

Project Goal

What problem are we trying solve?

Software that allows individuals to visualize the step-by-step process of computer programming has greatly assisted aspiring programmers and experienced professionals.

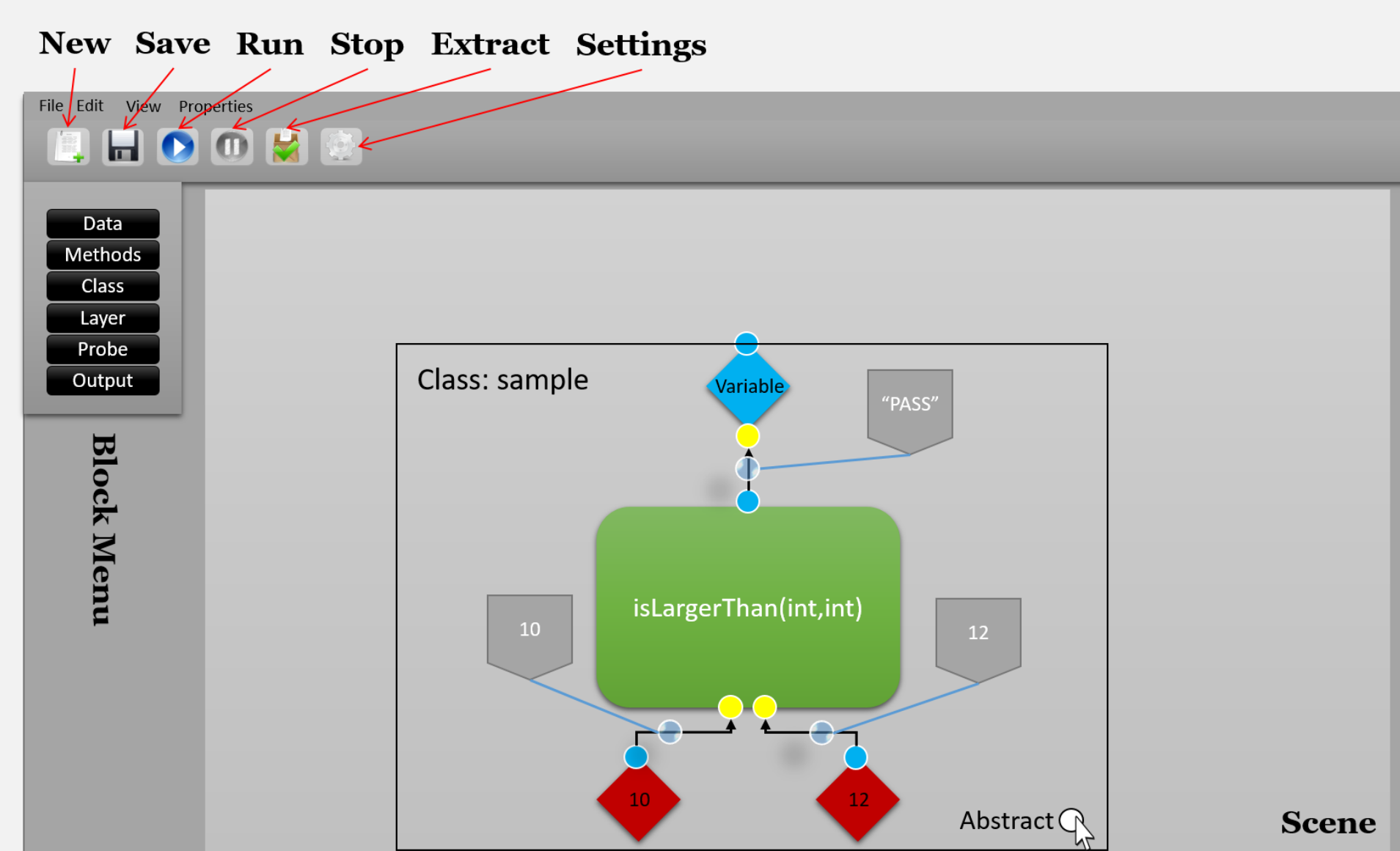
Tools that aid individuals in programming software exist for both educational and commercial purposes, but there is a lack of visualization software targeted specifically at the subject of machine learning.

TensorFlow is a machine learning API (Application Program Interface) developed by Google in order to provide an optimized machine learning toolset for developers.

Despite TensorFlow having useful applications and a rich manual it does not have an eloquent way to interact with visualization of the software for its users.

How are we trying to solve the issue?

