**Memorandum**

**To: Thomas & Rios GYM - Board of Directors**

**FROM: Software Development Department**

**SUBJECT: Proposal of a database for the Thomas & Rios GYM that will keep track of employees, customers, inventory, payroll, memberships, and schedules. This database will help manage the operations of the gym view how the gym is progressing.**

**DATE: February 12, 2016**

**Overview:**

**The company is looking to create a database for the Thomas and Rios Gym. This database will keep track of employees, inventory, payroll, schedules, customers, memberships, etc. This database will help manage the operations of the gyms. It will also help with creating reports thus reducing the amount of time and training it takes to make the reports. Hence, making the gyms and the employees at the gyms more efficient.**

**Access Privileges:**

**This database will have a couple of different access levels. Management will have access to the entire database. The reason for this is so management will be able to view employee performance, read and write access to modify the schedules, member’s attendance and payroll. In addition to having access to inventory and being able to order new equipment for the gym as equipment is worn out.**

**Then we will have a non-management employee level. This will allow employees to view their weekly schedule. It will allow employees to view their payroll. Lastly this will allow employees to sign up customers for membership subscriptions.**

**Entities:**

**This database will have quite a few entities. The first one will be an entity for the gyms. This table will contain information about the gym. For example, it will contain the gyms number, it will contain the number of employees the gym has, the address of the gym, and how big the gym is. The second entity will be for employees. This table will have employee specific information, such as first name, last name, home address, phone number, social security number (for payroll), date of birth and the position they hold in the gym. The next entity is for customers, which will contain first name, last name, email address, and phone number. The next entity will branch off of customers because it is for members of the gym. This will contain information about that members subscription period, first name, last name, date of birth, email address, phone number, and if they have an assigned trainer. It is important to keep track of inventory, which means the table for this will have all the information about equipment specific to its gym . Being able to keep track of the date the equipment was bought and when it needs to be maintained is crucial for safety of the gym. This table will also include the cost of the equipment when it was purchased and a way to get ahold of the manufacture that a piece of equipment. An accounting table will also be necessary to keep track of everything that has to do with money in the gym. From transactions that happen to every day to keeping track of expenses of the gym. A table for schedules will contain dates and times that employees are scheduled to work. This will be editable by the managers of the gym so they can schedule employees appropriately. The same goes for payroll. However it needs to be only editable by the managers and employees need to be only able to view payroll that is regards them. Next will be a table for to keep track of members attendance. This has multiple uses. It will help show gym performance along with employee performance if the customer they signed up is returning regularly. It will be also useful for showing customer/member retention. Lastly a table will be created for promotions/retention. This table will be used for keeping track of prized and discounts that a member can earn while going to the gym. Will be tied into accounting table.**

**Relationships:**

**1:1 Each gym has its own inventory. Each Inventory belongs to a certain gym**

**1:1 Each Employee has their own work schedule. Each schedule belongs to a certain employee.**

**1:1 Each member has their own attendance record. Each attendance record belongs to a certain member.**

**1:M An employee helps many customers. Many customers are helped by one employee.**

**1:M A customer can be helped by many employees. Many employees can help a customer**

**M:N Many managers can edit the employee's schedules. The employee schedules can be edited by many managers.**

**M:N Many managers can edit employee’s payroll. Employee’s payroll can be edited by many managers.**

**M:N Membership charges to many members. Many members receive membership charges.**