CodeMyThing is a 2D drawing program that auto-generates Processing code such that the user can visualize their creation in terms of function calls. We built CodeMyThing for the final project in our User Interfaces course offered during Spring 2014 at Mount Holyoke College.

Our motivation was to minimize the amount of time and effort required to code splash screen designs for games.

The functionalities include interactively drawing basic geometric primitives—lines, rectangles, ovals and triangles—with varied outline and fill styles and manipulating shape size, orientation and drawing order.

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As the project developed, we realized that our application can also be an educational tool for introducing people to coding.

The next steps would include

- to allow group selections for composing complex figures, save them in a method and associate its drawing to a method call and
- to make the code area editable such that changes are reflected in the image in real time.

Extending this drawing application to incorporate key-frame capabilities would help us to investigate the auto-generation of Processing animation code.

Another approach for CodeMyThing could be to supplement MIT’s Scratch, as Scratch links blocks of code with animated figures and CodeMyThing links Processing statements with simple drawing.

Video: http://cs.colgate.edu/~efourquet/nyc2015/draw/

Contact:
Humaira Orchee orche22h@mtholyoke.edu
Vedika Birla birla22v@mtholyoke.edu