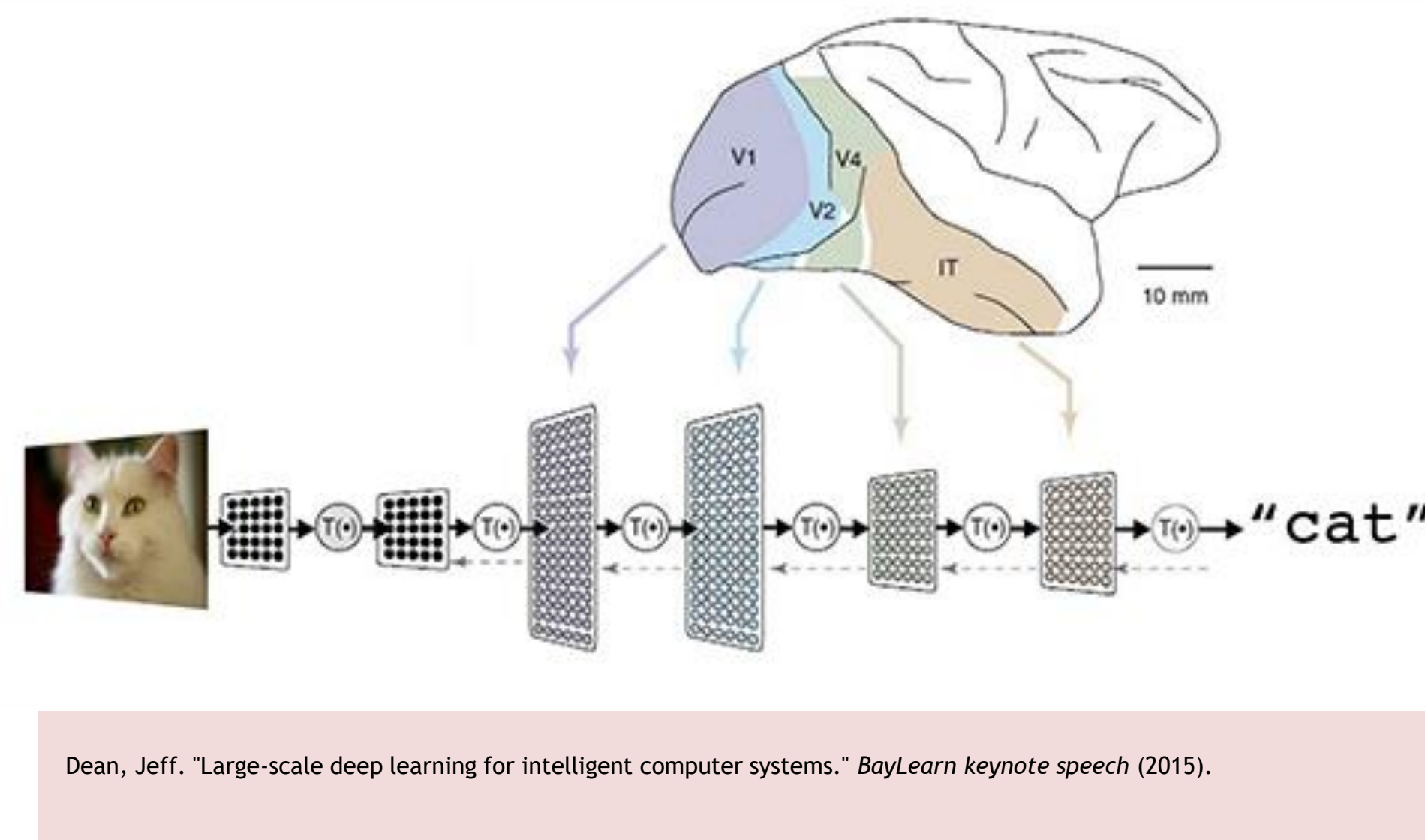
We are trying to implement a new way of programming. We are trying to abstract away the text based programming environment to shift the attention of the programmer from syntax to development of functionality, making it easier for them to focus on studying their design.



TENSORFLOW WYSIWYG GRAPHICAL USER-INTERFACE CS CAPSTONE PROJECT



Make Deep Learning Easier



What are we making?

We are making a Graphical user interface-based programming environment. The task of this tool is to convert a program design generated by the user using our interface into Python code.

