

**ASSIGNMENT SUBMISSION**

**COVER SHEET**

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***Section A- Justifying DSDM as an appropriate development method***

**A1. Management Summary for CoScholorship**

CoScholorship is a charity that supports young people for academic and sport scholarship by doing charity fundraising events. CoScholorship organization also has few universities and colleges who are collaborated has partners with them. CoScholorship has three main divisions in charge of fundraising, scholarship application and management, and treasury, also have employs about 40 individuals.

**A2. IDENTIFICATION OF PROBLEMS**

CoScholorship has developed their own web based software to manage their scholarship. **The system has been in use for the past 15 years** without any updates. The system works effectively but without proper maintenances on the long run the system will have to face functional problems.

CoScholorship employee’s **uses three different kinds of methods to evaluate the applicants.** By doing so can cause a lot of mistakes because the screening for the applicants are done by the employee and not by the system. An applicant can be selected and rejected based on different opinion and by different person.

CoScholarship management department do their **tracking manually of the funds that they get and where they spend them**. By doing manually maybe safe for the time being, if the fund raising where to increases employees may tend to make mistakes due to increase in the amount that they need to allocated for each agenda

CoScholarship own system **cannot be synced with the banking system** which causes the treasury department to make manual bank transaction. The transactions are done manually, when they do the money transfer some human tend error occur.

Besides that, the treasury department also do data recording, due to some wrong data recording in the system the treasury department had to face the **data integrity issues.** Due to the unintended changes in the data the employees had to record them manually without the system automatically saving them.

**A3. SOLUTION**

The DSDM Atern method will be the most appropriate approach to address software development failures such as lost track of data, budget overruns, and lack of quality in software, while at the same time flexible enough to accommodate changes in requirements.

The first principal that will be suitable in here **never compromise quality** of a system that is being developed. In CoScholarship when the system was developed and used for thr 1st time it was good in quality wise and function has well, but has the time goes one they just used the system just the way it was for 15 year which not a good thing. If a system needs to be categorizes has it is good it should be updated based on the current requirements that are airiest so it can be accepted has a quality system.

The second principal that can be applied in this project is **develop iteratively** of a system that can be improved or add features has the time and requirements increase based on the needs. In CoScholarship they did not add on the necessary things that where need on the system or altered them when it was hard to use has the increase of requirements.

In CoScholarship their IT support and other department needs to interact more to solve the problems that are showing up. Has the principal stated that **communicate continuously and clearly** by doing so will help all departments that are currently functioning in CoScholarship better. By stating the problems that are faced by departments to the IT support on a daily basics can help them to come up with an idea or solution that are faced by the other departments.

CoScholarship main objective is to give scholarship to the students that excel in studies, sports or in both. **Focus on the business need** is principal that can be applied at the selection process for the suitable candidate for the scholarship. The company has developed a system that does not help them to find sort the suitable, due to that the company member where forced to use other tools in order to sort the candidates. With a good business plan in place by following the principles can help to avoid this problem.

The treasury department also cannot completely control the system because when they want to do bank transactions because the system cannot be synced with the banking system. With principal of **demonstrate control** where all the items can be more accessible by all the department and make system less sophisticated for the user to use it. By doing so can help the other departments can utilize effectively of the system.

**A4. ADVANTAGES AND DISADVANTAGES**

A4.1 ADVANTAGES OF DSDM

By applying DSDM Atern in this project the CoScholarship can improve their system drastically because they first can create a prototype first by following one of the principles. By doing so can improve their team communication because when the system is being tested each department can give their opinion and what are the function that they need in the system to complete their works. Furthermore, by implementing DSMDM Atern it can help the IT support to equally separate each work that need to be completed by just use one of the principles.

A4.2 DISADVANTAGES OF DSDM

DSDM Atern will hard to be implemented because of its strict rules that needed to be followed and need a professional developer in order to complete the system. Due to that issue CoScholarship will have trouble completing the system if they were to implement DSDM Atern and they have a hard time developing it because other companies are still using other methods like waterfall model.

**A5. CONCLUSION**

Based on my perception and explanation there are also many benefits of using the DSDM Atern approach as it can quickly fix the problems and issues currently faced by the business. It is appropriate to use the DSDM Atren methodology and approach to improve the system.

