Team name

Agile

Team roles

• Pei Chen: Developer

• Jin Huang: Developer

• Yuanyuan Lei: Product Owner

Dongqing Yang: Developer

• Han Zhang: Developer

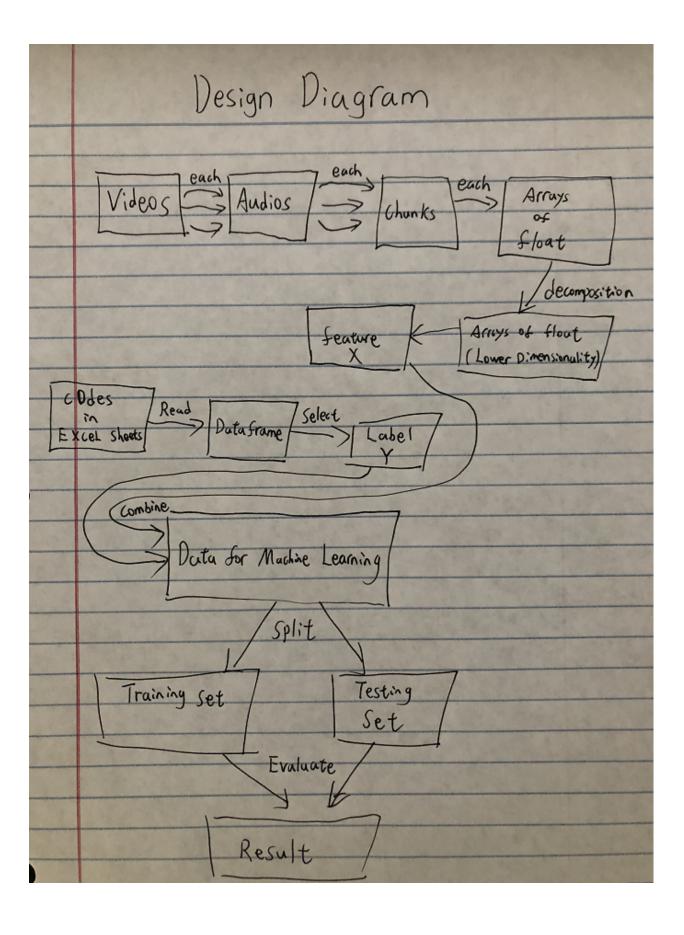
• Rongruo Zhou: Scrum Master

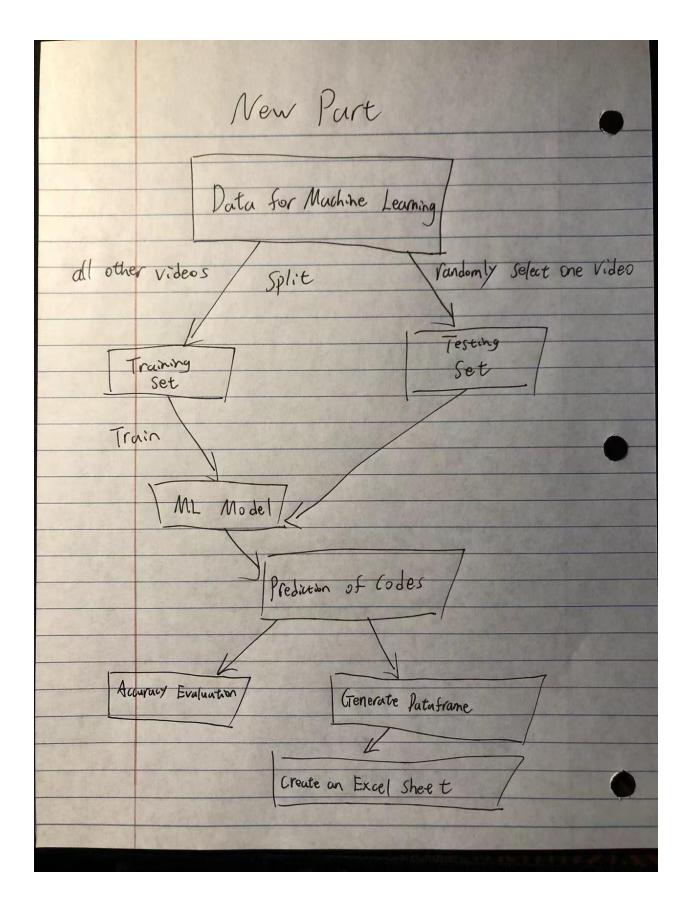
Customer meeting date/time/place

• First Meeting: 10/23/2021, Saturday, 10:00 am, Zoom

- Weekly regular meeting: every Wednesday (Start on Oct.27), 11 am 12 pm,
 Zoom with Cindy, Guerrero, and her group members.
- Weekly regular meeting: every Wednesday (Start on Nov.3), 5 pm 6 pm, Zoom
 with Dr. Irby for updates and clarifications
- Second Meeting: 10/21/2021, Wednesday, 11:00 am, Zoom
- Third Meeting: 11/10/2021, Wednesday, 11:00 am, Zoom
- Fourth Meeting: 11/17/2021, Wednesday, 11:00 am, Zoom
- Fifth Meeting: 11/24/2021, Wednesday,11:00 am, Zoom

Design Diagram





Customer Feedback

The customer proposed that our work could be written as a research paper. We
discussed the content and structure of the article, also the related journals
together. Finally reached an agreement, hoping to put our cooperation into a
publication.

User Stories Finished

- Modify the method to split the training, validation and testing data. Since more data was received. Students who are responsible for the data preprocess combined the dataset. This time, they used one video as the validation data and one video as the testing data and all other videos as training data. According to the model requirement, they processed the data from video to audio, then to uniform format as a 20s chunk.
- For the feature extraction, the two students made some research about MFCC and tried it on our dataset. Set possible hypo-parameters and see the feature matrix.
- For the new model LSTM. Studied the possibility on the dataset. Wrote the code and tuned the hypo-parameter to generate the predictions.
- Overall, the performance improved a lot from the accuracy around 40% to about 80%. The customers were very pleased about our result, they recognized our work and expressed their appreciation to us. At the same time we discussed our next work, which is the publication.

GitHub

https://github.com/oniremilia/ILOI

Slack

https://join.slack.com/t/csce606iloi/shared_invite/zt-xglog0ed-F8eRaqVaKMo0Kh
 eFO8DD5A

Custom Grading Request

- Since the ILOI project is a pure machine learning, or natural language processing project. We do not have any requirements from the customers to do the web stuff. The customers are looking for locally running machine learning modules that can generate result forms as desired.
- Hence, we can not deploy to Heroku. But the code can run as described before locally, and each of the user stories can be tested using data similar to the data we're using. Also, tests like RSpec or Cucumber are not doable.
- The current code completes most of our customer requirements already. We will
 discuss with our customers to see their requirements for the accuracy of
 predictions. And improving the accuracy should be the main and only remaining
 goal for us.