CHORDSCORE

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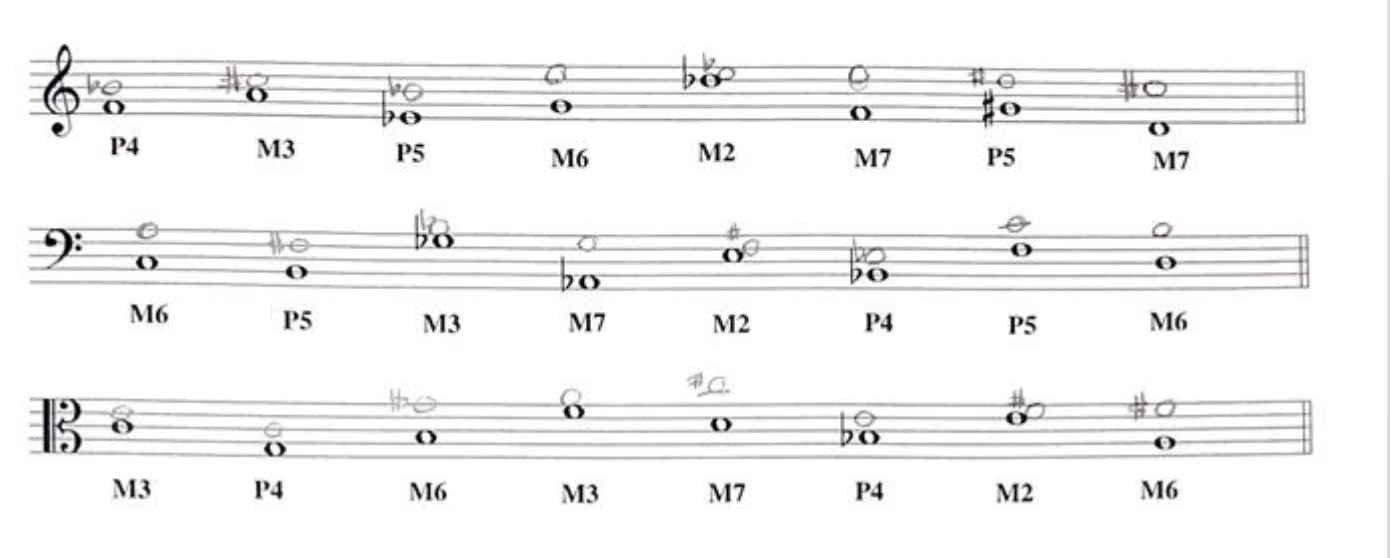
INTRODUCTION

SCOPE

- How it works…
  - Student
  - Professor
  - Optical Music Recognition (OMR)



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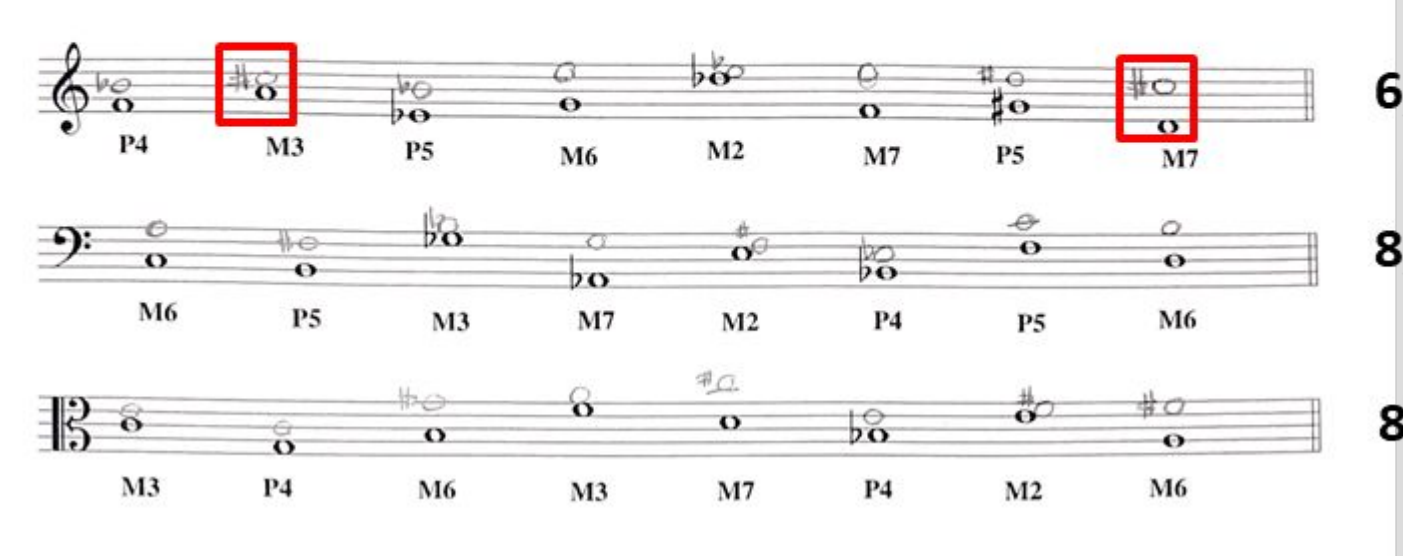

