Using python to teach programming to children

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Global programming movement

- Global emphasis on getting more children, especially girls, into STEM fields

- Attempts to promote computer science

- Technovation challenge, Girls make games, Girls Who Code, Kids 4 Coding, theCoderSchool, FunTech

Current approach

- Block based programming

- Drag and drop

- Visually appealing

- Example Stencyl, MIT AppInventor, LEGO EV3 Mindstorms

Drawbacks

- Limited functions and capabilities

- Does not harbor logical thinking

- Learning to use software

- Algorithmic thinking?

- Steep learning curve

My experience with block based languages

- Girls make games

- Project Ikhtiyar

Why Python?

- Reads just like English

- Easy to translate flowcharts and algorithms into code

- Powerful

- Plenty of libraries and modules

My experience of using python to teach children

▶ Teaching Python to students in grades 8 – 11 at Convent and Jesus of Mary

▶ The classes started last week, hence, this section will be updated closer to the conference