**IFT458/598 – Project 2**

Yuan Li & Edward Halper

**Introduction**

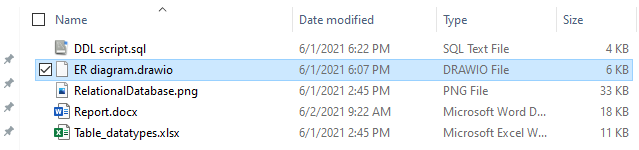
……???

**Description of your work**

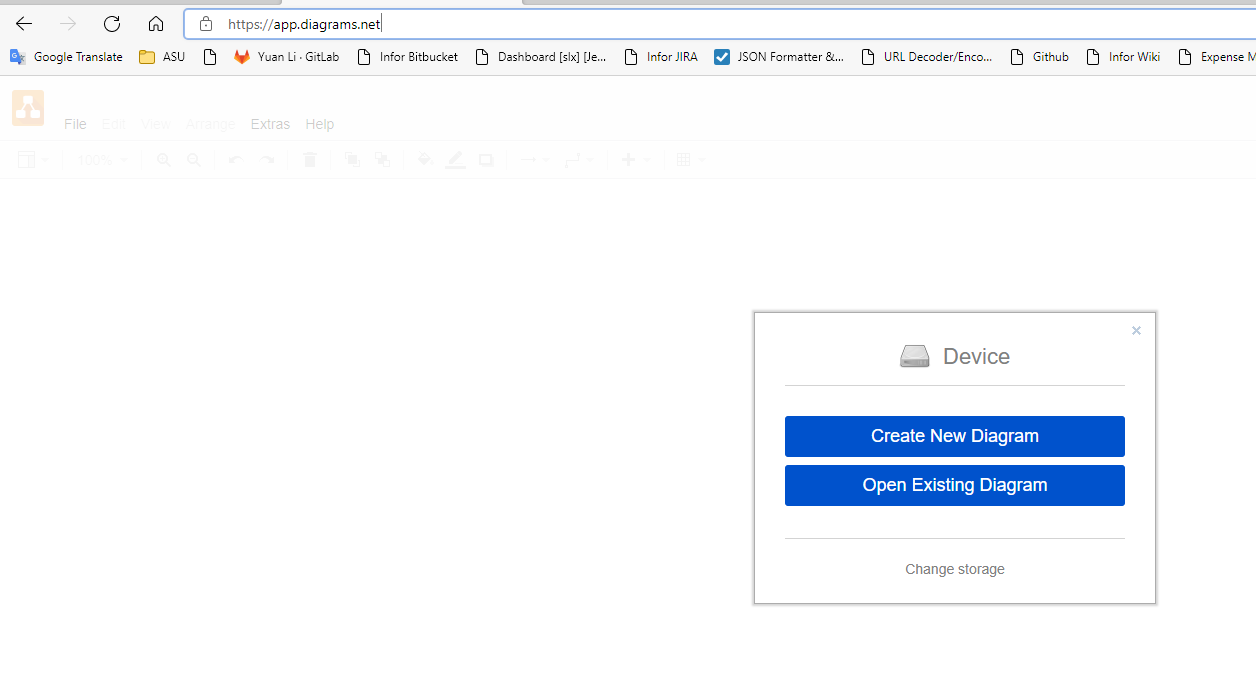
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| --- | --- | --- |
| Name | Item | description |
| Yuan Li | ER diagram | I used <https://app.diagrams.net/> to draw the conceptual ER diagram.  Create entity, relationship, and finally map to tables |
| Yuan Li | SQL script | I used MySql to define the DDL script. It corresponds to my ER diagram and my partner’s relational diagram too |
|  |  |  |

**User Manual**

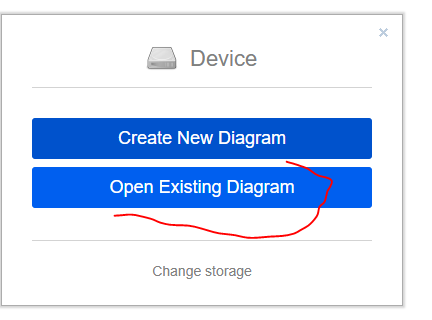
Step1: In the zip file, there is a file called ER diagram.drawio