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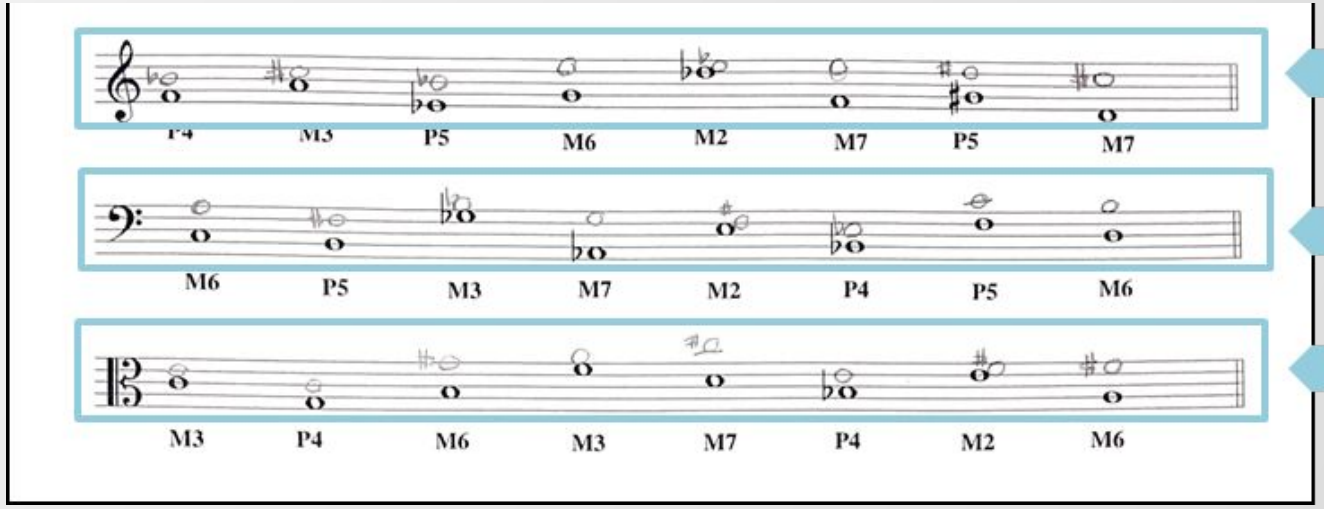

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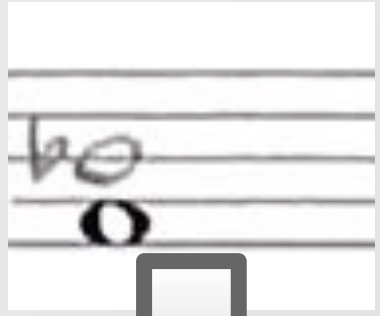

```
note
    pitch    = 4
    symbols  = "flat"
    duration = 0.4
```

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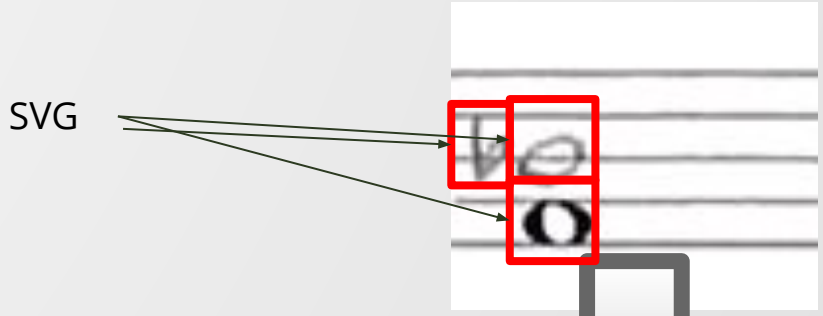
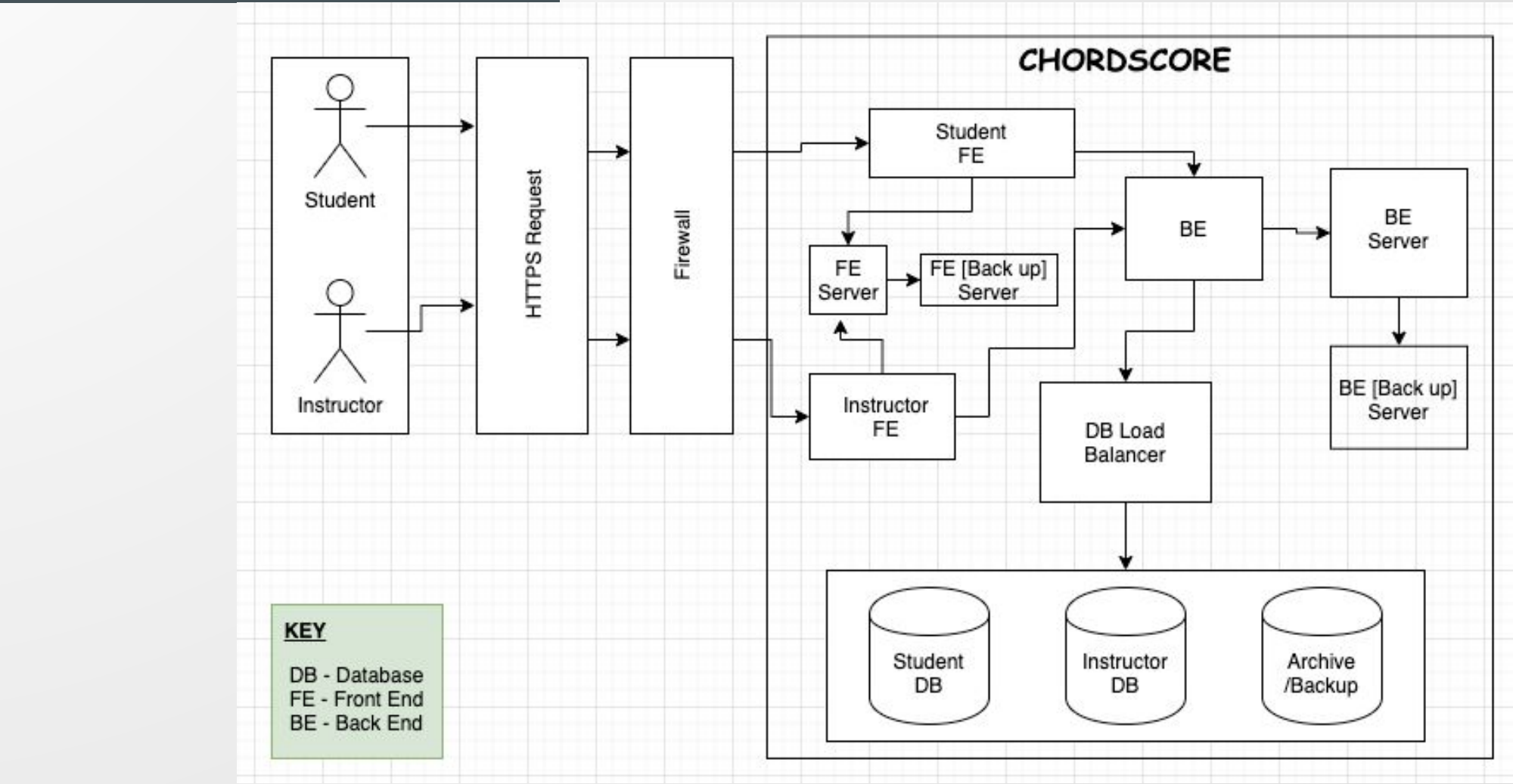


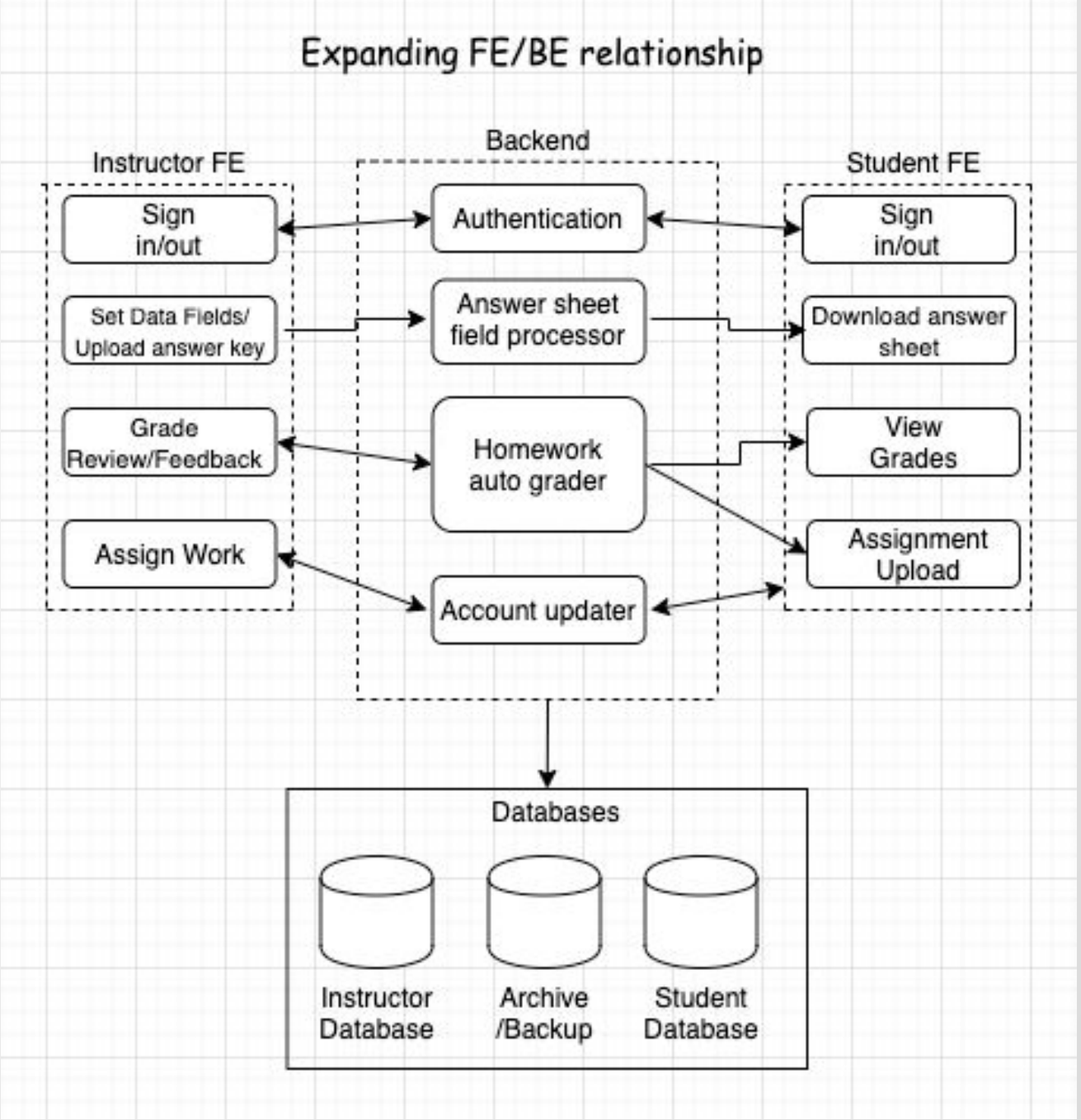
For training CNN…
- INPUT = JPEG images
- OUTPUT = SVG boxes
  & MusicXML attributes

```
note
    pitch    = 4
    symbols  = "flat"
    duration = 0.4
```

