Squares and Spirals by Mblock Based on Scratch

Teacher Norma Lisa Neiman (IT)

SPIRALS BY Mblock Based on Scratch

LESSON PLAN: 9th grade Students - 13-14 years old

SUBJECT: embedding coding square properties to art.

LESSON IDEA Squares and Spiral

Developing ideas from past lesson plan spiral by construction

AIMS:

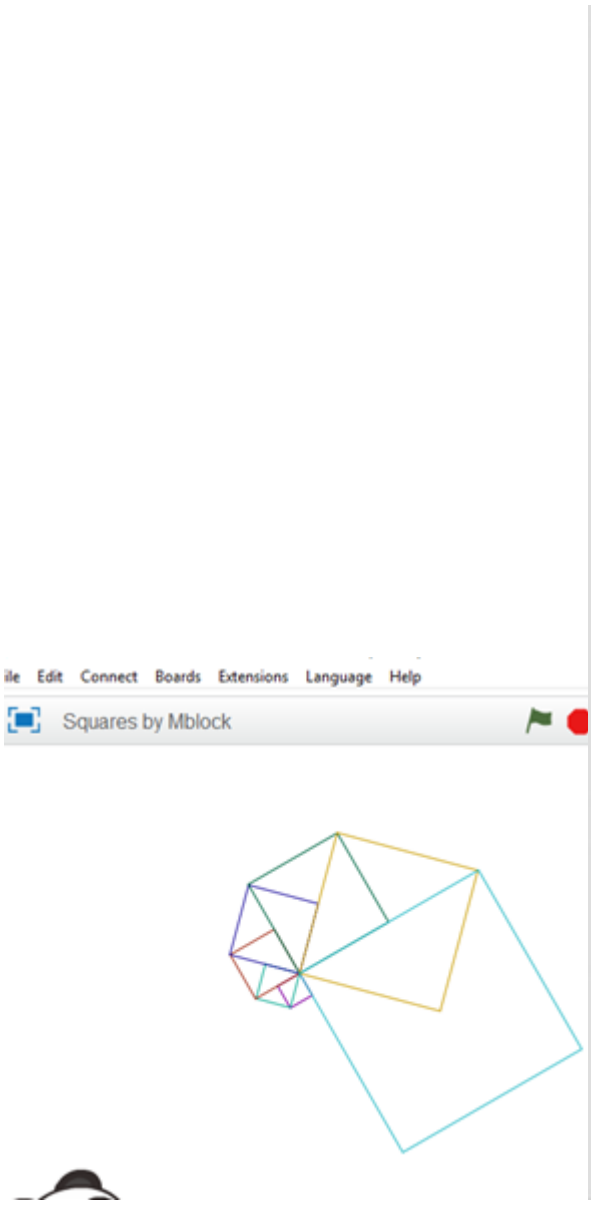
- Development Environment Mblock Based on Scratch cross curriculum with IT
- Coding by blocks
- Iteration
- Cartesian plane
- Reasoning on squares
- Reasoning on the Pythagorean Theorem
- Using properties of squares
- Investigating on the angles in rotation and motion
- Using properties of squares to create an art outcome