***Section B- High-level requirement analysis and MoSCoW prioritization***

**B1. Review the high-level requirements**

High level requirements will guide the developer to understand the major issues that are being faced by the CoScholarship employees and they can implement it easy in to the system because they know the purpose of the function.

**B.1.1 Not Appropriate High-Level Requirement**

The following requirements are not appropriate for high-level requirements. The following list of requirements is not a must to have in their system.

1. **Compile the criteria for each category into preliminary application forms**

This requirement can be done by the workers for the time being because the system is new and only the employee can differentiate the criteria better because the system will not have enough data to do the compiling. In the long run, these features can be added because the system can do proper compiling due to the data that has been gathered in the database and it can also help works reduce the workforce.

1. **Support events planning.**

By adding this feature into the system can only cause trouble because sometimes the suggestions from the system might not apply to that certain event. Even if the feature were to be implemented there are certain things cannot be changed like sudden accidents or delay in the items. If the event were to be planned by the workers, decisions can changes immediately if there were to be some trouble when executing the plane.

**B.1.2 Appropriate High-Level Requirement**

The following requirements are appropriate for high-level requirements. The following list of requirements is a must to have in their system.

1. **Register should be available in the system for scholars**

Has the system being used in the early stages with a register can help the admin to do the selection of a suitable candidate to offer the scholarship and the scholar can also keep track of the selection progress.

1. **Login facility for employees.**

Having a login function in the system makes things safer for CoScholarship because only an authorized person can use the system and look into it. By doing so can help the admins keep track of what is happening in the system.

1. **Applicants must be able to view available scholarships.**

In the early stages of the system, this can help them to sort the applicants who have already applied and the ones that have not been applied yet for the scholarship or not offered yet. By doing so can help the admin to see who has not received the scholarship yet.

1. **Automatically inform users of completed actions.**

Once the student has registered in the system, the system should give them update progress on what the CoScholarship is doing and how long it takes them to process their profile. By doing so the scholar will know that they have registered correctly as the scholar requested and all the given information is accepted.

1. **Notify applicants whether they were successful.**

In the early stages of the system use the user needs to know the progress of the states regarding the scholarship that they have applied for. When the user is given a notification regarding their application they can make other decisions like what do to next if they did not get the scholarship.

1. **Categories different e-sports.**

By having the function in the system CoScholarship can sort each student accordingly and they also can know how many types of e-sports that they are sponsoring by.

1. **Keep track of funds, how they are allocated and where they can be applied.**

With fund tracking function in the system, the employees can know how much revenue that they are making and they can be allocated properly for each event and they can also choose where to invest the money to gain more revenue for the company from that.

1. **Supply context sensitive information.**

By implementing this into the system the admin gets to know the achievements that the scholar has done in e-sports. By doing so will help them to screen the scholar better and can help them to offer the scholarship.

1. **Synchronisation between the platform and the organization’s banking system**

When the banking system and the company system are synchronized which will give more sense of security towards the company and the sponsors that are helping the scholars and the event.

1. **Sorting each scholar in to a proper management team for each category.**

When the system has this function in it the scholars can be guided properly to achieve their goals faster. The management also will know what the scholar wants to do and they can give guidelines and show them the proper path to their goals.

1. **Tools for selecting candidates that are suitable for the scholarship offer.**

With tools in the system, it can help the admin to sort or screen the candidate faster and they can pick candidates that are worthy of getting the scholarship.

1. **Helping marketing department by collecting information’s.**

The system will help the marketing department to find sponsors and promote the company. With this function it can save all the contacts and mail addresses, by doing so the system can send a message to sponsors regarding their purpose and aim.

**B2. Prioritization of MoSCoW Rules**

**B.2.1 Prioritization**

**Must have:** Must have is a list of functions that the system must contain explicitly and without this function the system will not be able to function properly based on business requirements.

* Register and Login function
* Categorize each e-sports
* Funding function
* Monitor management and scholarship offer

**Should have:** Should have is a list of requirements needs for system development success of the system but needed to make life easier.

