



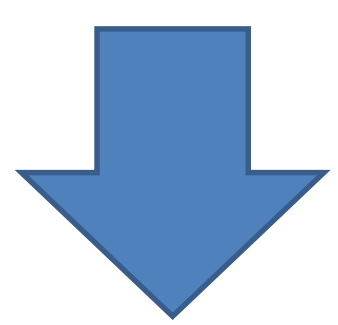
Erasmus+

# Serious Games for Fostering Multilingualism in Early Childhood Education

## Background

Perceptions on multilingualism in early childhood education are shifting. In the past the exposure of a child to two languages at the same time was considered a potential disadvantage in fear of the child not being able to differentiate language structures. Emerging pedagogical theories, however, argue that multilingualism positively affects a child's cognitive development as a whole, resulting in children becoming more intellectually perceptive and flexible (Goethe Institut). Researchers further argue (Yip and Mathews, 2007) that multilingual skill development before the age of 6 may be related to more effective use of brain capacity for multiple language production by early bilinguals. Other research (Craik, Bialystok, Freedman, 2010) makes connections between lifelong bilingualism and increased cognitive reserve.

On a practical level, today's children are exposed to languages other than their mother tongue in a natural way through sounds and images that are part of everyday life and their everyday environment. In instructional settings a second language, such as English, is often introduced as early as in pre-school education, although often informally and beyond the requirements of formal school curricula; second language learning is integrated into classroom activities such as drawing, singing, playing, and more. The development of language awareness and capacity in early childhood education can help learners to more effectively build language skills in subsequent school grades in primary education (Ford, 2010). It contributes to the widening of learning opportunities through access to rich multilingual content in diverse subjects. On the other hand, early language learning can positively contribute to the transition of multilingualism from pre-school to primary education and the building of functional language literacy.



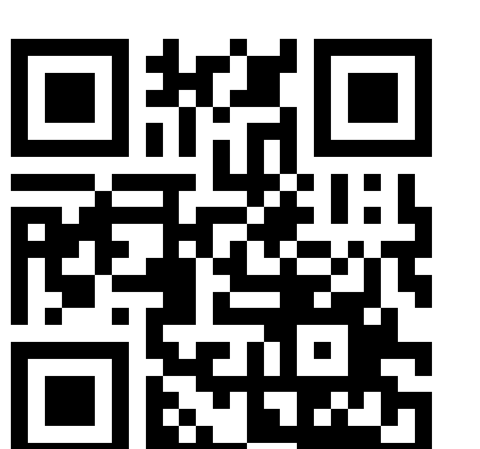
## Language Games Overall Objective

LanguageGames aims at the development of multilingual skills in early childhood learning, spanning pre-primary and early primary education, in an active and experiential manner. The project takes current practices for language skill building a step further by exploiting emerging state-of-the-art serious games-enhanced learning frameworks adapted to the cognitive development level of young learners. The proposed active learning approach will immerse young learners in activities that take inspiration from real-life and familiar school practices offering benefits that include immediate feedback for scaffolding knowledge by better understanding mistakes, motivational factors in the form of game rewards, collaboration opportunities, and the development of problem-solving skills through puzzles. The proposed tools will be designed for classroom deployment, as opposed to standalone use, in the context of wider language learning activities thus enhancing existing school practices in language education. The proposed serious game for language learning will integrate age-appropriate, well accepted syllabic language learning methodologies that help youngsters build word recognition and reproduction capacity.

