**NAME**

**COLLEGE NUMBER**

**DATA DESIGN AND DEVELOPMENT: A BI APPROACH**

**Abstract**

The developemt of databse systems whould be consderdd and looked ata as a wholesome approach. Since data is the haerst of the orgaanisatiom, oragnaisations and inidciduals are working there way uo the ladder to come up with more refined ways of offering information to magenement. There are three procceses to condier whrn trying to deal with data system. They include collectiom, storage,manaipulation and visualosation.

Data collection:

Is condired the first process in decion making.Top management relies in decin support tools to come up with ready to use algoritms and tools that will necissiatte the process of highlutung key deciins tio betaken in differnetmethods of addressing the company isuues.Soucres of these data can also be refred to as data points. Data pints are key locations where o=aftaa gets n ithe organisations,Uusukkauy , the comaomny has setvuoa amysiraf of applucations upon ists netewoek thata willalowan the consuptiin and full us id the snformation . Exaples of such data pojits include. Customer relationshio aagenets,company amobuoe apps, website posrtals, points of slas, conatnct forms and link, call logs, email cnsversations and social medi respnoeses.Now what happens in the ecent that the company is recievubg such too much information thata ut may anot be hnke to handle,, this is hwreebig data biw come in, Big data will try to answer the fowollin questiins;

1. What type of data is this?
2. Where is it cmong from?
3. Who is sedninf it in>
4. How should we store it?
5. How can we wanalysise it?

Some of the chharatrues of big data nckude the fact that its fast moving, its in high amounts and it comntans a larger amounts of truth in it.

In the snesxt stepof the data process inckudes the datas storage. Al our online data intections rewuier some kid o data storage. Cnisfer stuauons where you go shopng and hen yoi swiore your card acros the POS, card reader or o some machine, the tarces of you r information is left all over. Alternatively,when we alos g onoine to serach for a aoraticluavr pridyct to buy, google aerch engine automaticalllky and escreekyu monitrs our srac key words, maps ithes eto or locations and then sue these information to send to use recoomenayins form other sellers onw heta type sof iten whe want o to buy and how colsoely its rekated to the items we reactually loking for online, This is one of thevreaosns why sonethime qheb afrer tsaercgung for a oartcilar product onn, you get somm many reocmmeadons fromwbsitesm, mobile apps and social media ags athet you visit. This kind of niche esleinf may appear eillegal illegal and aunvallled for but iun some way tots still allowed. May ebe ew enned to revoew tfurther the kindof laws and policies that we ut in place to safegiyrad the human data privacy, sucj pillvie shsou;s d not just be protected by some weird terms and conditions that usually cnsumers do not even read or understand.

Futhert lloking at data storage, we can socniefr that applucations majorly store daya on three dfiffrent types of fprmats.

* Structured
* Unstructured
* No storage (web 3.0)

Stsructured database systems is the ind of traditional datbse ystems agree data is stired in the formof organised rows and ciumns, the attention here is paid to the foddreget rows that contant the unuqie prinar and seoncsy keys thatare used to acces these databses.These data va,ues are stoted and exists table. A table culd contain several co,myns for siroting different tables na,es alsp known as variblles. A raibels is a storage memerr for the partcilay tye sof data. Theycan store strinfs, numvers a;so know as integers, cahaters, Booleans and ecven float variables. The data is ualau caces by what we call yhe syrcutteiurexc querrey labuage also know as SQL The SQL runs y requesting formation soted on severalt tables andco,ums, I can also give database information, schemas, metadata, table information and ecene join different tabes together as we shall see later inthis disucssinn A database manaenebbt syetm(DBMS), on the other hand is s a tool for managonfing struecured data. Exampees of these DBMS include the MysQL, Orcacl, DB2 and postfersQL Almost all these dtaabses weokr in the same waym thediffrence however cold be alittle sysntax agree and there, the company nbame and the whetehr or nit to accept capital sql qieeties or jjust to ignore, oneguys whos is god at ilemetin this is the PostfresQL , this daatas pnly acscye sthe querries written on it in forma of clwoer case ltters andany other thing that is types win caps wikll automaticall y be onceterd ino mlla leteters and rendered to the user as lower case.

Cosnidere the beow table sample for orfgased table als know as sturctired table:

Insert classonromm tables down here:

Stsrucruerd adtavse ystems have been used for periofs ad abd are the oldestin history considering theier wide range of use. Hey are the agacy systems and datasbe.Thir sue span romfinancual systems, heathcarem edcatuion systems , rearch and developemne tsudues and fiaay a skey too, amg thed iffrent developer envronemnetss.

Unstictured adtasve ystens on the other uhad iste directopposute of the strucstured databse, Uinstead of data being stired in orgabsied rows and cumsm the data is tired in usntctied format, meaning e cannit exactly tell if the data I sinw hoch arycluavr row or vindex value position. Untcrired data is the seconf latesty type fo databse syyste, to ggtev into the industry. Rven some deelopers abd sofetare enegineers are not well versed with the datasbe, sad but its true that this is where mosyt appliactos generating alree amonuts fo data are going to shiftv their attentiona a nd focus to, this s deally beaiseu UDBS is the onky way thcurrentlu tahtapplications tire big data. Since UBD des not conider any specila kind f specific rows and coluns, the UDBS, wills stitre images audio ,chaaretrs, craibels andi even docueemnts tat can alsonly be acceas as an arty,consider the vekwe example of an array callin ing the object

Artist in rhe artsists datavbs:

Insert the artistdetails here as an array: