First Iteration Demo

Team name: Wall-E

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Part 1: Overview

We completed our demo at 11:30 a.m. on November 2nd, 2018. No significant challenges arose during the demo.

Part 2: User stories

We demonstrated the following user stories and conditions of satisfaction:

1. As an instructor, I want to generate deep learning code in real time so that I can explain the code to my students. My conditions of satisfaction are: 1) code appears in real time when I drag a component onto the canvas; 2) related code is removed when I delete a component.

   Change: Instead of generating code in real time, we designed a "compile" button and code is generated whenever the user clicks on this button. We made this change because we think that the user sometimes only drags components to the graph for future use, so there is no need to generate code (and run the compilation script) whenever a component is added.

2. As a student starting to learn deep learning, I want to familiarize myself with the process of building a deep neural network so that I can gain more understanding of the subject. My conditions of satisfaction are: 2) each step of the network building process is visualized in real time.

3. As a deep learning engineer, I am working in a team of a variety of backgrounds. I want to explain to my colleagues about the mechanism of neural networks so that they can quickly gain a direct impression of the tech parts. My conditions of satisfaction are: 1) different components of the neural network are represented in a straightforward way through different shapes and/or color.

Part 3: CI Mechanisms

Pre-commit: We used mocha-phantomjs to test our JavaScript code for compiling the graph and generating Keras code. We included this script as a git hook so it will automatically be run before each git commit. The pre-commit configuration can be found at https://github.com/CathyMouse96/lrn-deep/tree/master/bin/git-hooks.

Post-commit: We used Travis CI as our CI Server and pylint to check our code for potential bugs. The post-commit configuration can be found at https://github.com/CathyMouse96/lrn-deep/blob/master/.travis.yml.

We will switch our pre-commit and post-commit procedures because it makes more sense to check for "code smells" before committing and run unit tests after committing.

Part 4: Link to Repo

https://github.com/CathyMouse96/lrn-deep