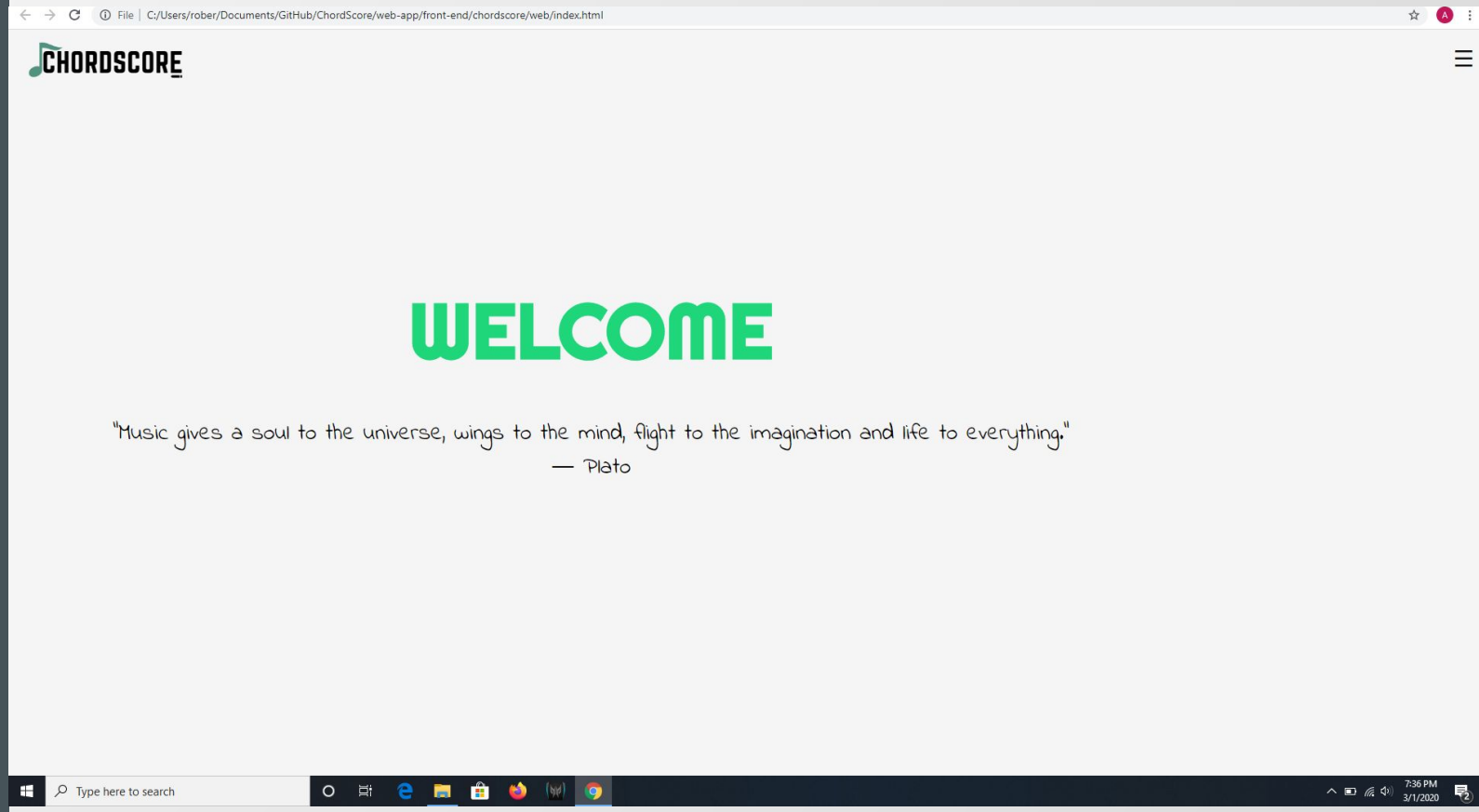
WEB APP ARCHITECTURE



CONTINUATION



INTERFACE DESIGN



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