

# Working with database design



One Issue with almost all software (any type) is because humans write the code for software and on the other hand other humans reverse engineer written software finding weaknesses, and design scripts or boot code, which will become a threat agent in a form of a Trojan-horse, viruses, Dos, Dos, and other forms of illegal hacking to steal intellectual data. A suggestion is using a specific tool called CAPITA "(Completely Automated Public Turing Test to tell Computers and Humans apart" also known as " Accusable-Levin Test. This is to create anti-fraud detection, which prevents a script or a boot from being able to complete authentication. Although, this tool is used in Pay-Pal transactions, its use for on-line of other types of internet web transactions to assure a live human interaction. This tool implementation into the accounting section between customers to Robots and even between Jim, Tim, and vendors, which helps prevent the criminal element from infiltrating the READS.

Let's DO It Another thought is since Jim and Tim will be using ACCESS" and EXCEL, and linking functions, there is the networking to consider to all these functions together for the importing/exporting intellectual values of data. Using the internet for vendor computer, laptop, notebook, Pad's, I-Pad and I-Phone, tablets, and other type of cell phone devices, let us look at building a web page. To use a web page will turn the business globally, allowing customers to view, order, request type of Rob product desired, request color, options etc. , and pay on-line.

This is where the internet and Pay-Pal will play an important role in the functions and expansion of value for Jim and Time's Robots organizations strategic plans and mission objectives for exclusive value. This relation is

input data from a web page linked by sharing the view in a ritual table, by the customer, employee, and vendors. Behind the web page the data shared to the use to order product, when entered into web page browser will insert data into ACCESS" or another compatible READS, which will supply data for the table and move to its perspective primary or foreign key location on its table's tepees/ attribute locale.

During a process an implemented Data Integrity's accomplish with a validation table of data imported into ACCESS" or EXCEL, and as the vendor will become aware, from the exported data from ACCESS" request of parts and/or components to build products. There will be some actions, which require concatenated text values, which will require mathematical expressions. As stated by Hernandez, (02003) Chi. 12, peg. 47, inform specific READS program can determine whether you refer this object as a query or view," from ACCESS. Now previously is mention of one-to-one table relation, and a one-to-many table relation, with a many- to-many table relation will give the opportunity to raise to a Global level now. This will give the ACCESS" READS more than likely function on a many-to-many table relationship due to linking Robots organization to customer and vendors, and even o bankers, investors, and even the NASDAQ.

During this whole process of connection via networking, intranet the infrastructure , clients' orders on line web page (which also is a great adverting and marketing tool), links to vendor and suppliers, band and accounting department with their spreadsheets, ask this? How do keep the importing and exporting of sensitive intellectual data secure and with assured integrity. The use of authenticity allowing only and only those

<https://assignbuster.com/working-with-database-design/>

authorized to have rights to view certain tables dependent on level of security and rights assigned to them.

This is based on either a data view, aggregated view, or a validation view for the logical structure of the database by either a materialized or partitioned view as paraphrased from Hernandez, (0 2003), Chi. 12, Peg. 449.

Remember to always make your tables, fields, and rows with links by primary and foreign or non-keys, so when the view are seen they have a strong and logical meaning, which is done every time a query is request, which database will populate requesting intellectual data from all linked tables within the relational database management system.

To open another door will be how to store and acquire this query, is the needs to place software's as SO operating, security, ACCESS, EXCEL, MS SQL SERVER, and more than likely MS Office word and other packages, since all will work seamlessly together. This will require the need of faster CPU operations, maximum allowed RAM, maximum ROOM by motherboard architecture design, preferably largest possible hard drive capacity, which actually leans on the file server capabilities.

Even if this is an acceptable plan, does not give an open book to creating or allowing the acts of foreign keys will help with keeping referential integrity. Although, still the need to pep data secure while importing/exporting across tables, the internet, and sharing certain data with vendors within a table has to be transitive dependency with value and accuracy. Sharing data with vendors from within a table has to be completely free of any outside corruption.

A team of IT security and security protocols deals with alterations by an unauthorized type of threat agent, when using entities and its attributes, this is referred to as a schema, as stated by Sings (0 2006), " specifying the relationship" and create a " framework into which the values of the data items (fields) are set. Therefore, within a theory the schema means an overall plan to store all data items and records within the READS for importing and exporting. Remember to document process when design the READS, keeping a log of errors encountered, use and catalog specification sheets and business rules set forth.