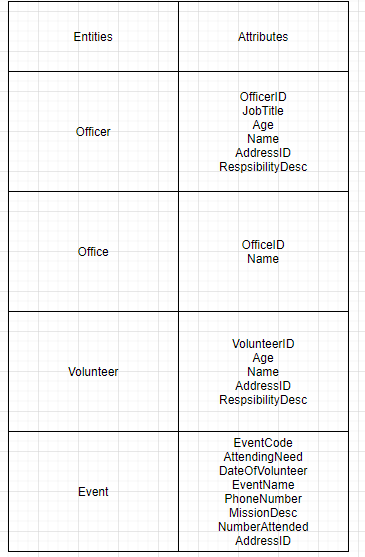
Step2: Go to <http://app.diagrams.net>



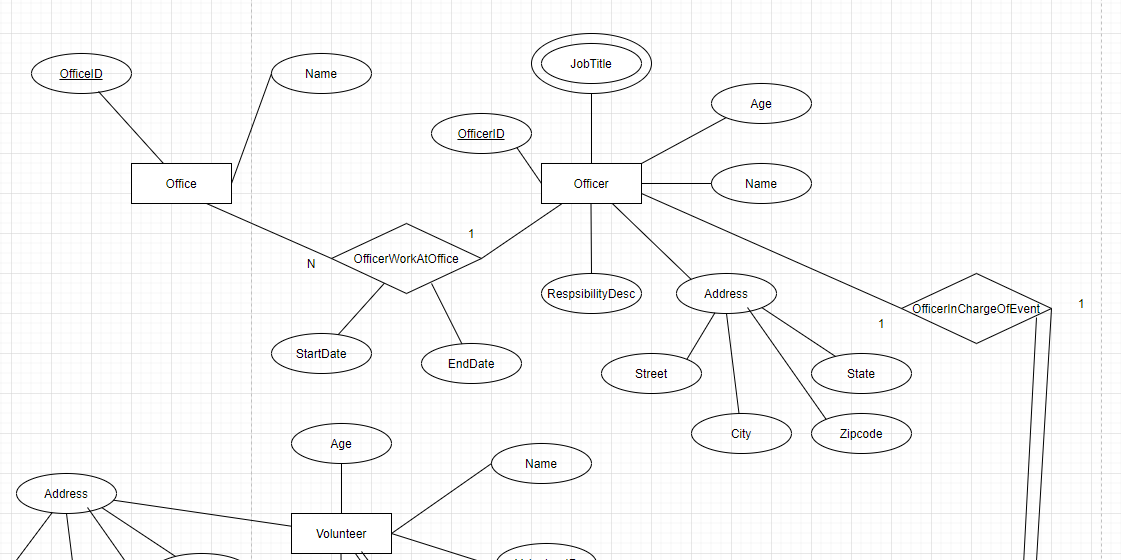
Step3: select Open Existing Diagram, and select ER diagram.drawio in your folder