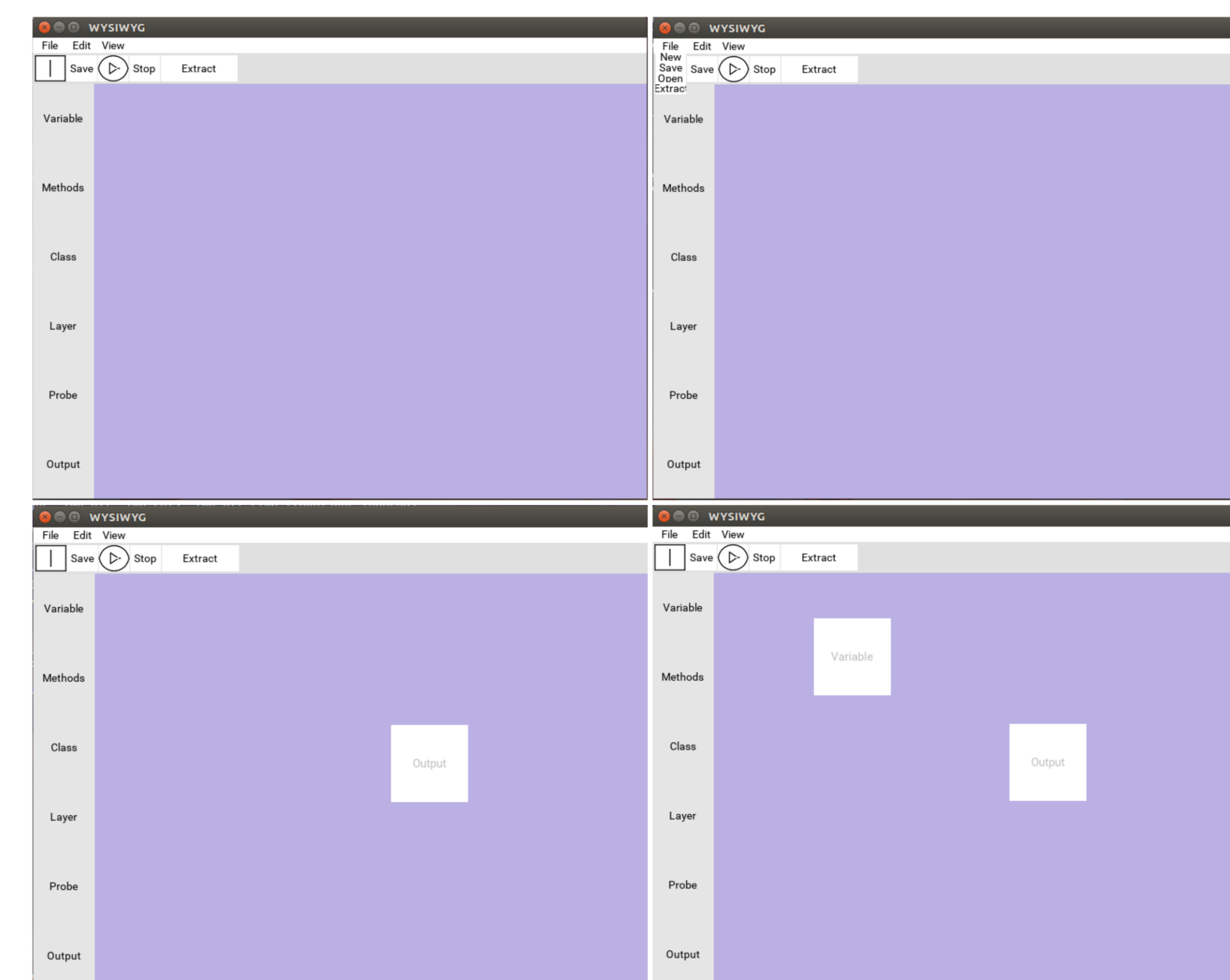
Our proposed solution is to use the Python scripting language to develop a software that grants developers the ability to visualize the control flow of their program using a flowchart style design.

The idea behind this comes from the analogy of a factory pipeline where each and every module (or in this case function) performs a task on the output of the previous module or function in order to generate the desired product. At each module the data is scrutinized and filtered to the next until the final module completes the pipeline and outputs the desired or expected value.

What is Deep Learning?

Deep Learning is a field of study related to Artificial Intelligence which allows us to estimate the probability of occurrence of a certain pattern given the data of an event.

In other words, Deep Learning allows computers to study given information to make a calculated estimate or educated guess that allows them to perform tasks like decision making from large sets of data like images or other gathered sensory information.



Meet the team!

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