

422 Application Development Practices - Final Group Project – Edge Converter

Your team has been asked to take over a project for a company that suffered loss in losing developers. The project in question is poorly designed and implemented and has not been finished. The project needs to be refactored and finished by the end of the semester following Scrum principles through three Sprints.

The project currently reads in a file that is created by Edge Diagrammer (a data modeling tool) and generates the SQL statements required to create the tables for a MySQL database. Your general overall task is to *evaluate the application*, *refactor the code* and *make it as reusable and extensible as possible*. There are two goals for the finished project:

1. **Generic Input.** Have the application be able to replace *Edge Diagrammer* (it is expensive) file with a schema description file (e.g. XML, JSON, etc.) generated from another diagramming tool, and perform the same functions, again with minimal changes to the application itself.
2. **Generic Output.** Have the application be able to generate the appropriate statements for any number of database management systems (e.g. MySQL, Oracle, etc.) for the current *Edge Diagrammer* file, with minimal changes to the code. You need to think of how you can structure the code and provide it with the information it needs to create the tables on a different DBMS without major rewriting of the code. This will allow the company to switch vendors with minimal effort.

These goals should be achieved by using any number of the methods we discussed or will discuss in class. You need to use a version control system for all your work (to be demonstrated in class), including any documents that are required:

1. Host your project on *GitLab* in the *iste-422-800(1)-g** repository (* is your group number)
2. Name your project as *EdgeConverterG**
3. Inside your project, the *docs* folder is for all the documentation that will be required.

Milestones

There are 3 project milestones to track your project engagement and accomplishments throughout the semester. The whole project is worth **50%** of the final course grade, and the project grade points are evenly distributed across milestones. The project is due end of week 13.

Peer Review

In the end, you will be peer reviewed. You will also have to review yourself. Depending on the review, you could lose up to 5 pts from your project grade. Also, if you do not submit a meaningful review, you will lose 5pts from your project grade.

Tracked Project Engagement

Your contribution to the project will be tracked and reviewed throughout the semester. If you have not contributed to the project as expected, you will not earn the group grade, but will be penalized based on how much you missed.