The KTouch Handbook

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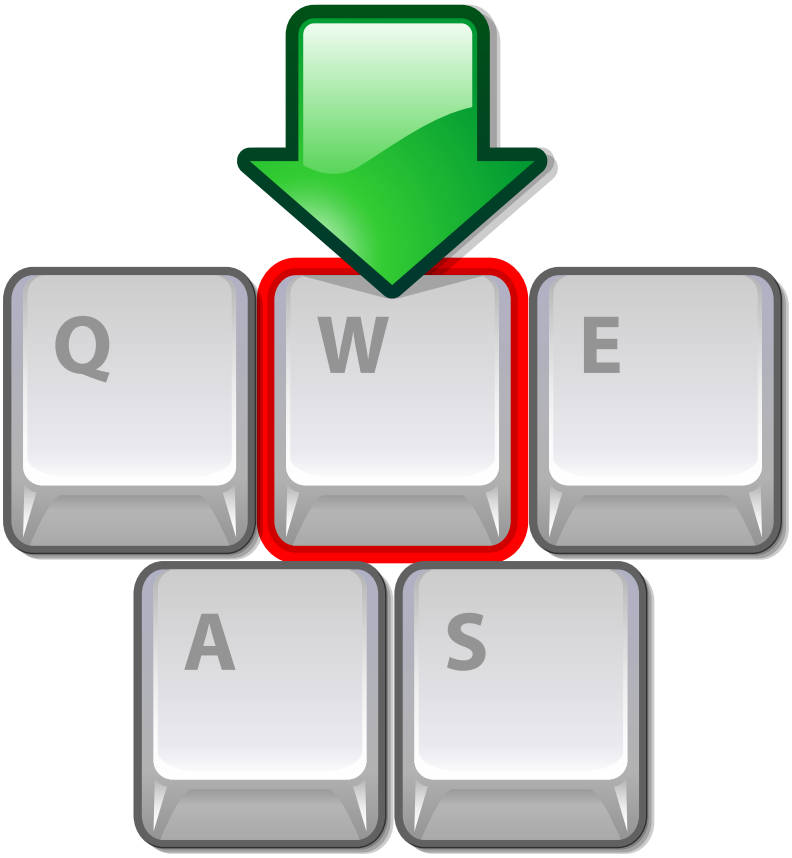

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Abstract

Typewriting Trainer is a program for learning to touch type. Typewriting Trainer provides you with text to train on and adjusts to different levels depending on how good you are. It displays which key to press next and the correct finger to use.

Chapter 1

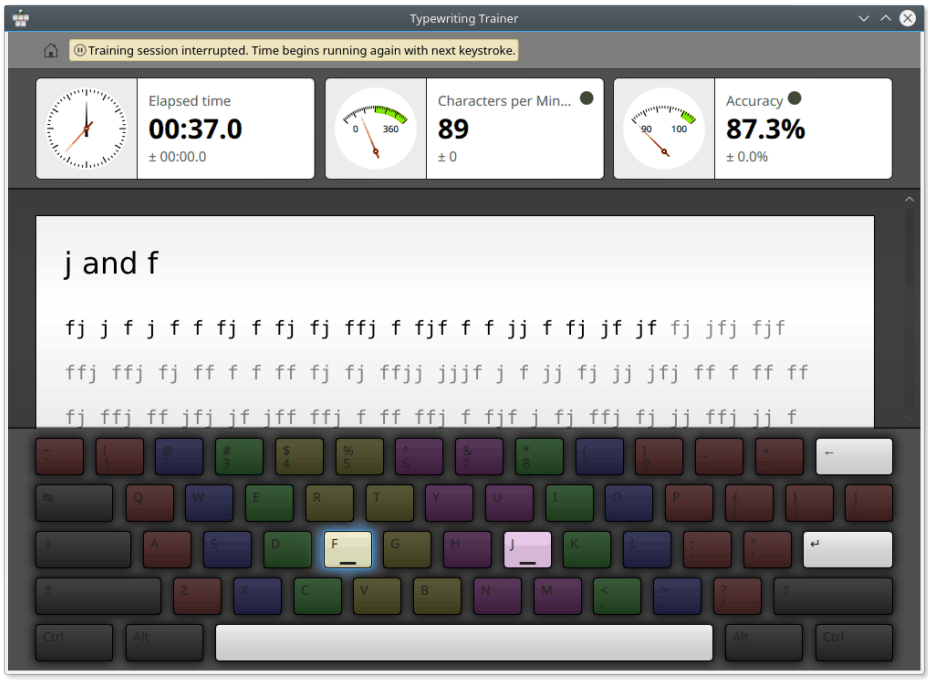
Learning touch typing with Typewriting Trainer