A though comes to mind of designing a bad database by using the old flat-file design, or the spread sheet design is not a good rule of thumb. Designing the READS should not be based on perceptions of thinking what the READS can or cannot accomplish, but design to fit the organizations needs and information requirements. As an extended, not review data integrity, by realizing the benefits and quality of an READS will help an organization, remember create a mission statement, and follow through with the implementing of mission objectives.

Since the databases contain " credit card numbers, social-security-numbers, and bank-account information certain steps should be followed as the Center for Internet Security will share some benchmark tool. These tools are able to be obtained from [http://www. Security. Org](http://www.Security.Org), and explore Defense Information Security Agency (DISK) Security Readiness Review (SIR) scripts [http://ease.Disk. IL/stirs/SIR/index. HTML](http://ease.Disk.IL/stirs/SIR/index.HTML) on information on procedures to prevent exploitation of cyber-crime.

Another option might be use of storage and retrieval with use of the cloud storage, and the factor here will entail the repetition of the organization security protocols, and pricing. When creating and managing a database there are three option available, use of SQL commands (which if manually written might create errors if not proofed properly). The following is a sample from M. IS. S. E. (02010); The second option is with a tool support by using a READS that support s key elections on a dialog box allow options to be implement to create tables, fields and links with defining primary keys, parent tables and foreign keys and children tables.

The third option is called Automation on a SST screen to specify source destinations and table conversion's automatically creating the database and tables automatically as stated M. U. S. E. (0 2010), Phase 3. There are four different types of databases signified as legacy, relational, object, and multidimensional, and since the multidimensional database of Jim and Tim will more than likely be a data warehouse and data mart, which is ACCESS"\* and MS SQL SERVER, EXCEL combination.

This type of database is used to store data and aggregate quickly and works well for use when implementing web services and integrity, efficiency, avoiding data corruption and misplacing data. Since the database will contain a schema with metadata, indexes, and application data, with a point by Doctor Anita Arcane is " If the value of the key changes in the parent table all rows with this foreign key in the child table(s) must be handled correctly. " " ... Either disallow the changes; cascade the change (or delete the records) in the child tables accordingly; set the key value in the child tables to NULL. Let us touch on the interviews, those interviews and

specifications sheets are very critical and crucial in designing the READS, and helps understand what data is required by the user for exporting/importing, which also defines the future data used within the newly designed READS. One option using [email protected] with MS SQL SERVER to import/export data, and with the major improvements since version 2004 MS SQL SERVER incorporates the newer development tools and support of the . NET languages, and implements database Job roles.

The option to use the Query Analyzer for each script, which is put into a separate box for individual analysis and evaluation, there is a way to create stored procedures by writing with new commands in personal queries, which the older versions had to use Transact-SQL, which made writing SQL difficult. With the SQL it is easier to query with commands such as, " SELECT address FROM customers WHERE (fame = 'Roberto' OR city = 'Albuquerque') AND age > 50, " Oh, 10 that is me they are looking for me, 10.

One caution is being very careful when using the DELETE syntax, because the record is more likely non- retrievable. This is where a back-up database file server comes into play in the event of inclement weather, threat agents, employee mistake of using the DELETE command, or intentional corruption to the database's intellectual data. On page 1 of Brown, (0 2013), he states, by storing data with a document ID, must be unique, although data stored can be any type of data from " a stream of bytes, a serialized object from your application language, or a flexible document format... " All the table element fields should be named such as Costs or Lame and Costs or Fame, assuring primary/foreign key share of meaningful data across all links, have a sword control, and have a system of managing and monitoring using hash

<https://assignbuster.com/working-with-database-design/>

document ID. Got a bit of surprise here, there is now a third edition (0 2013) of Database Design for Mere Mortals by Michael J. Hernandez. Now a quote from Sherlock Holmes, The Sign of Four, " When you have eliminated the impossible, whatever remains, however improbable, must be the truth," and Hernandez has restated , " ... Crack in the integrity could result in inconsistent data or inaccurate information," Garbage in, Garbage out, it is wise to do at least " one final quality- control review. " Review " each component of the overall data integrity to make certain hat you have properly established table level, field level, and relationship-level integrity as well the business rules. Binder all documents from the start of the project and hand over to the owners of the READS, this is where you can breathe again.

Handshakes, a toast (not the butter bread, 101), final good byes and off to await for the check-in-mail, Oh and by the way you must be willing to return after they run the system as technical support or assure that support any time of day/night.