## CP 8318, Assignment 3

# Kody Manastyrski 01/12/2021

### 1 Question 1

#### 1.1

#### 1.2

The plot of the regularized model shows a smoother descent, with significantly less amiplitude to the spikes in loss/accuracy. The regularized data, however, does not give a greater accuracy for the results, instead decresaing the accuracy. I am unsure of why this is.

#### 1.3

The accuracy remained the same between training and testing. It is still unclear as to why the regularization decreased the accuracy. Unfortunately I have run out of time, and since this assignment has been my life (to the exclusion of other work which will cost me a class if I'm not lucky) since it was released I will be submitting what I have and washing my hands of it. My the spirit of Mariah Carey's awful seasonal song embrace this assingment with all the malice it brings to retail workers.

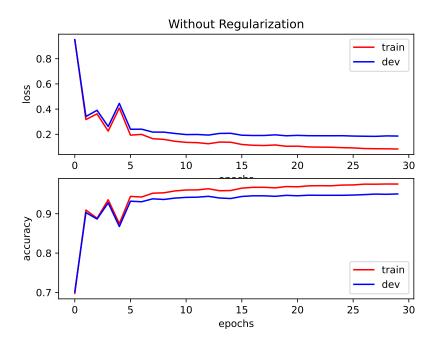


Figure 1: 'Baseline accuracy and loss vs epoch count'

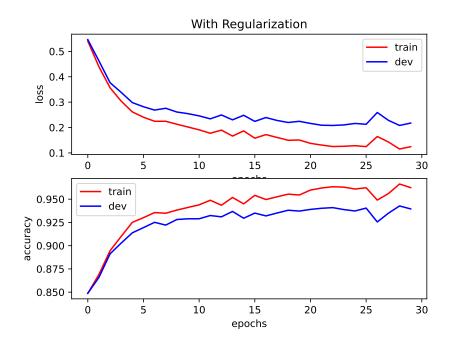


Figure 2: 'Regularized accuracy and loss vs epoch count'