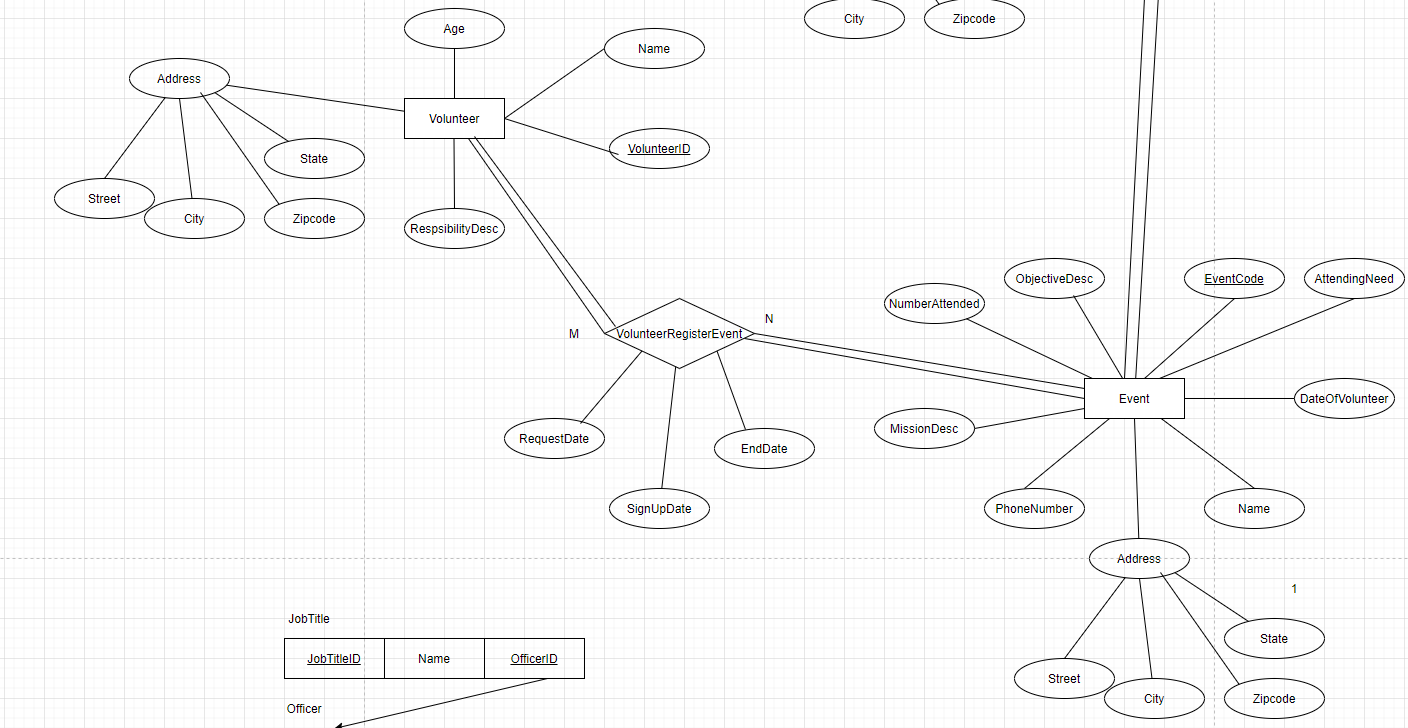


Step3: you will see the simple entities table in the diagram

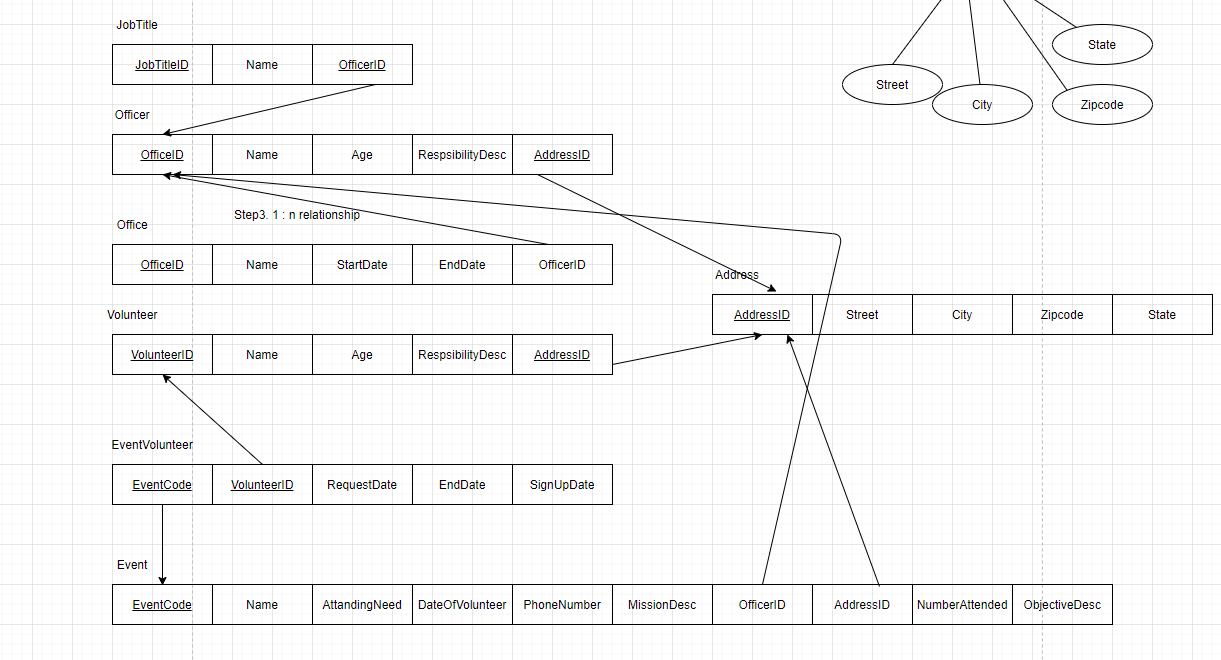


Step4:Scroll down, you will see the ER diagram including entities, attributes, and relations