* Able to sort each candidates properly
* Monitor the candidates achievements
* Candidates creating their account

**Could have:** Could have is a list of functions which are very less important, but the addition of these functions can improve the system. Basically a function that will make the system better.

* Having a report generator on how many students that are getting the scholarship
* Having a remark option on the scholars so that they know if the student where to have problems in getting the scholarship

**Won’t have:** Won’t have is a list of functions that can be overleaped as the function will not give the system any advantages for the user.

* Support event planning

**B.2.2 Justification of the MoSCoW prioritization**

* **Must Have**

The below explanation is the Must-have requirements. Firstly, **register and login function** is one of the most important functions in a system that works as security. By having this function an only a certain number of people will have access to the system and by doing so it can protect the confidential info of the company and the scholars who are applying with the company. Login register function also brings another advantage to the system such as the level of accessibility, for example, only a specific person can enter a certain part of the system and the other is not allowed or they don’t have that option. Next, **categorize each e-sports** which can be very helpful for the admin in sorting each student with proper scholarship and correct managements. By doing so, the students can know what are e-sports are being sponsored by this certain company to continue their carrier. Besides that, **the funding function** purpose is to know who is sponsoring and how much are they getting per annum. With that information, they restructure and plan their funding accordingly. By doing so they can maintain their business properly. Finally **monitoring management and scholarship offer**with this function the management department will have to understand what is happen and the processes that are involved in offering a scholarship to a student. They can also monitor the revenue that they are making through the system and who are the students that have been offered the scholarship. With this function, the department can function better and faster regarding the scholarship offering and other important things.

* **Should Have**

Should have functions in the system to complete the work easily, first **able to sort each candidate**with this function the workers can screen the candidates better and faster. Optimistically this function can help the workers to speed up their process of selecting the candidates and there will be no chance of human error to occur. Next, **monitoring the candidate’s achievement**with it they can find out what are the achievements that the student has achieved in which e-sport, by doing so will increase the credibility of the student to get the scholarship. Finally, **candidates creating their account** to keep track of the selection process for the scholarship. By doing so the candidates will know what is their status in getting the scholarship by who the scholarship being offered and all the other information.

* **Could Have**

A function that could have in the system is **report generator**for how many students are getting the scholarship and how many companies are sponsoring this project. By doing so the workers can have a rough calculation of how much revenue they are making for each student's education. The last could have a function in the system to help them improve is **remark** for the students that are applying for a scholarship with them. By having a remark option the supervisor who is taking care of a specific student will know the problems that they have when applying for the scholarship.

* **Won’t Have**

This function will not be implemented or not useful for the user, **support event planning**which this function it will only cause more trouble to the company. Because the system is the one that will do all the work so it cannot handle sudden changes and cannot make any fast decisions. In the long run, it may be added just as an assistant when doing the events.

***Section C- Legal, Social, Ethical And Professional Issues***

**C.1.1 Data Collector within the organisation**

The purpose of a data controller is to create data models such as regression analysis and other things has well with the data that has been given to them. The data controller’s main objective is to protect and segregate the data accordingly by doing so the data can be protected. A data subject are a reference of an individual who is being identified directly or indirectly, via an identifier like a name, an ID number, location data or via factors specific to the person this are one of the methods that are used by the data controllers to identify a user. In CoScholarship they are facing some problems with their data processes with their system which pushed them to do it manually and it consumes a lot of time and man power just to keep track of each applicant’s that are applying for scholarship. All the data recoding are done manually and each of them are stored in to the database so that only the authorized person are allowed to access the applicant’s information.

**C.1.2 Legal, Social, Ethical and Professional Issues within CoScholarship**

LSEPI issues is a comment problem that will be faced when the user are interacting with the system once it is completed. LSEPI are legal, social, ethical and professional issues which help a developer to reach the end result properly in this case the CoScholarship can use this issues to make the application more flawless.

**C.1.2.1 Legal Issues**

Legal issues are common when developing a system because the system should be able to process the company’s data **lawfully and fairly** in this case this issues can take has an example to develop CoScholarship’s system, because CS don’t proper method to collect and save the applicants information. Thus, it can cause a lot of commotion has per the rules that are set by the general data protection regulation in short (GDPR).