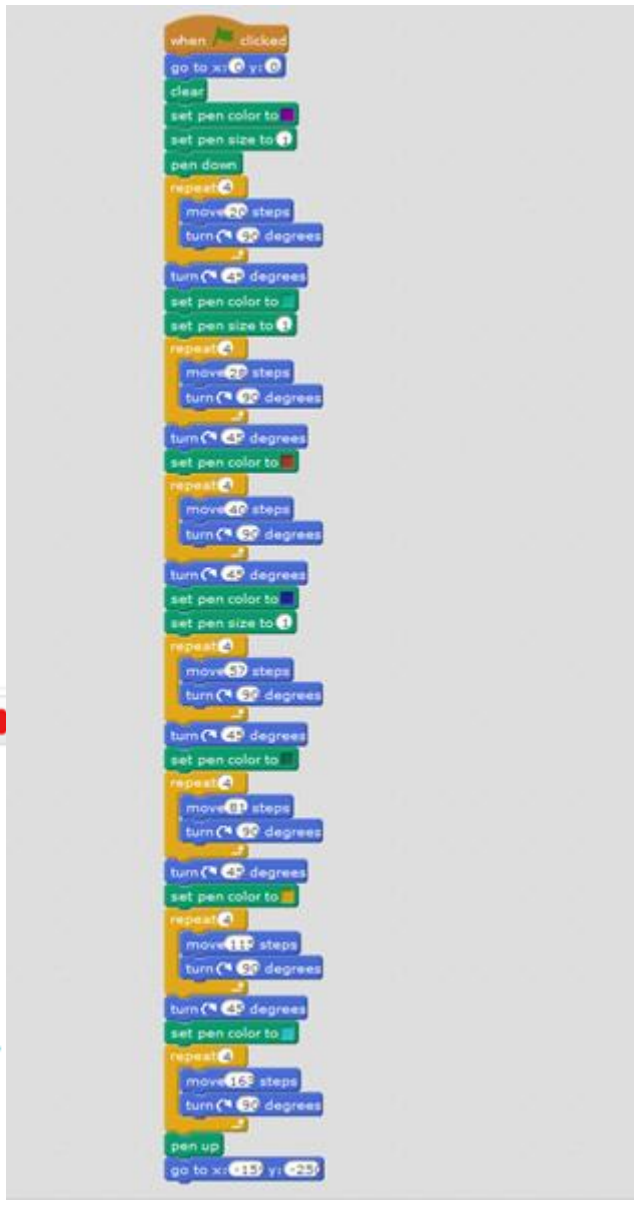
PROCESS:

1. We investigated the Development Environment Mblock based on Scratch
2. We programmed coding by blocks and using scripts from Event, Motion, Pen and Control after reasoning on the cartesian plot, concept af angles and motion, segments and motion, properties of squares, relation between side and diagonal
3. We investigated on the iteration repeat
4. Coding by block and programming an avatar that moves and designs the squares: the side of the following square is the diagonal of the previous one
5. The students uploaded their work on easyclass at the end of their assignment

