

Last name: \_\_\_\_\_

Mark a clear 'X' on the selected answer option, and erase all markings from the others. Usually you will select only the **BEST** answer (radio button). But, when you see notation like this, it means select all that apply

- ☐ jello
- ☐ hello
- ☐ bello

\*\*\*\*\* Docker exam 2022S \*\*\*\*\*

The questions must be understood in basic docker (and some in basic Kubernetes + docker) environment.

1. What are the goals we want to achieve with docker containers? Select **three** most common goals
  - ☐ independence of environment's varying settings
  - ☐ reusability
  - ☐ reducing memory usage
  - ☐ possibility to quickly take into use images created by somebody else
  - ☐ reducing the need for more processing power in host computer
2. What do containers typically have? Select **three**
  - ☐ Backend kind of functionality
  - ☐ Hardware access, e.g. playing sounds or accessing a thermometer device
  - ☐ Its own file and folder sandbox
  - ☐ Network connections
  - ☐ USB bus access
3. What does a 'container registry' mean?
  - ☐ Statistics and info about a docker image
  - ☐ System for automating deployment, scaling, and management of containerized applications
  - ☐ File that list all the containers in a computer
  - ☐ A site/server/service in the internet from where you can pull docker images
  - ☐ The structure of the docker container
  - ☐ File that list the running containers in a computer
  - ☐ A utility that allows to run multiple containers in a system
4. Which of the following ones belong to the container registries listed in course material?
  - ☐ GitHub, GitHub page, Heroku, BitBucket
  - ☐ Confluence, AWS, Azure, GCP (Google Cloud Platform)
  - ☐ Microsoft BizTalk Server, Mule CR, Oracle Enterprise Service CR, Progress Software Sonic CR
  - ☐ Azure Container Registry, Google Container Registry, Amazon Elastic Container Registry, GitHub packages
  - ☐ CSC Rahti, Firebase, Mongolab, etc. ...

5. What does the following mean in a 'docker run ...' command, or e.g. in docker-compose.yaml file?

... 1234:9092 .....

- ☐ The process with PID 1234 runs at port 9092
- ☐ The process with PID 9092 runs at port 1234
- ☐ We expose the port 9092 from the container processes to the 'native host' computer / outside the container, as port 1234
- ☐ You can kill this container both with 'docker stop 1234' AND 'docker stop 9092'

6. Before/as you take some server (e.g. database server) into use based on a ready-made docker image (made by e.g. some community), what you might want to know: select three most crucial

- ☐ the Dockerfile contents
- ☐ server admin's user name
- ☐ the IP address of that server
- ☐ server admin's password
- ☐ ports listened by the server process

7. What does a 'container' mean?

- ☐ A site/server/service in the internet from where you can pull docker images
- ☐ Image's access to the file system
- ☐ File that list the running containers in a computer
- ☐ A runnable (or running) instance of the image
- ☐ A template out of which you can make virtual machines
- ☐ A template out of which you can create and run containers
- ☐ A template out of which you can make images

8. What does the 'image' mean?

- ☐ A site/server/service in the internet from where you can pull docker images
- ☐ Image's access to the file system
- ☐ File that list the running containers in a computer
- ☐ A runnable (or running) instance of the image
- ☐ A template out of which you can make virtual machines
- ☐ A template out of which you can create and run containers
- ☐ A template out of which you can make images

9. What does the 'volume' mean?

- ☐ A place/server/service in the internet from where you can pull docker images
- ☐ Container's access to the file system
- ☐ File that list the running containers in a computer
- ☐ The size of the image on disc
- ☐ The RAM memory that a running image takes

10. What do we do with the 'docker exec kafka -it ...and more options and so on...' command?

- Shut down the instance
- Start the instance
- Run a process inside a container, from outside of the container.
- Run a container temporarily, without changes to any file system.
- Give the image more execution privileges, like sudo

11. What does 'docker compose' mean?

- Statistics and info about a docker image
- System for automating deployment, scaling, and management of containerized applications
- A site/server/service in the internet from where you can pull docker images
- The structure of the docker container
- A utility to run multiple containers as a system
- A read-only layer that is the base of your image.

12. What is 'Kubernetes'?

- Statistics and info about a docker image
- System for automating deployment, scaling, and management of containerized applications
- A site/server/service in the internet from where you can pull docker images
- The structure of the docker container
- A utility to run multiple containers as a system
- A read-only layer that is the base of your image.