IMSE Work protocol

Date, Time	Length in Minutes	Task	Activity	Result	Responsibility	Remarks
16.12.2019-05.01.2020	2.450,00	Work protocol maintaining	Adding tasks to the protocol and describing them	The work that was done is fully documented	Lujza Lanyi	The length shows the length of all parts of the project in summary
16.12.2019, 14:30 - 16:15	105	Planning	Talking, trying out the IMSE examples, setting up environments	Decision: We are taking Volobuievas past DBS project as basis for this project	All	The original SQL files were done in Oracle SQL. There were some compatibility problems on testing them in a MySQL environment
16.12.2019, 16:00	5	Gitlab repository creation	Steps done over web interface, then cloned to local machine and pushed MS1 PDF and past DBS project	We can now share our work more easily	Karyna Volobuieva	-
17.12.2019, 16:00-17:30	90	Definition of docker-compose.yml	Comparing with other docker-compose files to create our own	A docker-compose.yml ready to be executed including a database container, a server container, php and our program as container	All	We were not sure what all the variables meant, where to put which parts and what we really needed and what could be left out
17.12.2019, 17:30-18:15	45	Testing docker-compose.yml	Trying out the docker-compose file with the command docker-compose up	Fixed errors with ports being already used, wrong definitions and volumes not being found	All	php-apache and nginx work, but mariadb is making problems
17.12.2019, 18:30-19:00	30	Adjusting Oracle SQL files to MySQL	Changing NUMBER to INT...	The SQL scripts now work in MariaDB/MySQL	Karyna Volobuieva	-
17.12.2019, 20:00	10	Creating Dockerfiles for various services	Created a dockerfile for the initialisation of the database	The dockerfile should copy the create.sql into the entrypoint for the database	Lujza Lanyi	-
18.12.2019, 11:00-14:00	180	Fixing docker-compose.yml	Trying to make the database initalise with tables, by - adding the create.sql into the mysql folder, adding a docker-entrypoint- initdb.d volume to the service in docker-compose	The docker containers are up and running, the website can be accessed over localhost:8080	All	After multiple hours of trying we could not get it to work with our create.sql script, however a test script worked

19.12.2019, 10:45-10:50	5		Fixing docker-compose.yml PART 3	Changed the entry about the volume that is supposed to add the create.sql; after reinitialising the whole container (deleting all containers and volumes) and rebuilding everything it finally worked;	The tables are in the containerized database	Lujza Lanyi	tested by docker exec command to enter bash in the container
19.12.2019, 11:00-12:00	60		SSL configuration	First try: letting the ssl certificate be created in dockerfile; that would not work because the files ended up nowhere Second try: Creating ssl certificate manually and adding it to a folder, then copying the files via dockerfile	Https works only by finding out the IP assigned by apache2	Lujza Lanyi	I do not know if apache was the best choice, nginx is supposedly easier to configure
19.12.2019, 11:30-14:00	150		Changing TestData Java file to fit MySQL	Changed the test data java file	The java file is now compatible with MySQL	Karyna Volobuieva	-
19.12.2019, 20:00-22:00	120		Fixing SSL configuration	I had to add two lines to the localhost.conf and rebuild the whole container with docker-compose --no-cache build	Https is enabled on the server and is being shown in the web browser.		Due to it being a self-signed certificate there is the typical warning to not enter the site
19.12.2019	120		Adapting php files to MySQL	First try changing all oci parts of the functions to mysqli did not fully work; some functions had to be replaced with different sounding ones which do an equivalent thing	No more errors come up when looking at the php over browser	Karyna Volobuieva, Lujza Lanyi	After talking we decided on using PDO instead of mysqli because it is reusable for different databases as well
19.12.2019	60		Creating Java File to create tables	This java file takes the create.sql and executes it on an empty database	The java file creates the tables	Karyna Volobuieva	-
19.12.2019, 22:30-23:00	30		Fixing database connection in php files	The php files refused to connect to the database, in order to make them connect one had to use the container name as $servername: 'mariadb'	The connection is successful	Lujza Lanyi	-
20.12.2019, 20:00-22:00	120		Changing from OCI methods to PDO methods	This was getting from procedural to object oriented handling of the database	The php files do not display error message on opening anymore	Lujza Lanyi	-
22.12.2019, 21:00-22:00	60		Fix for database tables which did not get created and overridden php files	After merging there were some overridden php files	The php files are back to their working state and the tables get created again	Lujza Lanyi	-

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23.12.2019	120	Filler script	Creating a jar with the mysql connector jar and container for filler	The script successfully adds the data on first try	Karyna Volobuieva	It would only work on Karynas machine, so there was room for improvement; frequent problems with a SQL connections failure
26.12.2019, 23:00 - 27.12.2019, 00:20; 11:00-12:00	120	Making docker stack deploy work	Docker stack deploy would not run the project, after removing parts of the docker-compose.yml related to deploying it would now work		Lujza Lanyi	One has to build the projects first before running `docker stack deploy` otherwise it will not create tables and such
27.12.2019, 22:00- 28.12.2019, 00:30	150	Implementing connection pooling	Used the C3PO library to implement connection pooling in the Datagenerator, then bundling it in a jar with the library jars	When the application gets started via docker-compose up the filler container keeps trying to connect until it finally works, it now works 90% of the time	Lujza Lanyi	Since Lujza was only able to execute the data-filling by restarting the container (docker restart <container-id>, she thought about a way too keep trying to connect to the database until it is possible, since containers do not wait for other containers to be ready. Karyna did an attempt at fixing this with a wait-for-it.sh
30.12.2019	60	Fixing docker stack deploy	I removed the deploy part from docker-compose.yml	Docker stack deploy now deploys the application	Lujza Lanyi	One does have to wait a little while for the inserts to be executed, there are no logs shown immediately like with docker-compose, the can be looked up with `*docker service logs <service_id>*` manually
30.12.2019, 23:00-00:30	90	implementing of elaborate reporting use case	I created the SQL script to fetch the necessary data for the report and implemented a php function to create a csv file from the data. There was also a button added to the kochkurse.php.	The button is displayed in the Kochkurse.php	Lujza Lanyi	-

31.12.2019, 11:00-12:30	90	debugging of elaborate use case	The SQL script had to be changed because it was not working, the error was a forgotten group by. In order to make the button really work some changements to the kochkurse. php and the report.php had to be done too.	On click of the "Generate report" button a report.csv is created.	Lujza Lanyi	-
31.12.2019	60	inspecting and testing use cases	We went over the list of use cases which have to be done to determine what is missing and what has to be added. Afterwards we tested already existing code to see if it needs to be fixed.	A list of remaining TODOs has been created.	All	-
02.01.2020	30	Creating descriptive README.md	I added commentary to all parts of the tasks of our project including how to start the project	The readme can be found in the project root directory	Lujza Lanyi	-
04.01.2020, 18:00-23:00	300	fixing php files	Added "clear fields" button, added new search in Kochkurse, report use case fixed, added new php file for Manager and links (works as search) for attributes added	The changes described on the left work.	Karyna Volobuieva	it was necessary to fix report use case because it showed the double count of Kursteilnehmer
05.01.2020, 12:00-15:00	180	Writing the overall report for MS2	Describing all parts of the project.	The report is done.	Karyna Volobuieva	-
05.01.2020,17:00-18:00	60	Changing the position of the reporting use case	Removed the reporting use case from Kochkurse.php to move it to the menu into its own site	The reporting use case is now in the menu according to the description of the use case	Karyna Volobuieva	-