Project Partners



TALLINN UNIVERSITY



<http://languagegames.eu/>

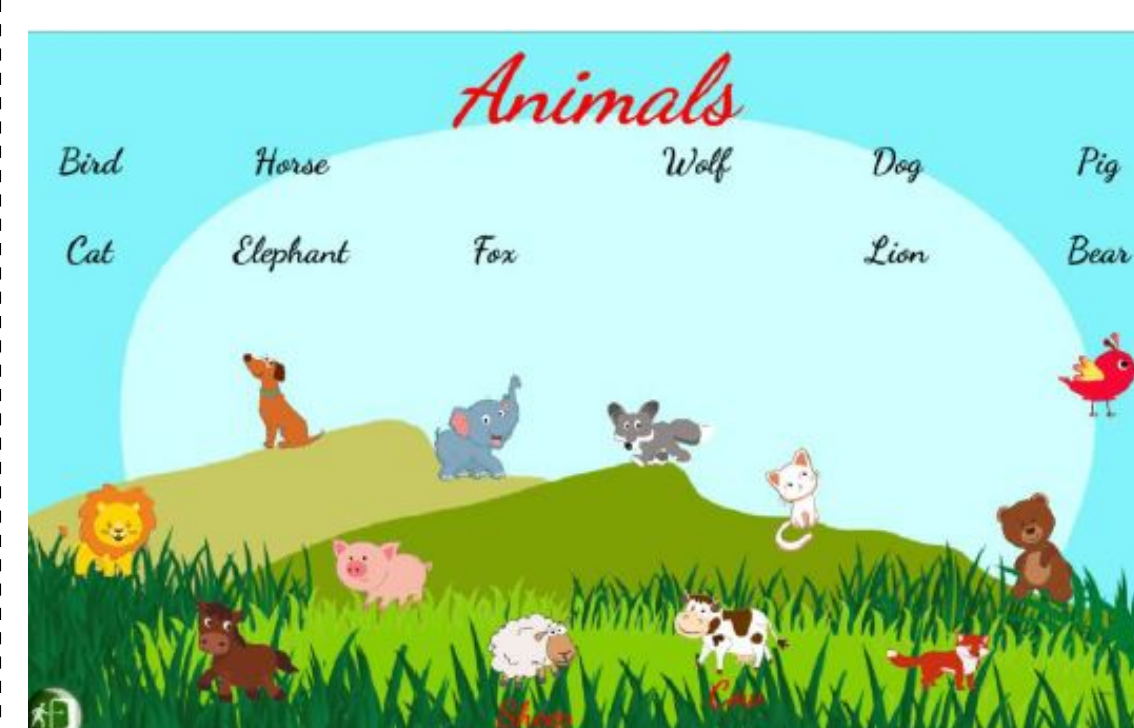
## The Concept

Innovation related to learning policies and approaches:

- LanguageGames focuses on quality early childhood education, including pre-school education and lower primary school grades.
- Pedagogically, LanguageGames focuses on the development of multilingual skills among young learners aged 5-7 years.
- LanguageGames promotes the strategic uptake of ICT in education through the design, implementation, and validation of proof-of-concept applications and the introduction of good practices on their integration into existing learning practices

Learning design innovation:

- The learning solution integrates emerging active, explorative, game-based pedagogies and supporting ICT that combined exploit the educational added value of serious games for helping learners scaffold knowledge through clear learning goals
- It enables immediate feedback for reinforcing newly developed knowledge
- It promotes engagement in the learning process through the motivational aspects of serious games such as story-telling, competition, and rewards
- It supports mobile access for anywhere and anytime deployment of proposed tools

