

User Documentation

TELOS CALC

—
The IHK Grade Calculation Tool for IT Specialists

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Note: This document has been automatically translated from German. Minor inaccuracies may occur.

Short Description: TELOS CALC is a tool for calculating the IHK final exam grades of IT specialists in the field of application development. It is primarily a desktop application for Windows, but experimental support for macOS and Linux systems is available. This manual is intended for end users and contains installation, usage, and troubleshooting instructions.

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1 System Requirements

- Windows 10 or newer (for the provided telosCalc.exe)
- Optional: Python 3.8+ if running from source or using Linux / macOS.

2 Installation & Launch

Running the EXE

1. Copy telosCalc.exe to any directory.
2. Double-click to start. On first launch, a configuration file (telosCalc.conf) will be created in the same directory. This file is read each time the program starts, restoring the settings from the previous session. When closing the application, the configuration file is automatically updated with the current settings.

Running from Source (Optional)

1. Install Python 3.8 or newer.
2. Create a virtual environment: `python -m venv .venv` and activate it via `.\.venv\Scripts\activate`.
3. Install dependencies: `pip install -r requirements.txt`
4. Run the application: `python main.py`

or:

Build the application: Using `pip install pyinstaller && pyinstaller main.spec`. You can specify the target architecture in `main.spec`; if none is set, the current system architecture is used.

3 Using the GUI

The menu bar (see Figure 1) provides the options File, Language, Appearance, and Help. Under Help, the options Documentation (linking to this document) and About (showing application info) are available.



Figure 1: Menu bar / Import & Export of input parameters

3.1 Color Scheme (Appearance)

The interface offers multiple color schemes, each available in light and dark variants. These can be selected via Menu Bar > Appearance > {light / dark} > {color} (see Figure 2). Figure 3 shows an example of a dark color scheme.

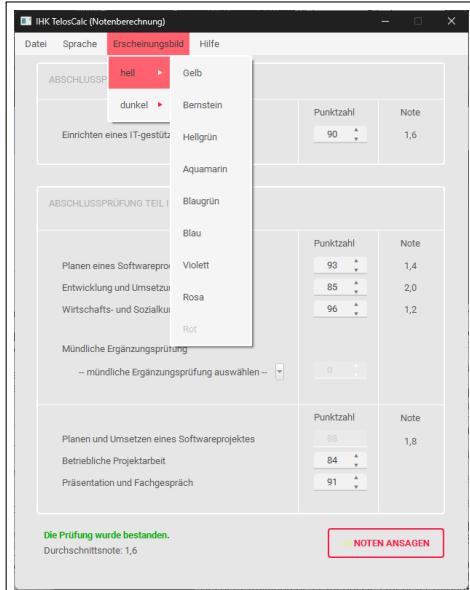


Figure 2: Available Appearance Modes

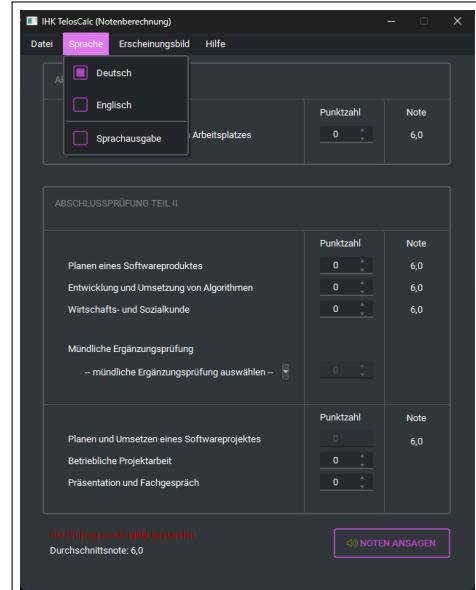


Figure 3: Dark Theme / Language Options

Under Language, you can switch between the German and English versions of the application (see Figure 3). The checkbox next to the language indicates the active one. The same menu also provides the Speech Output option — see Section 3.3.

3.2 Input Parameters

Input parameters can be saved or loaded via File > {Load Input Parameters / Save Input Parameters} (see Figure 1). All entered data from the input fields is stored in JSON format. Loading parameters overwrites any existing input values.

3.3 Speech Output & Accessibility

When speech output is enabled, the interface provides spoken feedback for navigation. Hovering over elements or navigating with the Tab key triggers speech output. The Announce Grades button also becomes active; clicking it announces all partial grades, the overall average, and whether the exam was passed, in the selected target language.

All interactive elements can be navigated using the Tab key. The top menu is accessed with [Alt], navigated via arrow keys, space, and Tab, and confirmed with [ENTER]. The [ESC] key exits the top menu.

4 Grade Calculation

The grade calculation follows the official IHK criteria as outlined in the training regulations, BBiG, and IHK guidelines. Specifically, the decision process for “passed” or “not

passed" follows the logic shown below:

Fachinformiker/Fachinformatikerin
Fachrichtung Anwendungsentwicklung
Ausbildungsordnung vom 01.08.2020

Die Abschlussprüfung ist bestanden, wenn die Prüfungsleistungen – auch unter Berücksichtigung einer mündlichen Ergänzungsprüfung – wie folgt bewertet worden sind:

1. im Gesamtergebnis von Teil 1 und Teil 2 mit mindestens „ausreichend“,
2. im Ergebnis von Teil 2 mit mindestens „ausreichend“,
3. in mindestens drei Prüfungsbereichen von Teil 2 mit mindestens „ausreichend“ und
4. in keinem Prüfungsbereich von Teil 2 mit „ungenügend“.

Der Prüfling kann in einem Prüfungsbereich eine mündliche Ergänzungsprüfung beantragen.

Dem Antrag ist stattzugeben,

1. wenn er für einen der folgenden Prüfungsbereiche gestellt worden ist:

- a) Planen eines Softwareproduktes,
 - b) Entwicklung und Umsetzung von Algorithmen oder
 - c) Wirtschafts- und Sozialkunde,
2. wenn der benannte Prüfungsbereich schlechter als mit „ausreichend“ bewertet worden ist und
 3. wenn die mündliche Ergänzungsprüfung für das Bestehen der Abschlussprüfung den Ausschlag geben kann.

Die mündliche Ergänzungsprüfung darf nur in einem einzigen Prüfungsbereich durchgeführt werden.

Die mündliche Ergänzungsprüfung soll 15 Minuten dauern.

Bei der Ermittlung des Ergebnisses für den Prüfungsbereich sind das bisherige Ergebnis und das Ergebnis der mündlichen Ergänzungsprüfung im Verhältnis 2 : 1 zu gewichten.

The option for selecting an oral supplementary exam only becomes available if such an exam is applicable. You can then navigate to the corresponding element with Tab or click the arrow to open the dropdown menu (see Figure 4). Only valid subjects are selectable. Once a valid subject is chosen, a corresponding score can be entered.

5 Troubleshooting

Application won't start: Check antivirus / SmartScreen; try running as administrator.

Configuration error: Rename or delete telosCalc.conf; restart the application if necessary.

TTS not working: Run from source; check console messages and install any missing packages.



Figure 4: Oral Supplementary Exam