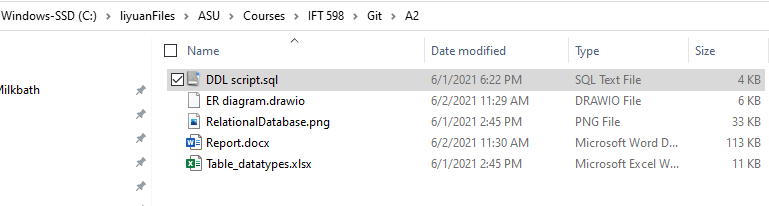




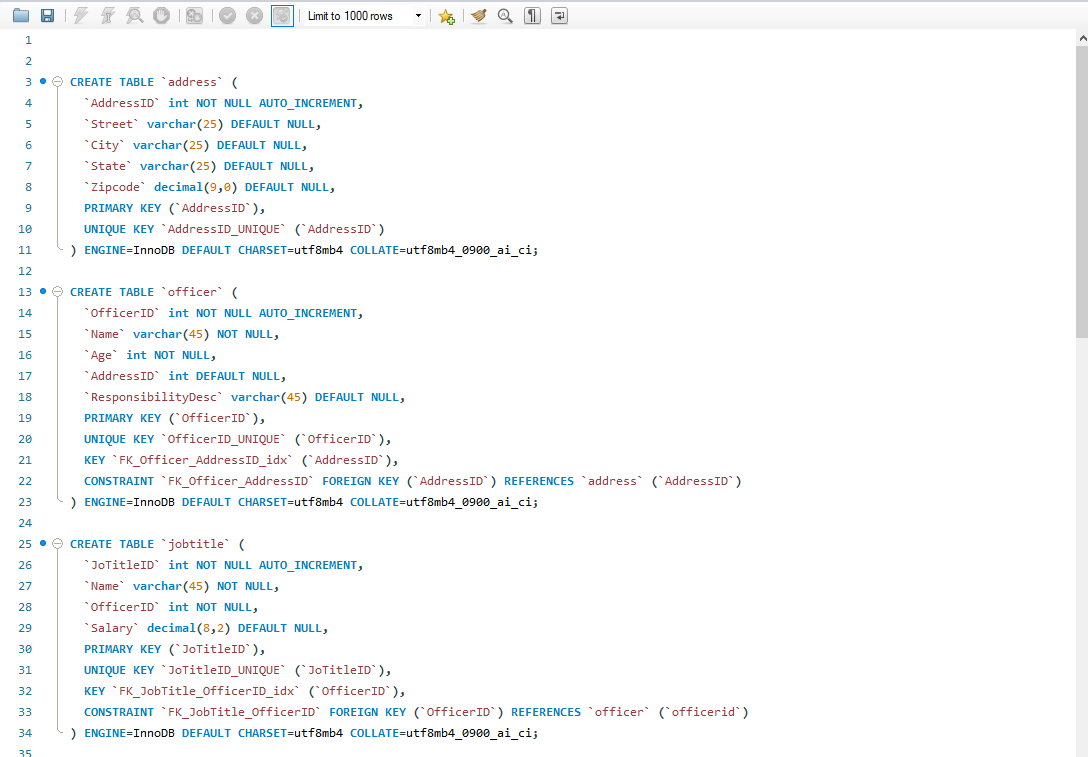
Step5: continue scrolling down, you will see the ER diagram mapping with relation diagram. We first had 4 simple entities but ended up with 7 entities. That’s because we have one M:N relationship and two multivalued attribute



Step6: Open the DDL scrip



Ste7: Open the DDL script







**Yuan’s Conclusion:**

I learned how to design database from the concept to implementation. I used to design the database directly from database, and then generate the diagram from database, it is kind of backwards process. I never followed the conceptual algorithm to design the ER diagram step by step. I think the step by step design will help catching all the requirements. I also learned the relationship attribute; a lot of attributes are only existing when the relationship exists, so we can add as many as attributes to the relationship entity/table.

Now if you give me an ER diagram, I think I will understand it and can implement it in database accordingly. I also learned MySQL, I never used MySql before. I installed MySQL and designed tables and created the DDL scripts. MySQL is very similar to SQL Server, it’s actually easy to pick it up. The improvement is the ER tool I am using, it is online ER too, you have to open their website to draw your diagram and open your existing diagram, and there is no an smart way to organize your diagram layout. Instead of dragging and dropping.

**Edward’s Conclusion:**