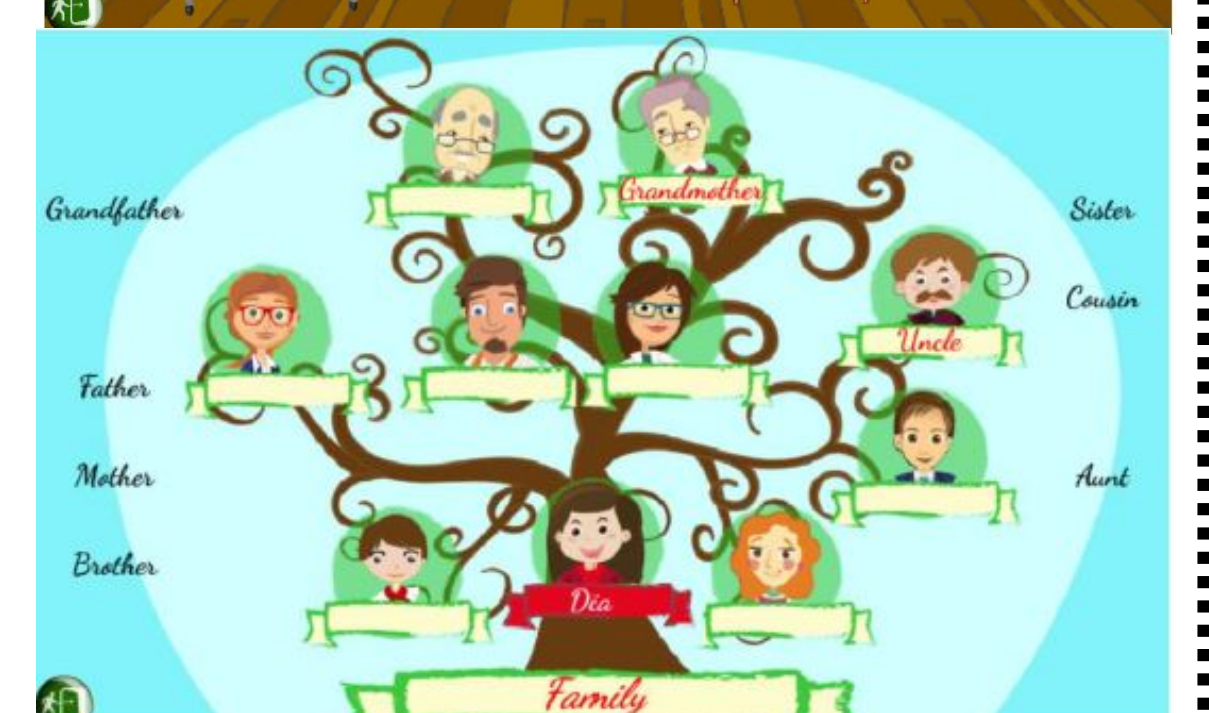
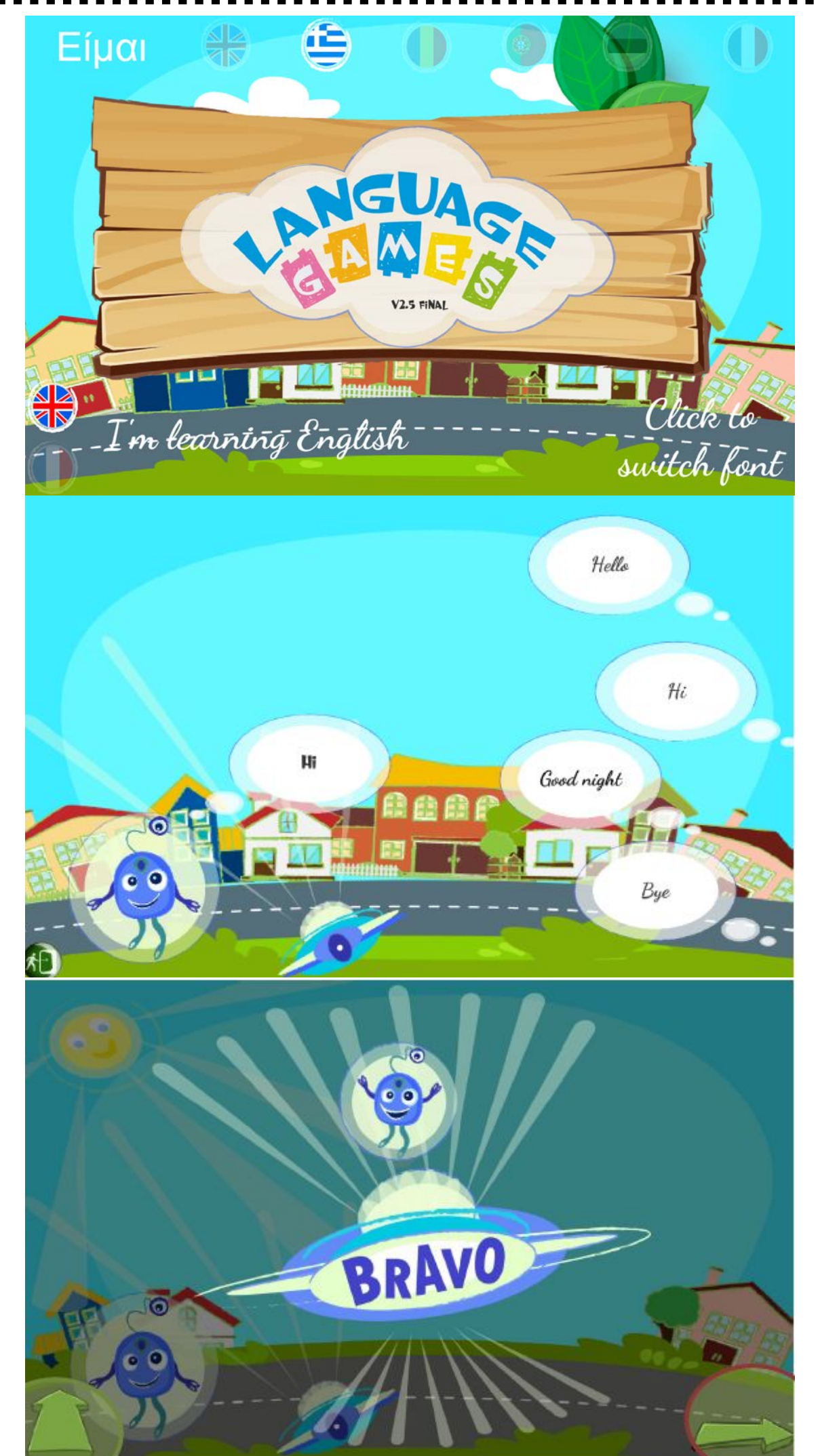


