PYP.AI

Wong Ding Feng　　　　　Derrick Chua

May 28, 2017

1 Level of Achievement

Gemini

2 Project Scope

A portal for crowdsourced Past Year Paper solutions

3 Problem Motivation

We realised the lack of past year paper solutions for some courses in NUS. When we come up with some solutions for past year papers, it would be nice to be able to check against other people's solutions.

4 Detailed description

4.1 Method to sieve out correct answer

We need real data to know how each method would work out, currently still experimenting. These are a few that we had come up with.

4.1.1 Reddit style of upvote

Upvotes pull it up.Add some time based weight to pull it down. This is to allow for possibly newer better answers.

4.1.2 Similarity comparison through NLTK

Great minds think alike, thats the idea behind this. Using python NLTK or other machine learning methods, possibly doing word count to find similarity in sentences. Then this could possibly be a correct answer.

4.2 Rebuttal methods

There are some questions that trick the majority into getting the wrong answer, to allow for the few to submit meaningful corrections to the majority's answer.

4.3 Tagging and Indexing

Information is useful becaused it is indexed, try to create some auto indexing algorithms.

5 Technologies and tools

- Backend
    - Node.js
        * Passport.js
    - Express
    - NLTK
- Frontend
    - React

6 Development Plan

Parse past year papers using OCR (otherwise manual)	June week 1
Create forum	June week 2
Sieve our answer	June week 3 & 4
Crypto-currency	July