



Departamento de
Informática

SolidAR

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Objectives

In this augmented reality (AR) application, intricate 3D geometric shapes spring to life through the magic of mathematical formulas. Its primary aim is to simplify the comprehension of solid geometry concepts for elementary school students by offering them tangible, real-world visualizations. By providing students with interactive 3D models of geometric solids, this innovative tool empowers them to grasp complex mathematical principles with greater ease and enthusiasm.

By effectively eliminating the divide between abstract mathematical concepts and their tangible representations, this application not only fosters a deeper understanding of geometry but also bridges the gap between theory and practice. Students can now explore, manipulate, and gain insights into geometric shapes in a hands-on, immersive manner, making the learning experience more engaging and effective. Ultimately, this AR application revolutionizes the way students approach and engage with the world of mathematics, enhancing their grasp of fundamental geometric concepts.

Keywords

Programming, software engineering, augmented reality.

Workplan

The workplan encompasses complementary tasks as presented below:

- T1 - Technological background study (0.5 months);
- T2 - Requirements analysis (0.5 months);
- T3 - Design and development (1 month);
- T4 - Testing and evaluation (1 month);
- T5 - The writing of the report (1 month).

	Oct	Nov	Dec	Jan
T1	X			
T2	X			
T3		X		
T4			X	
T5				X

Required Skills

Hard skills: Programming skills, and software engineering

Soft skills: Creative, proactive, responsible, resilient, willing to learn, and able to work in a team.

Deliverables

In this project work the following deliverables are expected:

- A validated computational tool;
- A report describing the method and the validation results.