The work will be organized around 3 tangents:

- A) the development of a background theoretical framework for building early multilingualism skills
- B) proof-of-concept technical implementation of the proposed educational framework into a serious game and supporting content
- C) valorization of theoretical and technical implementation through evaluation, dissemination, and adoption outcomes

The following most important results are foreseen from the implementation of project objectives and activities:

1. A learning requirements and methodologies analysis and an analysis of current practices for language skill building in early childhood education.
2. A proof-of-concept serious game for the development of multilingualism skills in early childhood education.
3. A user guide on the proposed serious game for language learning in early childhood education available in English as well as the national languages of project partners.
4. Instructional support content in the form of good practice videos that will facilitate the integration of proposed methodologies and tools into existing language learning practices in early childhood education, enriching learning experiences and enhancing multilingual skills
5. An evaluation strategy that will provide a comprehensive guide on how the relevance, acceptance, effectiveness, and quality of the proposed serious game and instructional support content will be established through formative and qualitative evaluation methodologies.
6. Evaluation outcomes from the deployment of the proposed methodologies and tools in real-life educational contexts in Romania, Greece, Portugal, the UK, and Estonia with the objective of generating objective feedback with a European footprint on learning outcomes resulting from LanguageGames activities in diverse educational, cultural, and economic environments.
7. Conference publications targeting the academic community and industry and presenting in a information on project objectives, implementation activities, and outcomes
8. Contacts with policy makers, teachers, teacher trainers, learning designers, and other stakeholders with the objective of disseminating project results and promoting uptake of outcomes



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Takes current practices for language skill building a step further by exploiting emerging state-of-the-art serious games-enhanced learning frameworks adapted to the cognitive development level of young learners.



