



TLT Center Database

MOVING BEYOND THE STONE AGE

Current TLT Check-In/Out

1. Tutor arrives to TLT, signs in on paper sign-in sheet
 - Fields are arrival time, all subjects tutored, and table number
2. Tutor signs in on their own paper timesheet (kept in the Tutor's possession and turned in bi-weekly)
 - Fields are Date, time
3. Student/Tutee arrives to TLT, signs in on Ipad
 - Field is ID
4. Student meets tutor, signs in on tutor's paper timesheet
 - Fields are ID, name, time-in, class

Current TLT Check-In/Out cont.

5. Student signs out on tutor's paper timesheet
 - Field is time-out
6. Tutor signs out on their paper timesheet
 - Fields are time-out, total time in shift
7. Tutor signs out on TLT paper sign-in sheet
 - Field is time-out
8. Tutor fills out Bi-weekly online timesheet
 - Tutor fills out per shift worked in corresponding pay-period, fields are time-in, time-out, type of shift (regular work, overtime, sick-pay)

Current TLT Check-In/Out cont.

9. Student Manually adds all hours worked for pay period, records this on physical timesheet and turns into TLT Management
 - Additional Fields are , pay-period, ID
10. TLT Management (2 people) manually inputs timesheet data for all tutors to Excel and compares to online time-sheet. Searches for missing fields and inconsistent/absent Tutee arrival and departure times.
11. Tutors are sent emails about bad or missing info on time-sheets, are told to correct it.
 - Pay is withheld until corrections are made. Tutors also held liable for Tutee mistakes.
12. Tutors submit corrected paper timesheet
 - Timesheet is manually re-verified by TLT management.

Current TLT Check-In/Out cont.

- 13. TLT front desk attendants and management manually input sign-in sheet data
 - We estimate the TLT is a year behind on this data-entry

Problems with Current System

Data stored redundantly and across many mediums

- 4 mediums to be exact, 2 of them paper, 1 Excel, 1 Peoplesoft Lite


Mistakes abound

- Often impossible to correct
- Tutors cannot babysit tutees and ensure that they remember to fill out a form for the third time
- Data likely unusable


Lack of data-analysis affects TLT day-to-day operations

- Manual entry time-consuming
- Pay delays for tutors, massive work-loads for TLT management
- Data entered with significant delays, likely filled with false data-entries
- Surplus of tutors for some subjects, shortage for others
- Tutor shifts do not coincide with rush hours


Proposed TLT Check In/Out



Swipe ID card to Check-In



Swipe ID card to Check-Out



Let SQL do the rest



Let's take a look

Implementation Basics

- MySQL on Google Cloud Server Backend
- Runs on Electron (node js)
- Current app to be run on touch-screen, could potentially be re-implemented as a web-app if needed

Planned Progress

- Add load-balancing for tutors, possibly alter check-in flow
- Implement desktop app for use by TLT front desk and management
 - Extensive Data-correction and Data-analysis features
- Adding secure password verification for tutor shift check in/out