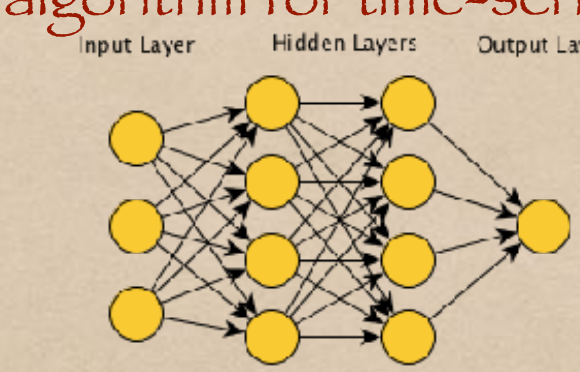
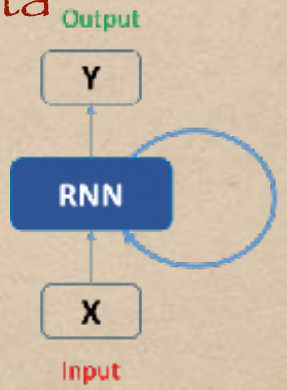
Budget Agent Status Update: 7/10

Objective:

An agent that

1) learns how daily limit(budget) to be set in order to optimize ads performance as well as ads pacing; — RNN LSTM learning algorithm for time-series data





2) satisfies that daily limit as a constraint by incorporating the trained solutions from the model that serves well as a continuous feeds to automate the whole budget allocating processes — customized algorithm to meet business needs

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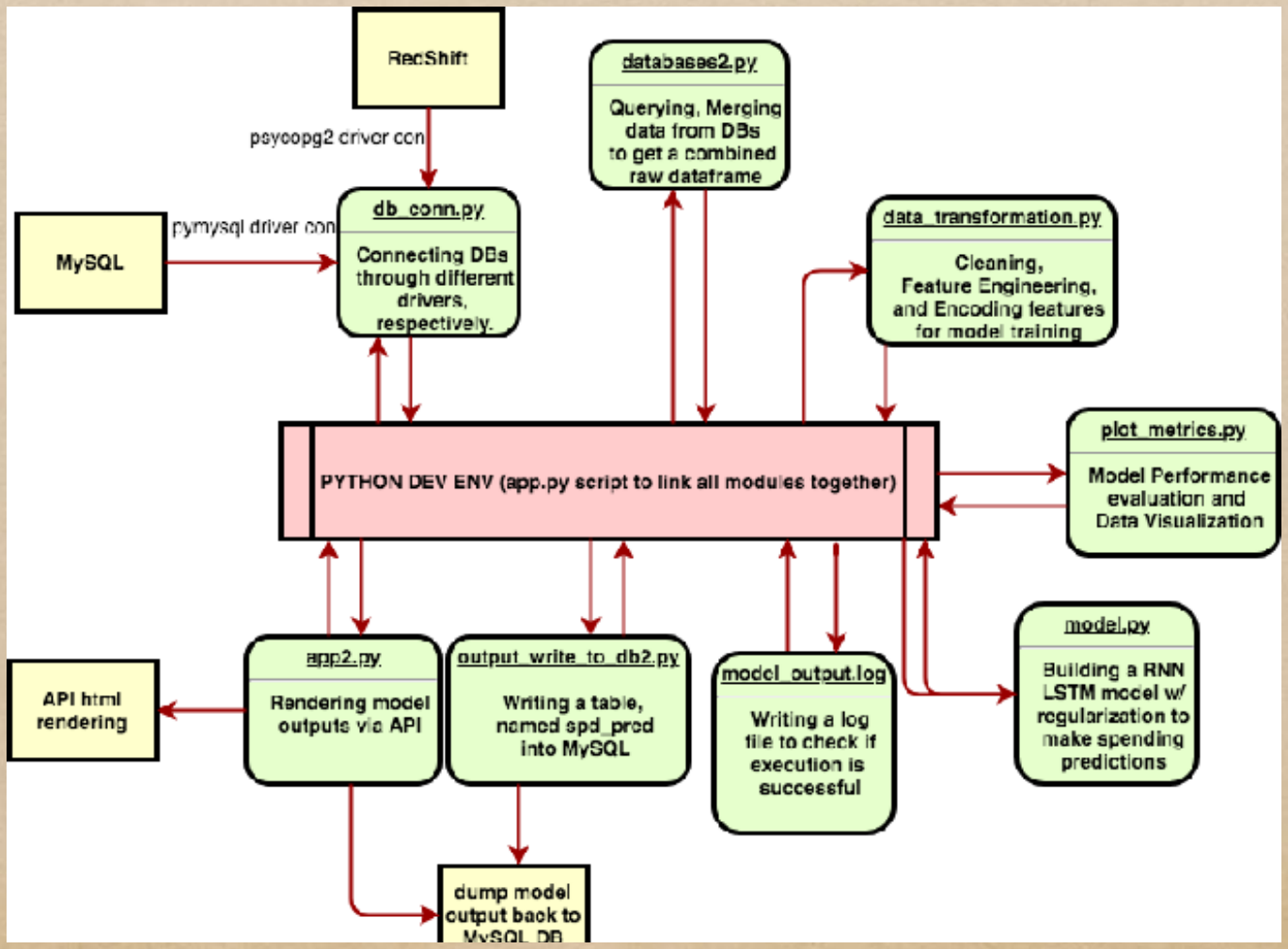
Tasks :

1) Model Training, Logging, Scheduling to full automation



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Tasks :

2) customized algorithm write-up:

i) the logic of the procedure:

Check the daily limit, compare it w/ predicted spending, impose the checkpoints (#4-10), sum up to the monthly level, and adaptively adjust spending accordingly

ii) data study:

a) campaign currently running: 391 & lasting at least 30days: 309; campaign-wide, we've trained cids about 309/391 (~=80%)

b) client currently running: 92 & fully trained on clients: 63 & partially trained on clients: 29; client-wide, we've trained bids about 63/92 (~=70%)

iii) the approach to deploy:

a) conservative approach: limit spending to +- 15% of daily limit regardless of predicted spendings

b) adaptive (hybrid) approach: apply predicted spds and regularly adjust at checkpoints

c) aggressive approach: play aggressively, let the model fly w/o adjusting

iv) target to go alive: targeting to deploy solutions on 63 clients by refreshing the next several days spendings by next Monday, 7/16, no later than 7/19