

Team InnovActionLab



A collaborative educational coding game

Conceptual scope

The theme of Hack4Code 2015 is about:

[...] create tools to help trainers teach kids skills, such as:

- *understand what algorithms are and how they work;*
- *create and debug code;*
- *logical reasoning and problem solving; and,*
- *communication and collaboration.*

The project



A videogame for 2 players: help SuperMario finding his way out!

Program his actions as a story and watch him going on his own.

Character gets stuck in somewhere?

Check the execution as it happens and fix your story.

A game for 2 roles

Player 1: **the coder**

The coder can program the story, a sequence of actions.

He can't see the outcome, though.

A game for 2 roles

Player 2: **the debugger**

The debugger sees the program flow go by and can understand the outcome.

He can't modify the story, though.

Demo time



“understand what algorithms are and how they work”

When you play a game you solve a problem.

Instead of interactive gameplay, the planning perspective naturally brings the kid to a “coding challenge”.

“create and debug code”

Coding and debugging are two sides of the same coin.

The 2 distinct roles are the gamification of these 2 aspects.

“logical reasoning and problem solving”

Natural language stories are easier to understand.

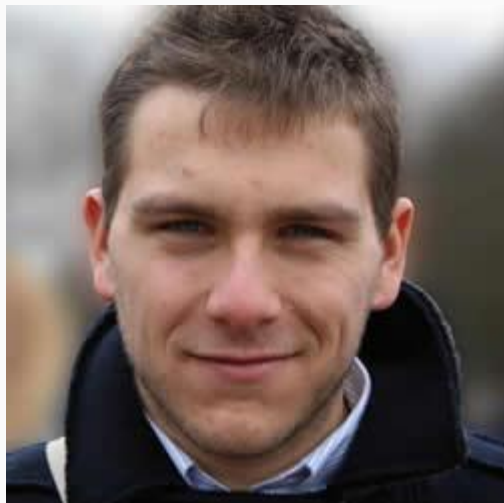
Buttons take away the syntax nuisance, letting the kid focus on what matters: **logical reasoning**.

“communication and collaboration”

The cooperative nature of the game pushes the kids to interact.

No one wins alone.

Team



Stefano Salvucci
Game view port



Manuel Gajo
Backend networking



Alberto Massidda
Scripting engine

Thanks