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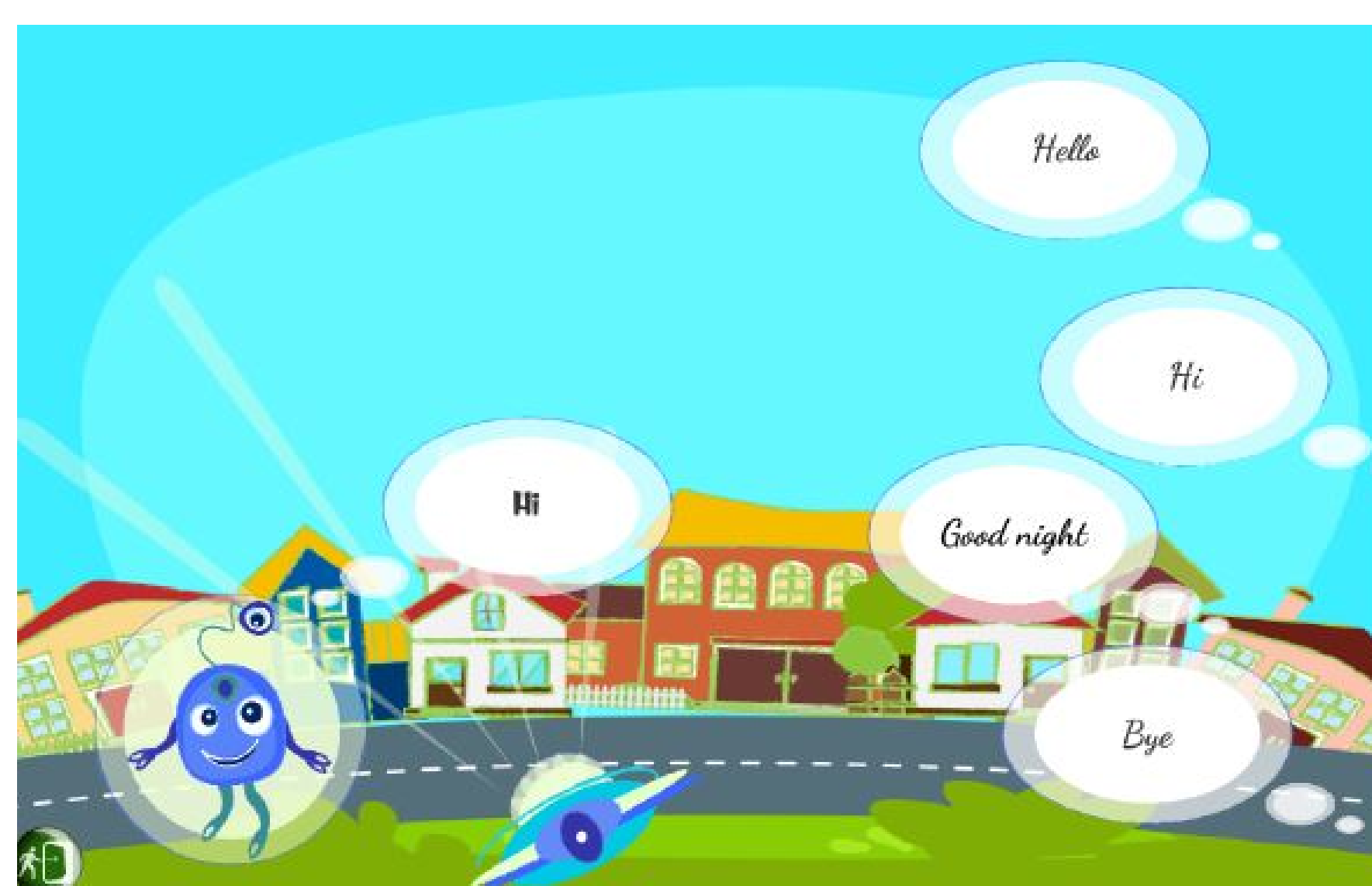
