**Student’s Oasis Tutoring Center  
A Database Project**

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**Summary**

Students’ Oasis Tutoring Center is a midsized tutoring company that provides services to students from grade kindergarten through grade twelve. Based in Cartersville, Georgia, the center has been in operation since July 2013. Since its startup, the tutors at the center are expected to keep track of their scheduled sessions with students and bookkeeping by way of calendar and spreadsheets. However, this method has been proven inefficient for tutors as it has led scheduling overlaps and reduced, or missed, payments from the parents of the students. The director of the center has decided a database will better suit the administrative needs of the company by preventing major conflicts, gaining public traction, and increasing the center’s profit. In the beginning stages of this project, we will describe the rules of the business by identifying the major entities that make the business, their attributes, and the relationships they share with each other. Next, we will design tentative conceptual and logical database models from our business rules which we will then present to the stakeholders. Afterwards, we will make changes to those models, if necessary, before moving on to the final stages of the project.

**Stakeholders**

The stakeholders for this project include the director and tutors of the Students’ Oasis Tutoring Center, students and their parents or guardians, and the center’s Partners in Education – Cobb Elementary School, Altoona Middle School, and Barrett Highschool. The implementation of this database will increase the center’s profitability and improve tutors’ productivity and student attendance. Tutors can schedule, organize, and view sessions in advance, update their profile, record payments per session, and manage their students. Like tutors, students can also view upcoming sessions with their tutor, make changes to their profile, and reschedule sessions if needed. Parents and guardians can book sessions for their students and view their student’s activity. The director will be able to use the database to remain up to date with bookkeeping, maintain the payroll of the tutors, and have an overview of tutor and student activity. The Partners in Education can track the progress of students that attend their schools.

**Business Rules**

* A parent has one or many students.
* A parent or student purchases tutoring credits.
* A student is in a grade level.
* A student studies many subjects.
* Student status updates the student.
* A tutor instructs students.
* A tutor works in one tutoring department.
* A tutor hosts session.
* A tutor receives payment.
* A credit can have one or many sessions.
* A student attends session with their tutor.
* A credit purchase creates an invoice.
* An invoice contains details on the students, the lessons, and the tutors.

**Glossary**

**Student** – A student is a person who studies at a school and uses the tutoring services at SOTC for extra academic assistance.

**Parent** – The legal guardian of a student/ students and schedules a service with SOTC.

**Tutor** – a person employed by Students’ Oasis Tutoring Center who instructs students through tutoring sessions.

**Tutor Wage** – The payment a tutor receives for each session they complete; includes the payment amount and the payment date.

**Student Status** – A student’s status can be ACTIVE, INACTIVE, TEMPORARY PAUSE, DROPPED, or COMPLETE.

**ACTIVE Student Status** – The student regularly attends sessions and maintains contact with their tutor.

**INACTIVE Student Status** – The student consecutively misses sessions and does not keep contact regular with their tutor but is still on the tutor’s schedule until further notice.

**TEMPORARY PAUSE Student Status** – The student paused attendance to sessions to the knowledge of their tutor.

**DROPPED Student Status** – The student has stopped attending sessions and contact with their tutor and is completely off the tutor’s schedule.

**COMPLETED Student Status** – The student has attended scheduled sessions and used up all purchased tutoring credits

**Subject** – Includes disciplines in Mathematics, Science, English, Music, Social Studies and World Languages.

**Tutoring Department –** The center has a tutoring department for each subject area where the tutors in that department specializes in that subject.

**Credit** – Purchased by a parent and given to a student to generate the number of sessions the student has with the tutor. For instance, 1 credit gives a student 3 tutoring sessions whereas 3 credits gives 6 sessions.

**Session** – A meeting between tutors and students that contains the meeting days and times, tutor’s name, number of students attending, fee, location, the subject, and the session type.

**Session Type** – Sessions can be taught In-Group Online, Individual Online, In-Group Face-to-Face, or Individual Face-To-Face.

**In-Group Online Session** – Sessions are held in a virtual chatroom with one tutor and two or more students.

**Individual Online Session** – Sessions are held in a virtual chatroom with one tutor and one student.

**In-Group Face-to-Face Session** – Sessions are held in person between a tutor and two or more students at a decided location.

**Individual Face-to-Face Session** – Sessions are held in person between a tutor and a student at a decided location.

**Invoice** – Billing sent to a student’s parent to be paid once the parent and tutor sign off on all the sessions the student attends.

**Invoice Status** – An invoice is either PAID or UNPAID.

**PAID Invoice** – The parent has paid SOTC for their student’s completed lessons.

**UNPAID Invoice** – The parent has not paid SOTC for their student’s completed lessons.

**Data Questions**

1. Which subject receives the most tutoring request among students/customers?
2. Is there an uneven allocation of tutors in different subject areas?
3. Which tutor has the most students on their schedule?
4. What is the average length of time a student stays in the tutoring program?
5. Which tutoring medium is requested the most amongst students/customers?

**Conceptual Model**

**A close up of a map

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**Logical Model**

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