CS 6343: CLOUD COMPUTING
Mid Term Project Milestones

Midterm demo dates
- On 3/3
  - Midterm demo date is set on 3/3, try your best to have your system ready for demo
- Fall back period: 3/10 - 3/17
  - In case you are not fully ready on 3/3, you can pick a day later to do the demo
- Note: 3/10 is the first exam

Midterm project goal
- Set up a preliminary, but complete flow for the overall project

Midterm requirements
- Installed Linux and VMM on all platforms
- Installed at least one TSDB in VMs
  - RiakTS and potentially KairosDB
- Explored the features and performance of the TSDB(s)
  - Query languages, data retention policies, etc.
  - Raw data read/write performance at different data rates
- Implemented a fault diagnosis system using bearing data and run one instance at a single platform,
  - Being able to read the data in its original formats, write them to the TSDB
  - Being able to retrieve the data from the TSDB
  - Being able to process the data through the processing workflow
    - DWT (discrete wavelet transformation), high/low passes, neural net training, neural net fault diagnosis
    - For midterm, it will be ok to skip DWT and filter (high/low passes) and directly feed your data to the neural network for training and fault diagnosis
  - Being able to generate diagnosis outcome
    - Whether it is normal, pinion gear fault, wheel gear fault, simultaneous synchronous pinion wheel gear fault, and asynchronous pinion wheel gear fault
  - Being able to perform both offline and online processing
- Explore the performance of the TSDBs in handling different data rates
  - Change the data rate and examine what is the saturation rate for the system
  - It is possible that the saturation rate would be due to the TSDB or the online processing

Midterm report submissions
- Please refer to the original project description for information