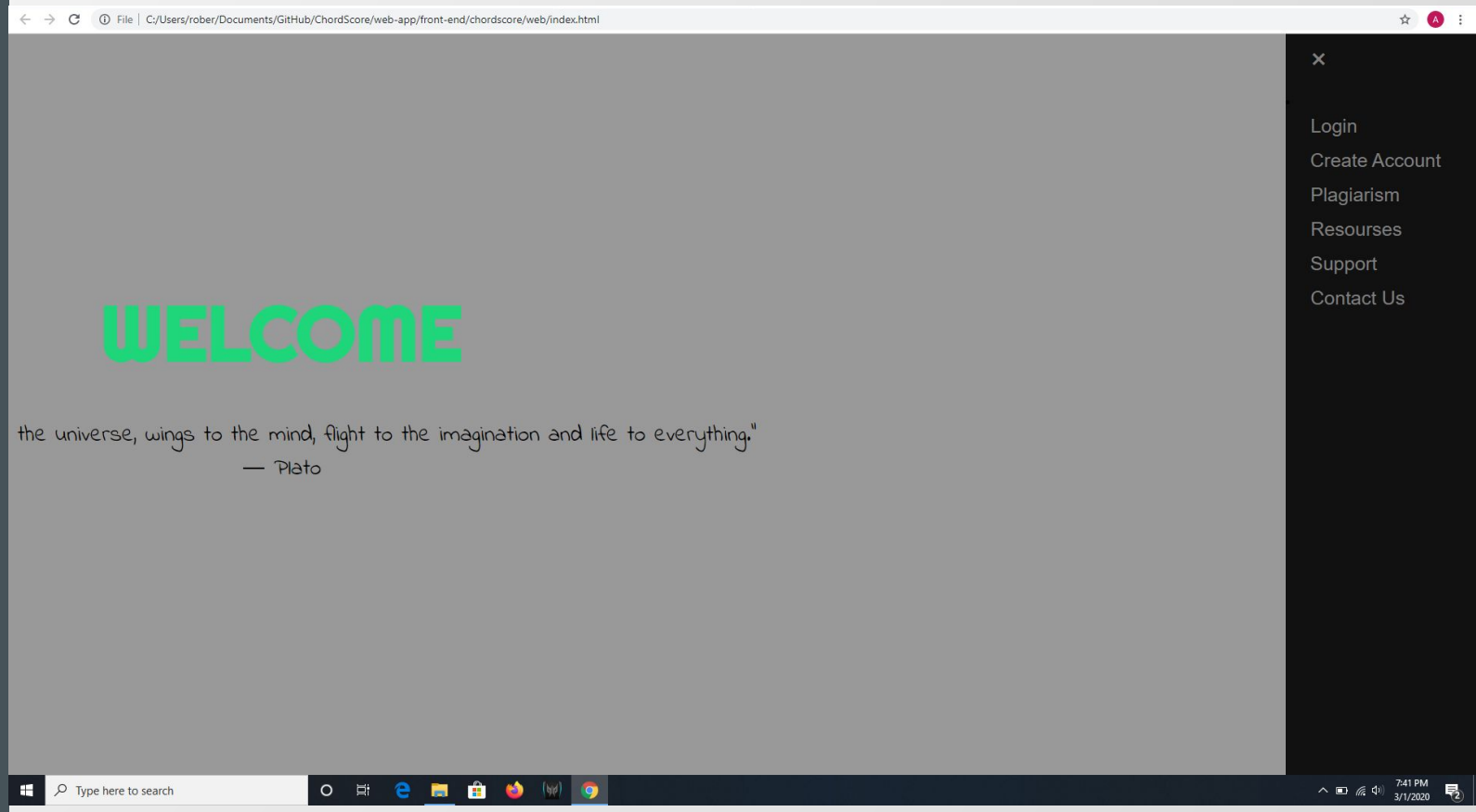

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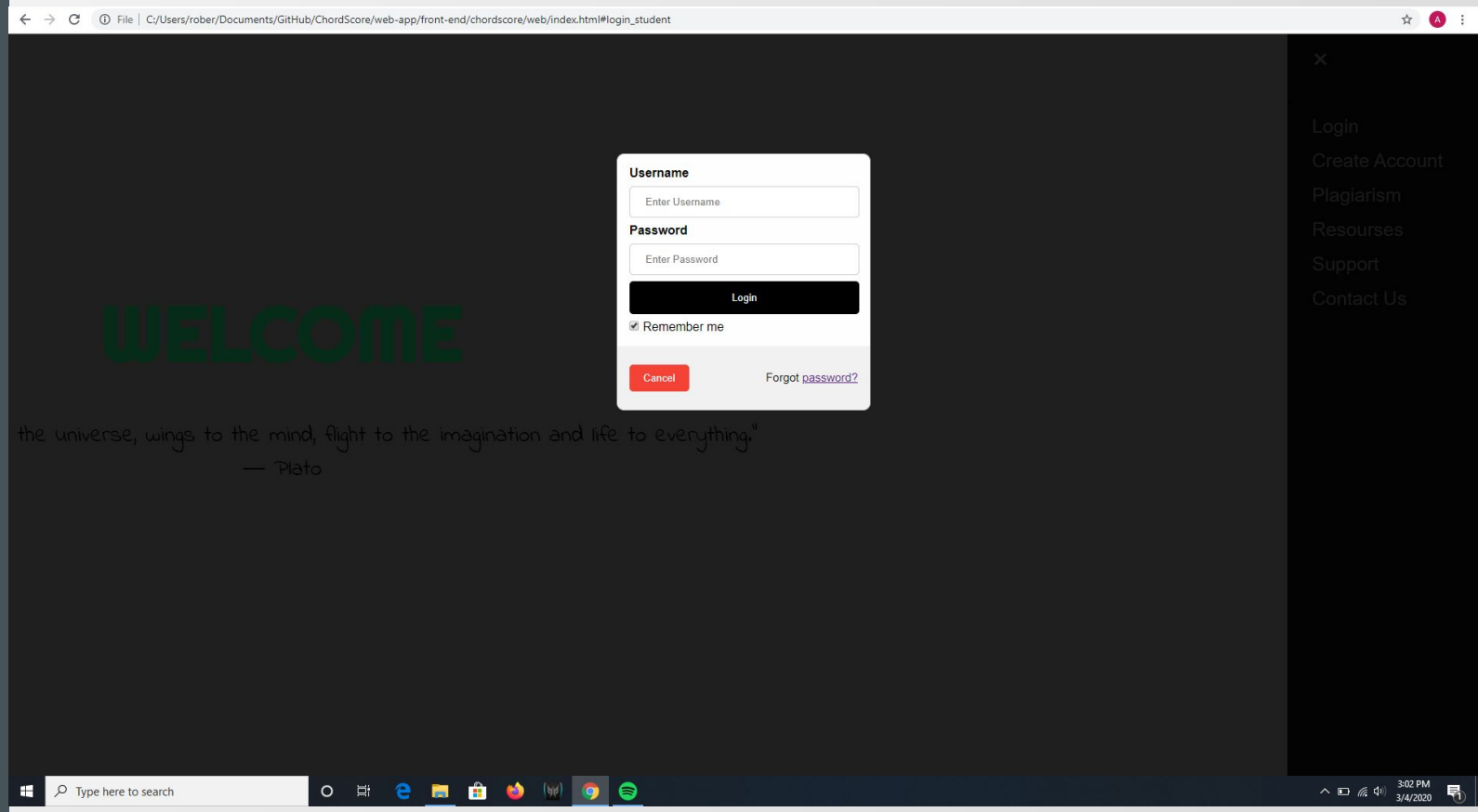