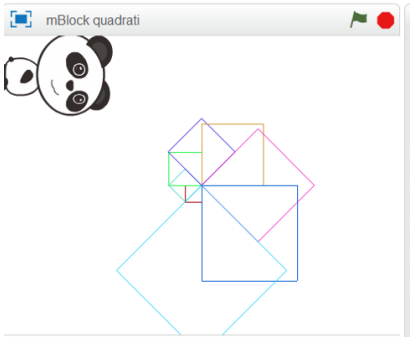
OUTCOMES

Alessandro Vacaru

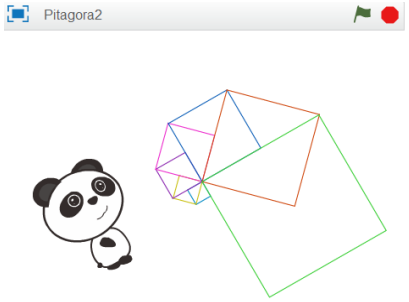




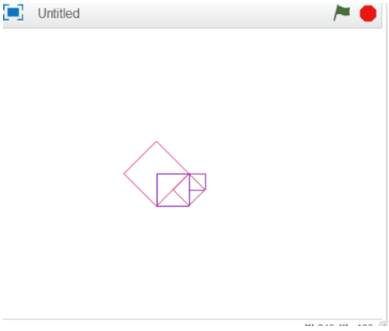
Daniele De Rossi



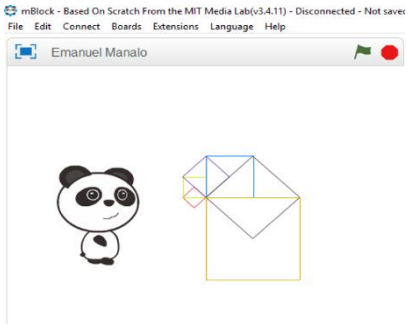
David Lu



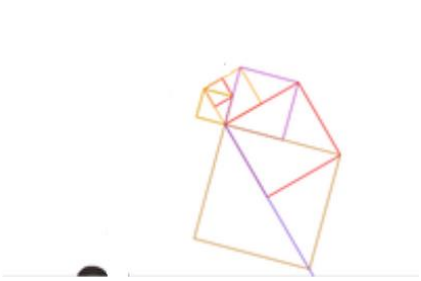
Deveesh Rampersad



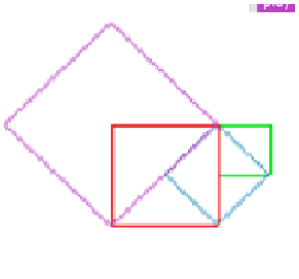
Emanuele Manalo



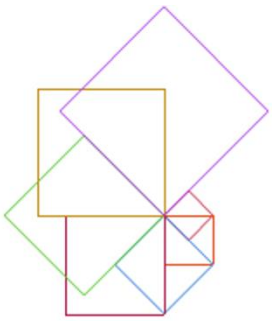
Filippo Colizza



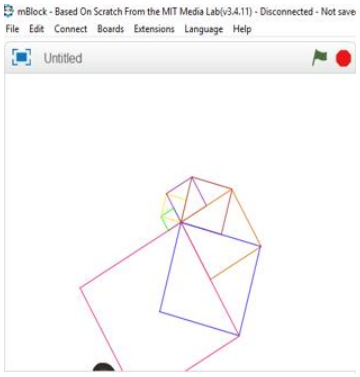
Francesco Minutillo



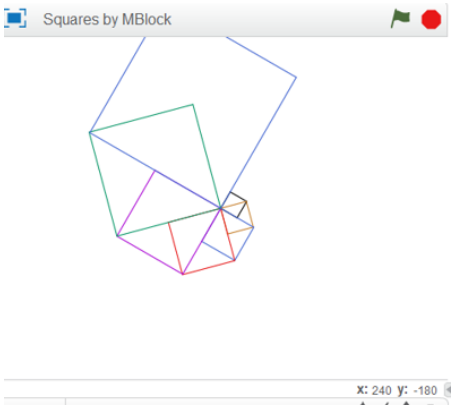
Francesco Torchio



Franz Calachan

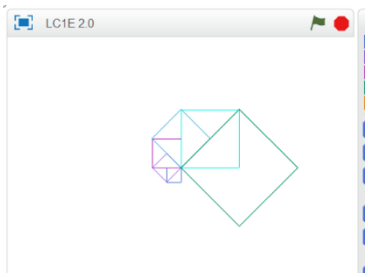


Giancarlo Alda

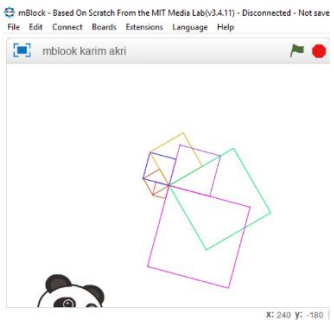


Gianluca Pucci

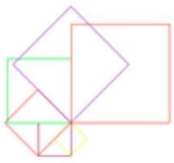
Karim Akri



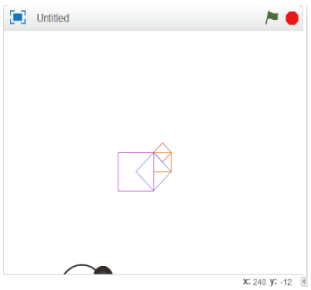
Leonardo Cavallo



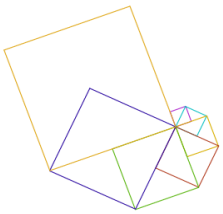
Leonardo Cosma



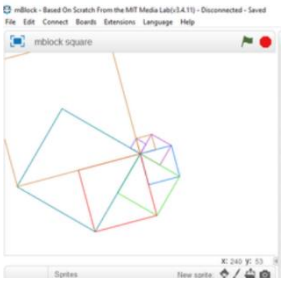
Luca Salvati



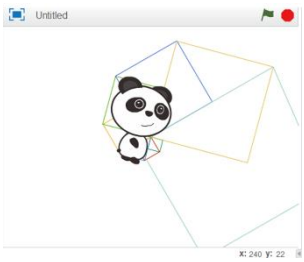
Mattia Pascale



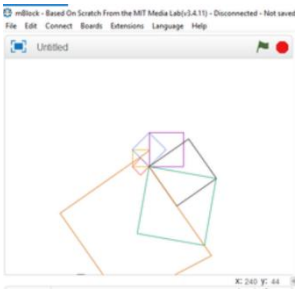
Simone Petrone



Valerio Castelforte



Valerio Grimaldi



Valerio Landolfi