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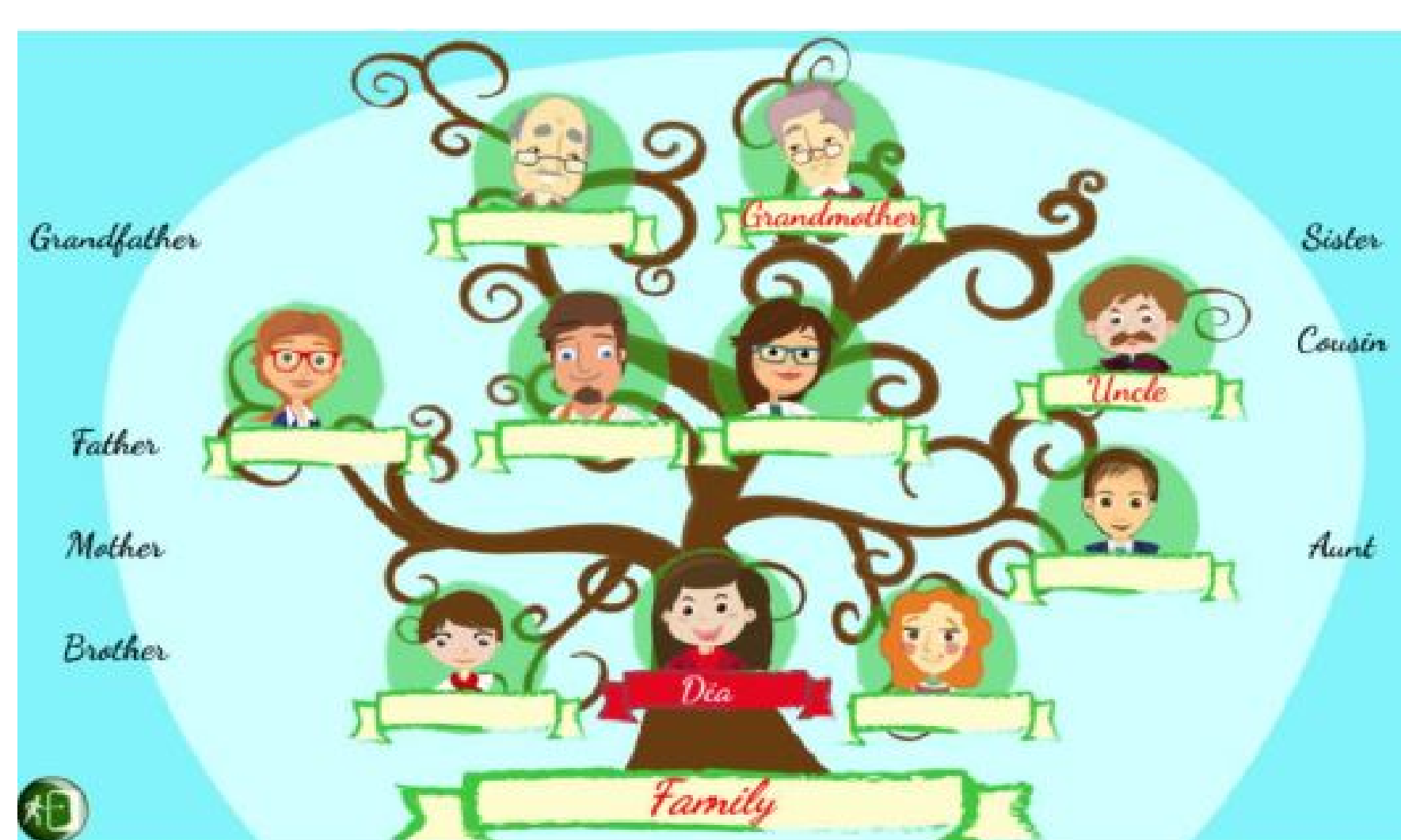
