Second Sprint Backlog (Owner: Mingda Zhang)

Planning to finish in sprint 2:

Jian Gong & Mingda Zhang:

1. Deploy web application into cloud-based application server. (15+ hours)
2. Collect audio learning materials (5 hours)
3. Finish functionalities of testing and learning including audio learning materials (10 hours)
4. Get user audio input (5 hours) *PortAudio* and *PyAudio*
   http://www.portaudio.com/
   http://people.csail.mit.edu/hubert/pyaudio/
5. Display audio waveform (5 hours) using *numpy* and *audiolab* package
   http://www.numpy.org/
   http://cournape.github.io/audiolab/

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6. Add another web framework to realize real-time chat function (10 hours)
   https://django-websocket-redis.readthedocs.org/en/latest/introduction.html
7. Finish building a multi-user real-time chat room in discussion page (15+ hours)
8. Finish sending messages between two users (10 hours)
9. Add chat-room page corresponding to different discussion ways (3 hours)
10. Increase learner's virtual money when the learner finishes a level (2 hours)

Evaluation:

Most tasks we list in this sprint have been completed. Each member's task is also done on schedule. Homework 6 is a very good start to prepare deploying web application into cloud-based application server.

Unforeseen problems:

When getting Audio the web application need to communicate with hardware. Hence there might be problems related to platforms.

Websocket is a new field that we never learn or use before. It may take plenty of time to get familiar with websocket before we can start next steps, which may cause some delay of real-time chat function.

Third Sprint Backlog (Owner: Jian Gong)

Plan to complete:

1. Add video learning materials.
2. Serving audio recorded by student for teachers to grade.
3. More real-time features, probably the interactive video implementation.