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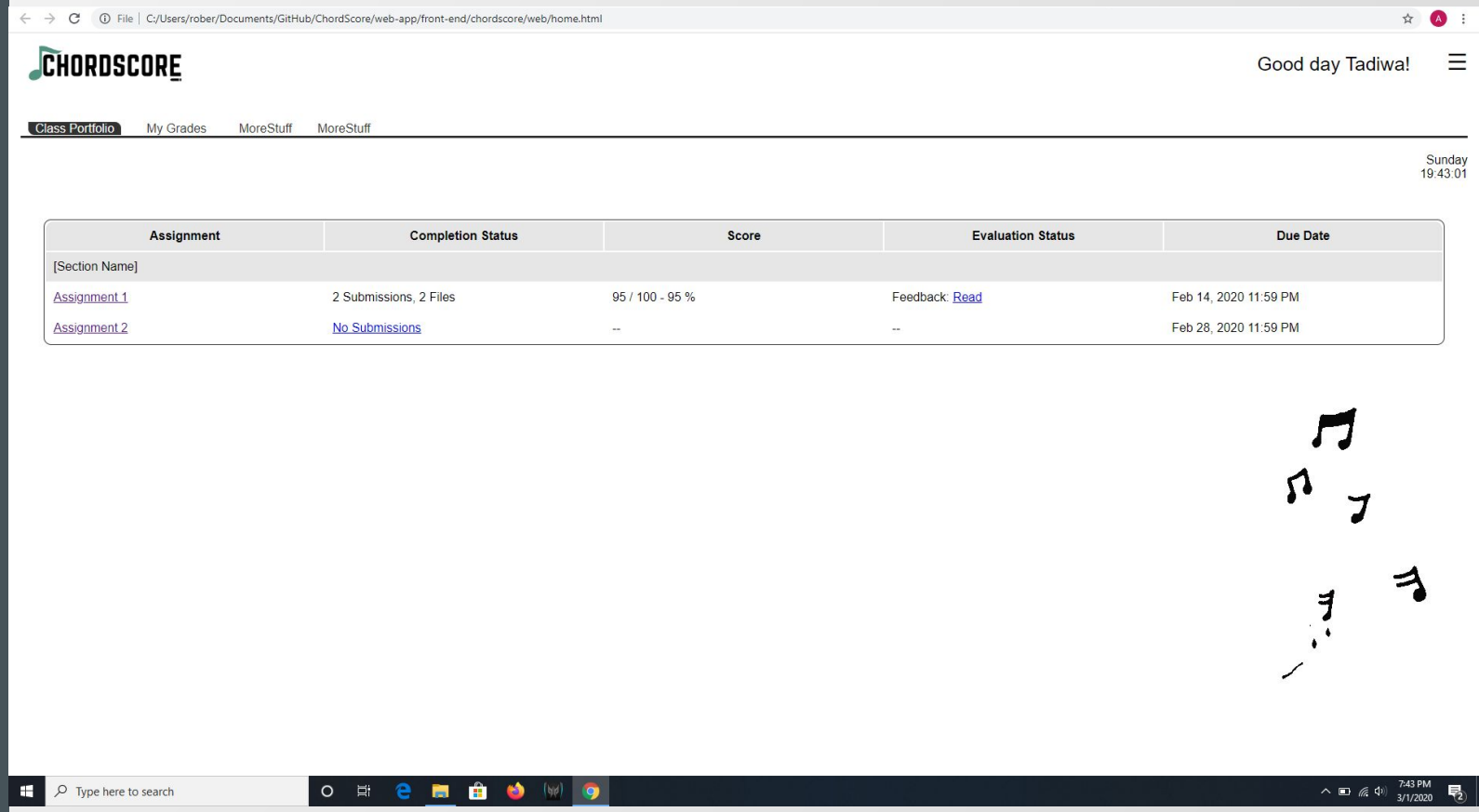