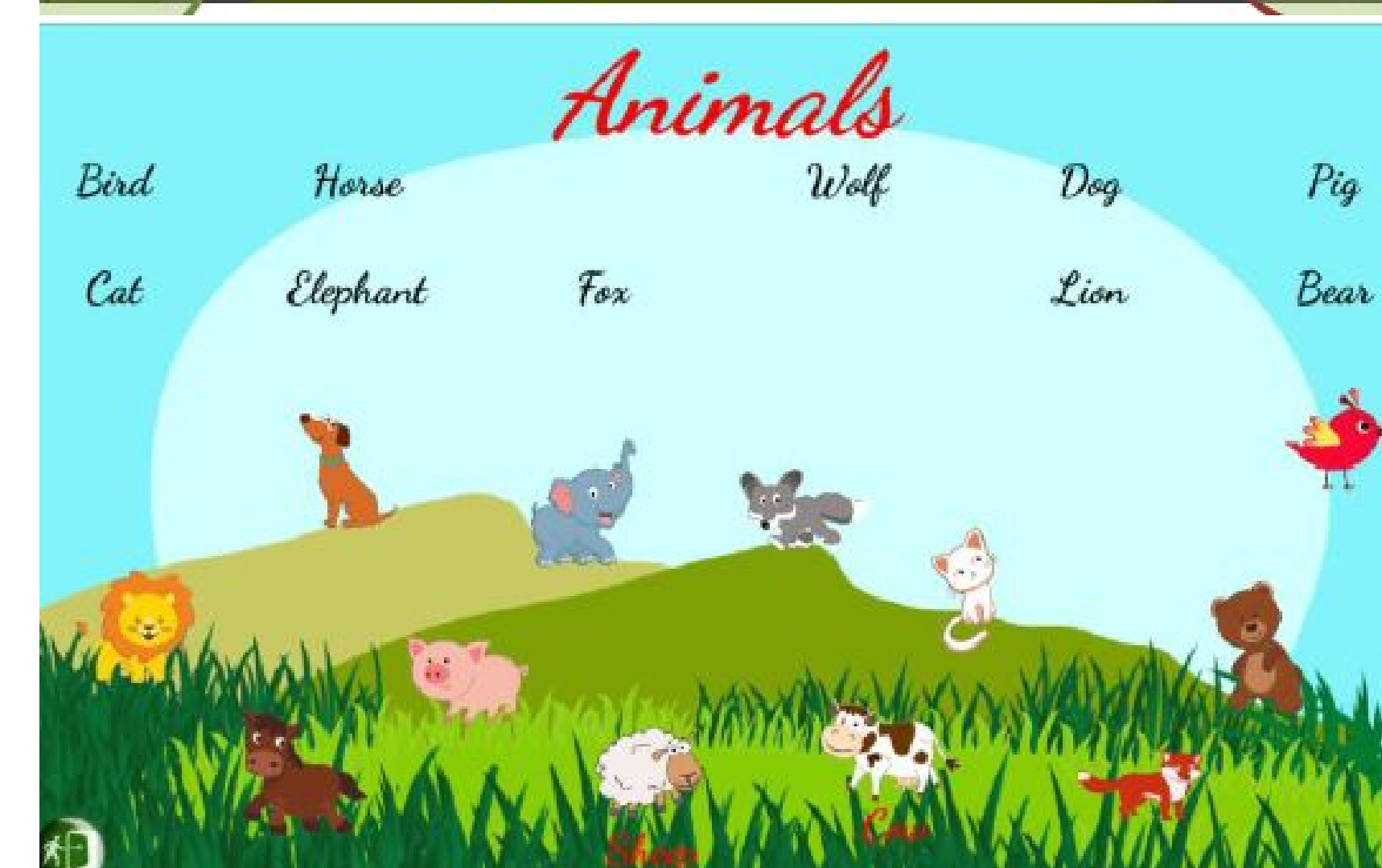
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