

Project Steps

STEP 1

- Form your project group (maximum 6 students). In case you can not form a group, individual projects are possible
- Decide on the database application you will develop
- Think about the database application you will develop and write a one page report which describes the world that you will model, and the data that you will store.
- Draw an ER diagram based on the description. The ER diagram should be fairly complication reflecting the size of the project group. Groups of 6 students should come up with a database application which has at least 9 entity sets, with key constraints, participation constraints, ISA hierarchies etc. In general the ER diagram that you will submit should contain at least $(3 + \text{group size})$ entity sets.
- The document you will submit should contain the description of the database application and the ER diagram. You may use the editor that your TA showed during the recitation to draw the ER diagram.
- Submit your work in PDF format through sucourse. The document should contain the title of the project and students in the group. Each student in the same group should submit the same report.

STEP 2

In this step you are expected to complete the following tasks:

- 1- Write the relational schema of your project with respect to your ER Model.
- 2- Create your tables on MySQL.
- 3- Insert records/data to each table. If a table is an entity, add at least 5 records to the table and if a table is a relation, then add at least 10 records.
- 4- Create a page called index.php. In this page, connect to the database, retrieve the rows of an entity and display them on a table. You can choose any entity in your project you want.

Expected Submission:

A pdf file containing relational schema of your system (relationalSchema.pdf).

?Sql dump of your tables (including the insertions) (sqlTables.sql).
index.php

For Sql dump, you can use the Export option on phpMyAdmin. Archive all your files into yourGroupName_step2.zip and submit through SuCourse.

Make only one submission per group.

STEP 3

In this step of your project you will design your pages and determine the use cases. A use case is a list of actions or events which describe the interactions between a role (i.e. end-user, admin) and system to achieve a goal.

For your projects, you do not have to create complicated use cases. For example, registering a user, signing in or buying a ticket could be one of your use cases.

For the 3rd phase of the project, we want you to create your use cases. You should complete the following steps:

Each group should create (3 + group size) database-related use cases. Please describe your use cases in detail (You do not have to draw any diagram; a written description is enough).

Write the SQL statements necessary for each use case.

Design your pages and decide which use case belongs to which page. For example, if you design a movie site where users can buy tickets, decide in which page you should register user or let a user buy a ticket.

For submission, submit a PDF file containing the description of your use cases and page descriptions and a separate SQL file containing your SQL queries. Add comments to your SQL file that indicates which query belongs to which use case (e.g. `/* Query below belongs to use case - 1 */` etc.) Please make only one submission per group. (Don't forget to write your names in the PDF files)

STEP 4

In this phase of the project, you will finalize your projects. In the 3rd step, you have created the use cases for your project. In this phase, you will implement these use cases using PHP, HTML and you will beautify your pages with CSS.

The 4th phase will be the last phase of the project. At the end of this phase, you will have a final product which should be presentable. This means: You should beautify your pages with CSS, if your use cases are out of context, you should somehow put them into context (by creating content, story or modifying them a little), you should have proper navigation between your pages and you should have an introductory page which explains what your site is about.

The demo session for project step 4 will be in the finals week. In the next week during recitation, we will give you feedback about project step 4. If you complete your projects by next week and don't want to wait until finals week, you can also make a demo during recitation.

For submission, please upload all of your HTML, PHP and CSS files and your database (export it to a SQL file) in an archive file. As always, please make one submission per group.