**IFT 458/598: Middleware Prog & Database Security**

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Module 3 Assignment: ERD Diagram

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Git: <https://github.com/AnuragShahare/M3A3/>

**Create a Basic ERD diagram that Relates a Student with the Courses and Student Contacts.**

Diagram, schematic

Description automatically generated

**Export the ERD Diagram in PDF Format:** Added the PDF in zip file

**Create any assets like word documents:**

**Project Title: Creating Basic ERD for Student, Course, Contact**

**Introduction:**

In the given project we are creating an ERD diagram to show the relationship between three entities(Student, Course, and Contact) as per the documentation provided in Module 3, assignment 3. the project was created using the Lucid chart maker as per the instruction.

Graphical user interface, application

Description automatically generated

**Project Overview:**

Requirements: Lucid Chart, SQL, Visual Studio, JavaScript.

**Project Estimates:** The Project has multiple phases like Database designing, creating the database, adding Graphical representation to display the meaningful data, as well as using the right tools to do so. we are considering the Waterfall model to complete this activity. In the first activity, we decide on the tools and software for our project, it will take 1 week time and cost 10,000$ for licenses. the second activity Database designing and creating will cost 2000$ and it will take 5 months to complete. The third activity, implementing GUI and integrating different modules will take 2 months to complete and will cost 5000$

**Risks:**

**Technical Risks:**

Technical risks refer to the functional risk or performance risk which means this technical risk is mainly associated with the functionality of the product or the performance part of the software product.

Some reasons for technical risks:

Frequent changes in requirement

Less use of future technologies

Less number of skilled employees

High complexity in implementation

Improper integration of modules**.**

**Schedule Risk:**

Schedule risk refers to time risk or schedule risk associated with project delivery. Bad progress affects the development and handover of the project. These risks are mostly pointed out when there are delays, as project development does not progress in time and has a direct impact on project delivery. Ultimately, if schedule risk is not managed properly, it will lead to project failure and ultimately it affects the economy of the organization/company very badly.

Some reasons for Schedule risks:

Time is not estimated perfectly

Improper resource allocation

Tracking of resources like system, skill, staff etc

Frequent project scope expansion

Failure in function identification and its’ completion

**Budget Risk:**

Budget risk refers to the currency risk that arises primarily from going over budget. The financial aspect or project should always be managed by decision, but if the financial aspect of the project is poorly managed, budget problems will arise giving rise to budgetary risks. Therefore, adequate fund distribution and management are necessary for the success of the project, otherwise, it may lead to the failure of the project.

**Phase 1: Designing ERD:**

we create the entities and decide on the relationship with other entities which is necessary to establish the connection between the entity. For instance, one student must take at least one course and he can take many courses. Here In the Student table, Student\_id is the primary key.In the Course table, Course\_id is the primary key and Student\_id is the foreign key.

**Phase 2: Development**

Based on the previous step we have designed below ERD diagram below using the Lucid chart platform:

Diagram, schematic

Description automatically generated

**Reference:**

<https://www.geeksforgeeks.org/different-types-of-risks-in-software-project-development/>