

PROJECT PART 2: DATABASE MANAGEMENT APPLICATION FOR S.O.S.

In the second part of the project, you will be working on the relational database of S.O.S. You are required to design web-based applications for modules that are assigned to your group, including user interfaces, e.g., form-based UIs, graphical UIs, and menu-driven UIs, to support data storage and retrieval activities of S.O.S.

You can create an application using a programming language of your choice. Your application will basically access S.O.S.' database and do Create, Retrieve, Update, and Delete operations on the database.

You will use **the database model**, which is uploaded on ODTÜClass, to set up the database and to generate data. While generating data, please be sure that you have enough records for each relation to test the required functions. The user of your application should be able to perform the required functions emphasized in the previous parts, including DFDs.

- For the Performance Management module, the user should be able to generate the following reports:
 1. Response time: the report should include the response time for each request, the mean response time for each district, the mean response time for overall
 2. Number of requests: an ordered list of districts with respect to the number of requests, the number of requests met on time (within 2 days) for each district, the percentage of requests met on time for each district
 3. Number of requested items: an ordered list of the number of requested items under each category for the overall system, an ordered list of the number of requested items under each category for each district, and the percentage of requested items met through donations
 4. Expenses: the percentage of logistics and procurement costs for the overall system, the percentage of logistics costs for the district, an ordered list of the purchased item expenses under each category
 5. Inventory: an ordered list of the number of items under each category for the overall system, an ordered list of the number of back-ordered items; requested items cannot be met from either inventory or purchase, under each category for the overall system

The user should see the result of report queries on the screen and also should be able to export reports in .csv format.

You will use virtual servers to run your codes. Therefore, for each group, a virtual machine is generated. In order to access those virtual machines, you need to first sign in from [http://3.250.45.131/users/sign in](http://3.250.45.131/users/sign_in). You will also find the tutorials on ODTÜClass explaining how you can deploy and run your code on those virtual machines. However, for the time being, you can start to study on the project on your local servers.

DELIVERABLES

This is a **group** project of **six**. The deadline is **Monday, June 19, 23:59**.

You will not submit anything to ODTÜClass. In the repository of your group, the following should be included:

- Implemented database model
- Data set
- Source code
- Executable code
- User guideline