facts about waste management**, and a **sorting quiz** where players must **correctly place waste items into the appropriate recycling bins**.

The game covers various waste categories, including **paper, plastic, organic, glass, and municipal waste**. With **8 levels** in total, each new stage introduces a fresh set of questions and increasingly complex sorting tasks, gradually raising the difficulty to keep the experience both educational and engaging.

Gameplay information

Green Siesta Quiz
sort and learn in augmented reality

v1.0.0

PLAY

SETTINGS

EXIT

🦆 Newbie

Person
Progress: 0%

User manual

Questionnaires

Credits

About the project

Overall progress report

Select your game

Person
Progress: 3%
🦆 Newbie

Successfully completing levels unlocks new ranks. The starting rank is Newbie, followed by Explorer, Professional, and finally Master in waste management.

Level	Paper	Plastic	Organic	Glass	Mixed	All	Progress	Rank
							13%	🦆 NEWBIE
Level 1	✓	60%	○	○	○	○	27 %	Complete 50% to get a bronze medal.
Level 2	○	○	○	○	○	○	0 %	
							0%	👒 EXPLORER

New rank unlocked!

Welcome!
Just select any of the white circles and start your first quiz!

Scroll down to see all the quizzes you will unlock soon!

Newbie   OK

Game has **8 levels** for **each type of waste** with **progress report**!

START

FASHION ROOM

TUTORIAL

SETTINGS

EXIT

The tutorial launches automatically when accessing the app for the **first time.**
It can also be started at any time by pressing a button.

EXIT

TUTORIAL

Welcome! Let us get through the basics of our game!

Click NEXT when you are ready.

Next

By selecting one of the available white circles, the user is taken to the **main game screen.**
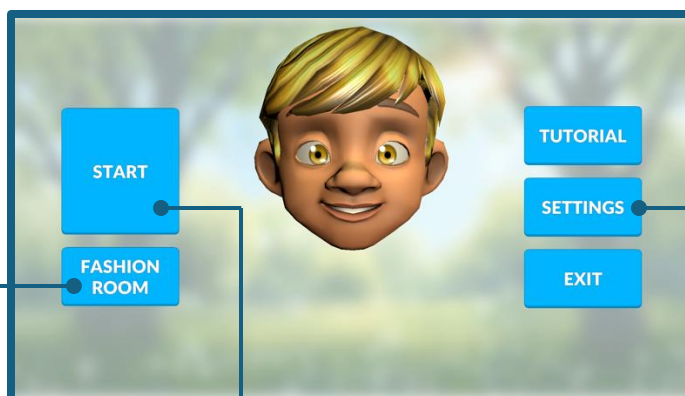
Inside white circle the check mark signifies a perfect level completion (100%), while partially correct answers are displayed as a percentage score.

PLAY2GREEN
Serious Gaming for Universal
Access to Green Education

Co-funded by the European Union

In the **Fashion Room, you can customize your avatar.** As you progress through the game, new customization options become available.

Within the settings, you can **adjust AR experience**. By selecting the button, you **switch to AR mode**, which **uses camera and place the avatar onto your body**.
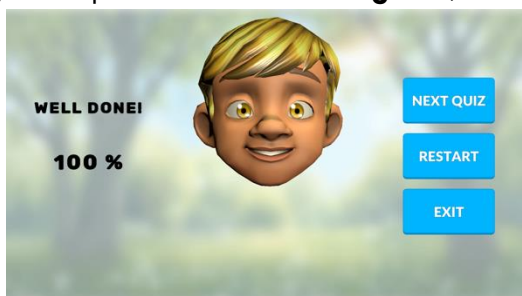
Pinch gesture adjustment

Multiple-choice quiz

Sorting quiz

After the quiz is completed, the achieved **score percentage** is displayed along with options to start a **new game**, **reset**, or **exit**.

DOWNLOAD GAME AND MORE INFO:

https://sociallab.fer.hr/play2green/green-siesta-quiz/

UDL GUIDELINES

The **Green Siesta Quiz** serious game implements
26 Universal Design for Learning (UDL) guidelines.
According to these guidelines, they are divided into three pillars that offer multiple means design guidelines for: Engagement, Representation and Action & Expression.

Multiple means of ENGAGEMENT ⬤

1 Users can choose and modify avatars.

2 Users have choice of level.

3 Offering user profiles.

4 Quiz to assess adopted materials.

5 Offers feedback in the form of audial and textual information.

6 Offers internal feedback in the form of a timer.

Offers feedback for motivation in the form of points, awards and unlockable features.

7 Implements an onboarding tutorial.

8

Multiple means of REPRESENTATION ⬤

9 A pictogram, label and sound for each game object.

10 Subtitles, texts and labels for questions.

11 A Text-to-Speech implemented.

12 Multilingual solution in five languages (English, Croatian, Spanish, Hungarian and French).

13 Onboarding video with follow through.

14 Implementing sequential learning to further in the game.

15 Inlcuding prerequisite knowledge to further in the lessons.

16 Dividing the learning materials according to topic and game mechanics.

Multiple means of ACTION & EXPRESSION ⬤

17 Multiple interactions with the interface, such as click and scroll.

18 Controlling the game with hand gestures or using the mouse.

19 Multiple manipulations of objects, such as pinching, grabbing and dragging.

20 Including hand gestures and features using Augmented Reality (AR).

21 Increasing difficulty with game progression.

22 Clear goals and expectations through instructions.

23 Implemented progress bar.

26 Implemented scores in real time and at the end of the game.

24 Getting badges as you progress in the game.

25 Getting rewards and opening features for passing a level.