tudent ID nt Information System

Student Review Report – Icon College Student Information System

Submitted By

Course

Professor

Date

Table of Contents

[**Project Scope** 3](#_Toc3386773)

[**Objective** 3](#_Toc3386774)

[**Using Object Oriented Approach in Designing the System** 3](#_Toc3386775)

[**Advantages of Using Object Oriented Paradigm** 4](#_Toc3386776)

[**Disadvantages of Using Object Oriented Paradigm** 5](#_Toc3386777)

[**Suitable System Development Methodology** 5](#_Toc3386778)

[**Improving Some Areas** 6](#_Toc3386779)

[**References** 7](#_Toc3386780)

# **Project Scope**

The main scope of the project is to develop an information system that can help tutors to record details with accurate information. All the lecture notes can uploaded by tutor to the system, so that students can view those lectures from anywhere.

# **Objective**

The principle aim of developing this IS is to keep up student records adequately and will oversee the schedule of students, can track student attendance will get valuable records based on information. As the data increases, it will be troublesome for the association to oversee student records. Thus, the usage of Student Information System in Icon College will help to deal with all information and will diminish the time taken in dealing with that record.

# **Using Object Oriented Approach in Designing the System**

We have select object oriented approach for system analysis of SIS as The OO procedure guarantees numerous advantages such as minimizing development time, reducing resources that are required to keep up existing frameworks, enhancing code reuse, and give the better competitive advantages to Icon College. We have used UML diagrams in order to depict the processes of Student Information System.

UML centers around three structural perspectives on a framework, that can be functional, static, or we can say dynamic. UML diagrams like use-case diagrams can be utilized to delineate the utilitarian view. The static view can be portrayed as characteristics, methods, classes, relationship as well as messages. The dynamic view can be shown by sequence diagrams, collaboration diagrams, as well as various state charts. These diagrams can be shown iteratively when the prerequisites of proposed data framework are completely comprehended and the structure is understood. (Rob, n.d).

# **Advantages of Using Object Oriented Paradigm**

Being system analyst, I have chosen object oriented approach in order to define various diagrams because object Oriented Paradigm is the modern approach of developing system, which has turned out to be a better tool for modelling complex frameworks. This analysis allows developments as well as modification over a significant time and provides better support during a wide scope of utilizations. This methodology utilizes the idea of objects as the unit of the association. (Bouktir, T. & Gherbi, 2016).

**1. System Stability -** This methodology will in produce frameworks that are versatile to change, where changes can be made without real interruption, with negligible time as well as efforts, and with very small fear of disturbance in the system. This steadiness and versatility occur with the objects in light of the fact that the framework is intended to oversee furthermore, support the business activities.

**2. Maintainability -** These strategies produce frameworks that can be kept up and upgraded with more promptly. These frameworks generate fewer errors than frameworks delivered by different strategies and are effectively adjusted or enhanced to meet evolving necessities.

**3. Reality-based frameworks –** The procedures utilized with this approach give an undeniably progressively precise image of the clients' business task and its data needs, prompting a last framework that is nearer to what the client requires.

**4. Data Accessibility –** This approach tend to lead better structure of databases, accordingly information is more available and usable.

**5. User Contribution and Possession** – The users are more completely associated with the frameworks venture. The final product is that the user has to own the framework, and this causes a dimension of co-operation that can be seen. (Post, n.d).

# **Disadvantages of Using Object Oriented Paradigm**

Various disadvantages of using object oriented paradigm are given as following:

1. This methodology is complex to extract plan data for the components of the system like UI, application systems, and database or records

2. Input as well as output data is dispersed in numerous sequence diagrams in the form of input and output messages. Various classes portray the information

3. No single repository has been defined for the data; they are dispersed by using class definitions as well as defining use cases.

4. The detailed knowledge will be required for having better analysis as well as system design.

5. This approach is difficult in order to oversee frameworks advancement venture and the strongest part of programming which mainly relies upon packages that are complex; in this manner undertaking span is difficult to evaluate. (Rob, n.d).

# **Suitable System Development Methodology**

Being system analyst, I would like to suggest agile method for developing Student Information System. The agile software development strategy mainly focuses on the short iterative programming release cycle. This structure is designed for intensely which includes the stakeholders as well as we show them exhibits the current state of the new software. This can allow stakeholders for making proposals and it also recommend changes in the development process of the software with the goal that the software will be able to track what the clients really want.

This methodology helps programming ventures to improve the desires for when programming will be completed, and will find what can be possible in release cycle, and can effectively track in the development process. The client assumes an imperative job in agile methodology with key duties to drive the venture, collaborate always with business clients and give prerequisites and partake in retrospection to test the delivered product. (Edeki, 2015).

# **Improving Some Areas**

The main thing which has been learnt from the project is that object-oriented paradigm is best option for system analysis approach. This approach is closely related to system development approach. The best part of this approach is that processes are subdivided into sub-processes. This provides better idea of the system that which processes need to be included in the required system.

The object oriented methodology considers bottom-up approach. It consolidates information and procedures or we can say methods into the objects. Various use cases and UML diagrams are utilized in order to show different perspectives and usefulness of the framework and is generally known as Unified Modeling Language (UML). The objective of this analysis is for improving the quality and efficiency of frameworks analysis and configuration by making it increasingly usable. In order to continue into the plan stage, object oriented structure includes a change procedure that changes true ideas into a product show that gives better solution. In the given analysis, we can also develop entity relationship diagram in order to better understanding of database which will be implemented during development process. Also, only one process has been considered in sequence diagram. In order to better understand the entire system, some more processes can be shown in the diagram. (Lin, 2011).

# **References**

Bouktir, T. & Gherbi, A. (2016). Object-Oriented Software of Power System Analysis. Retrieved from - <https://www.researchgate.net/publication/255640825_Object-Oriented_Software_of_Power_System_Analysis/download>

Edeki, C. (2015). AGILE SOFTWARE DEVELOPMENT METHODOLOGY. European Journal of Mathematics and Computer Science Vol. 2 No. 1, 2015. Retrieved from - https://www.idpublications.org/wp-content/uploads/2015/05/Agile-Software-Development-Methodology.pdf

Lin, J., C. (2011). Various Approaches for Systems Analysis and Design. Retrieved from - http://www.umsl.edu/~sauterv/analysis/termpapers/f11/jia.html

Post, E. (n.d). Advantages of using the object-oriented paradigm for designing and developing software. Retrieved from - https://pdfs.semanticscholar.org/0c3b/98172de01f22f1694bd582dec6163f614a95.pdf

Rob, M., A. (n.d). Dilemma Between the Structured and Object-Oriented Approaches to Systems Analysis And Design. Retrieved from - https://pdfs.semanticscholar.org/93b1/f1620f8cf2b05b348139ef73b85741875a56.pdf