

Regional ICT Skills Championship 2022

IT Software Solutions for Business

1 Introduction

This document describes the ICT Regional Championships in the category IT Software Solutions for Business. You are tasked to develop a desktop application consisting of various windows. You will have three hours to complete as many of the listed tasks as possible. You are free to perform the required tasks with all the skills you have using the tools provided. To provide all participants with the same starting situation, you get a virtual Windows machine for the competition with all tools preinstalled required to solve the tasks (see the tools section for more information). The description and tasks are included in the virtual machine. Along with the task description you will get a Styleguide, various resources to be used during the competition and a SQL file (MySQL or T-SQL) to set up your database with the corresponding tables and test data. Any further information about the tasks and the delivery of your work you will get at the championship.

2 Bring your own device

Competitors will use their own devices for the championship. This also has the effect that internet usage is no longer restricted. Please note that any communication about the championship tasks, or the exchange of the tasks or solutions, is strictly prohibited and will result in disqualification of all involved parties from the current and future championships.

The virtual machine for the championship will be distributed a few days before it takes place to give everyone enough time for downloading it.

On your host following software is **required** to run the virtual machine:

- For Windows/Linux: **VMware Workstation Player** version 14 or higher (free)
- For Mac: **VMware Fusion Player** version 10 or higher (free)

It is suggested to download and test the VM (see [Preparation VM](#) section).

2.1 Rules

To perform the tasks, the following rules apply:

- The use of any communication is prohibited (mobile, tablet, chats, etc.).
- No external storage can be used (USB, memory card, etc.).
- You are not allowed to talk with other candidates (offline or online).
- No sound devices (headset, headphones, etc.) can be used.

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2.2 Tools

The virtual machine set up for the competition will contain following tools:

- Java
 - Open JDK 17.01
 - IntelliJ IDEA Community Edition 2021.1.2
 - SceneBuilder 17
- .NET
 - Visual Studio Community 2022 (16.10)
- Databases
 - Microsoft SQL Server 2019 Express
 - JDBC Driver
 - Management Studio 18.10
 - MySQL 8
 - JDBC / .NET Connector
 - Workbench
- Windows 10

You are allowed to tweak the tools or install additional tools. However, keep in mind, that your end product must be executable in the original virtual machine.

3 Preparation VM

To allow familiarization with the environment, installed editors, and their plugins, the VM is provided and can be downloaded from the OneDrive share of "ICT Berufsbildung Schweiz":

https://ictbb-my.sharepoint.com/:f:/g/personal/info_ict-berufsbildung_ch/EqYAX7qKOEVGgfKF69DLsXQBOWFCUmc1ZuorJGS-n5v3Kg?e=Yvv008

3.1 **Very Important!**

By downloading this VM the competitor is agreeing to following rules:

- The VM is to be used **exclusively** for the competition.
- Any **distribution** of the VM is strictly **forbidden**.
- After finishing the competition, the VM including the compressed archive and any resulting files have to be **deleted** until the end of the competition day.
- The competitor takes **full responsibility** for downloading, storing and using the VM.

3.2 Notes

It may be necessary to have a Microsoft account to be able to use some MS products.