The next issue that can be stated for CoScholarship is **adequate** of selecting applicants. The applicants that are selected should meet the criteria that has been set for selecting scholarship by the CoScholarship acceptance level in order to process an adequate candidate.

Furthermore, information regulators ought to have a substantial and real purpose behind gathering and preparing individual information and ought not to utilize information in a terrible or malevolent way. For instance, as CoScholarship has their clients' very own information, the applicants may demand the information it holds. In this manner, information regulators must conclude that they need information and what they need to do with information and furthermore need to furnish clients with the right security notice to gather their own information. This guarantees that the information regulator follows the third lawful issue being prepared for a **limited purpose.**

**C.1.2.2 Social Issues**

Has for social issues it something about the applicant’s information processing. The applicant’s information have to be **accurately** processed before releasing for selection for scholarship. By doing so it can help CoScholarship and applicants a senesce of surety that they have given the correct information data processing. The data collector need to be more **specific**  about what are the information that are need for an applicant to know when applying for scholarship, by doing so can help data controller to screen the applicants and save their information better.

**C.1.2.3 Ethical Issues**

Ethical is something that accordance with the rules or standards for right conduct or practice, especially the standards of a profession. CoScholarship have to follow the rules of processing an applicant’s information and store it in properly. The principal that can be suitable is **security** of the applicant’s information, because the applicants are giving their confidential information and CoScholarship needs to keep them safe and if the information where to be exposed publically it could tarnish the company’s name. The last rule that can be stated for ethical issues is **transfer data** to another file. When the files are transferred from one place to another should be secure and the user data should be protected for all the user information.

**C.1.2.4 Professional Issues**

As far as expert issues that CoScholarship needs to consider, data controller need to ensure that individual information gathered isn't **not stored longer than necessary** in there database cause it can cost more harm than good for CoScholarship has an organization. Has an applicants they should now what the company does with their information and where they share it because it is their **rights,** to know the purpose of sharing the information.

**C.2 Management summary of BCS Code of Conduct**

British computer society also known as BCS, the Chartered Instituted for IT which functions has a rule or a standard that need to be followed when computing.

**C.2.1 Public Interest**

The CoScholarship system will hold a part of individual data, system designers will not be able to reveal or share customer’s information indeed in case they are advertised bribes. Instep, they ought to dismiss any offer of debasement and exemption. The developers must keep up the morals and guarantee that the data given by CoScholarship for the advancement of the modern system is secured and not spilled by keeping up security. All information cannot be unveiled without the right authorization. Designers of the framework ought to endeavor to advantage the open intrigued. System developers must demonstrate the results and dangers they confront. Developers must use caution around the protection, well-being of others and the environment and ought to take under consideration the lawful rights of third parties.

**C.2.2 Professional Competence and Integrity**

System developers from CoScholarship must have the information required to create a modern system without surpassing their boundaries. As this may lead designers to construct frameworks that don't meet commerce necessities. The designer cannot ensure that he can do anything the client inquires without considering in case they can. Since improvement includes a parcel of developers must be open to everyone's sees additionally be responsive in the event that any feedback is shared. System designers may be advertised bribes from competitors to confirm a few vital data and may abuse the system itself, but as a BCS developer it must be moral and not acknowledge it.

**C.2.3 Duty to Relevant Authority**

Developers from CoScholarship need to carry out their duties professionally with wants of the pertinent specialists. Developers must not engage or cause any circumstances that will result in clashes of intrigued between the designer and the company. In expansion, designers cannot take advantage of others' lack of information and involvement. For case, since most individuals don't have a parcel of IT information, at that point engineers can't trick them and imagine the framework is free of any bugs and culminate indeed in the event that they know there are a few bugs within the system.

**C.2.4 Duty of Profession**

System developers from CoSchoalrship need professionals and can't do anything that can bring debate to the calling. In expansion, when building a modern framework, framework designers have to be keep up great connections with all staff and everybody included. Not fundamentally any kind of discrimination. As a proficient, engineers must acknowledge the obligation to preserve the notoriety of the calling and not mishandle it. As a developer of the BCS system, he or she must be willing to share their information and experiences with others. System developers can share data and information with their staff since they do not have much encounter and information in IT.