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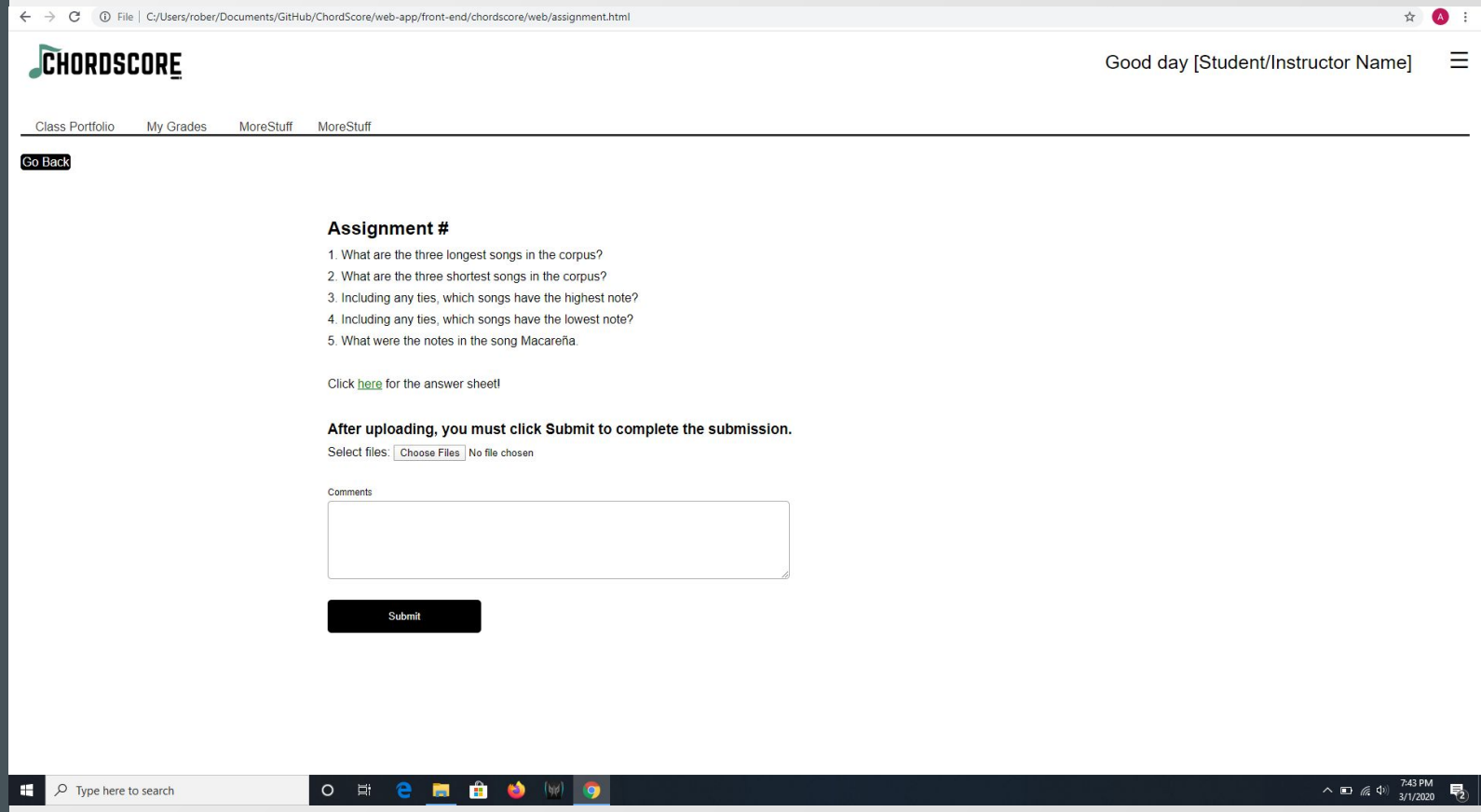

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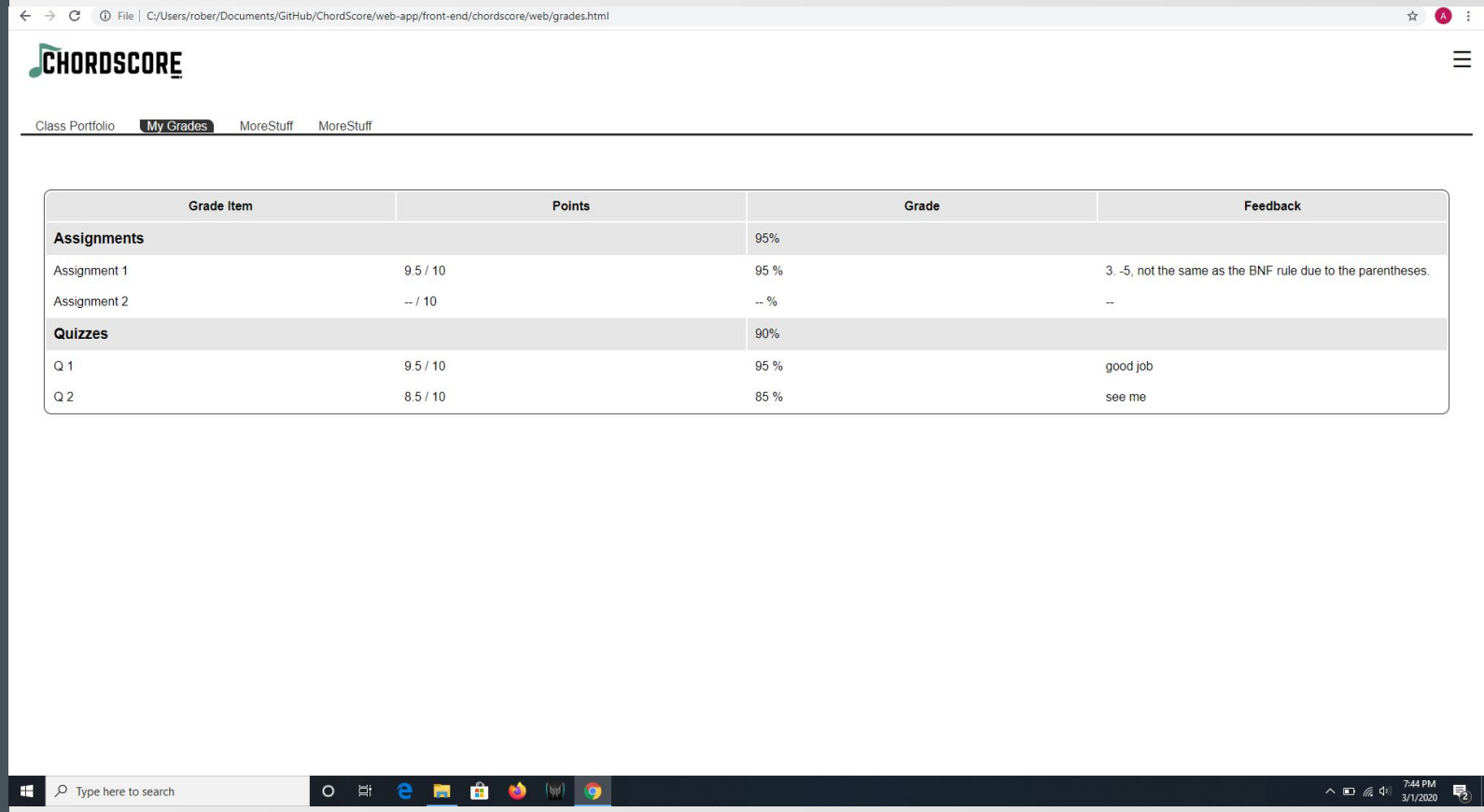

DATA SAMPLES

- Modeling music notation with a Neural Network requires data samples similar to homework expected from students
- Data collection sheets
  - Partially handwritten notation
  - Printed notation only

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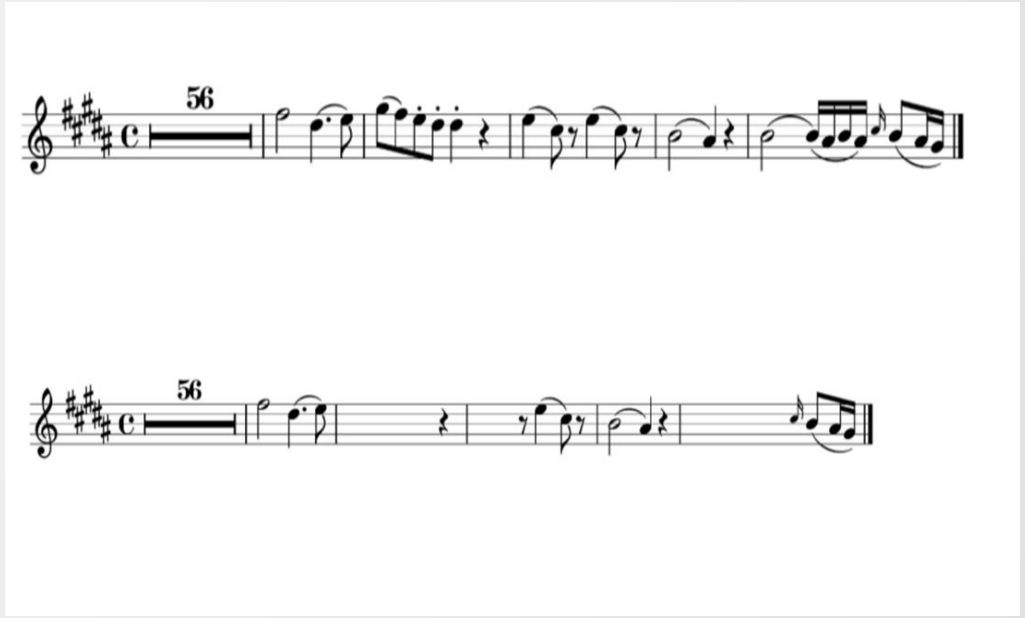

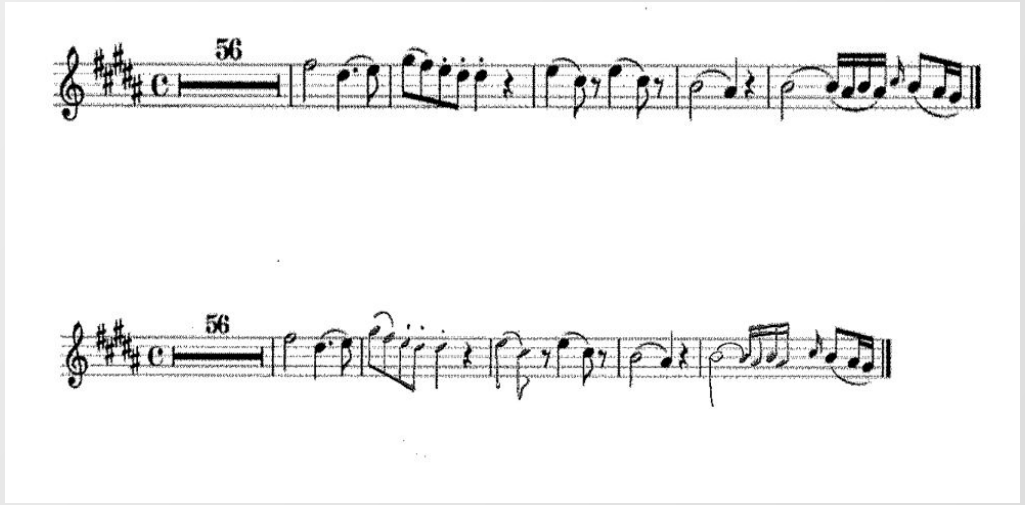

WRAP-UP

Next Steps

- Build, train, and evaluate supervised CNN model with...
  - INPUT as JPEG images of the music notation (handwritten and printed)
  - OUTPUT as...
    - **bounded boxes** from music SVG files for **object detection**
    - **pitch**, **note symbol**, and **duration** attributes from MusicXML files for **note attribute prediction**