1.1 Introduction

1.1.1 What is Typewriting Trainer?

Typewriting Trainer is a program for learning to touch type.

Typewriting Trainer provides you with text to train on and adjusts to different levels depending on how good you are. It shows your keyboard and indicates which key to press next and the correct finger to use.



Typewriting Trainer is a touch typing tutor aimed mostly at personal use. You learn typing with all fingers, step by step, without having to look down at the keyboard all the time to find the right keys which slows you down a lot.

1.1.2 Features

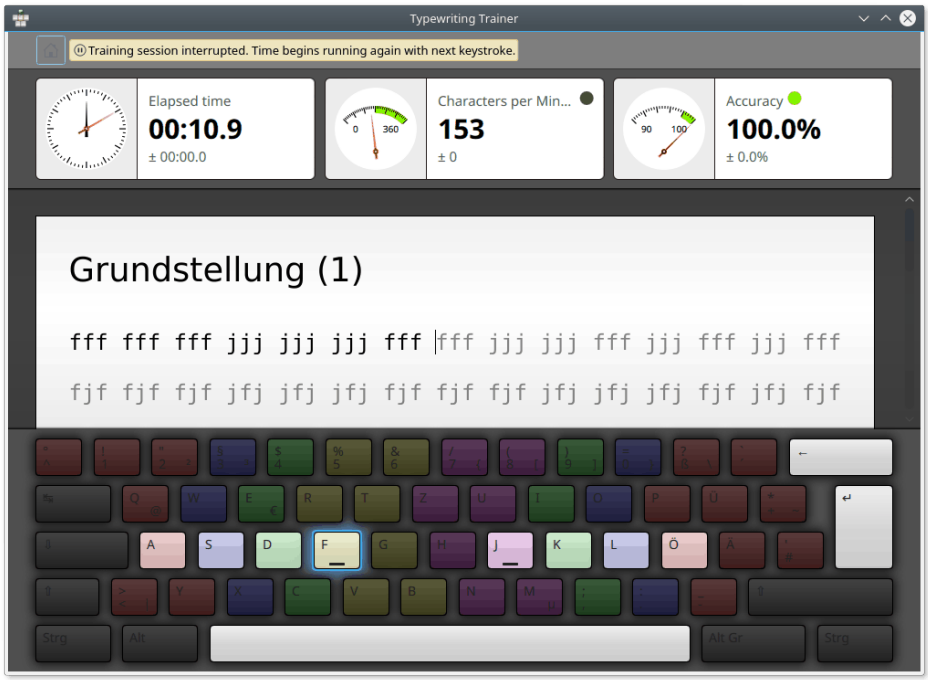
In its current version, Typewriting Trainer has quite a number of features, such as:

- Ships with dozens different courses in many languages and a comfortable course editor
- Support for different keyboard layouts with the ability to use and edit user-defined layouts
- During your training session Typewriting Trainer collects comprehensive statistical information to help you or your teacher analyze your progress

There are many more features which will be discussed in the appropriate chapters of this manual.

1.2 Getting started

Here's another screenshot of Typewriting Trainer in action, this time with a German keyboard and training lesson:



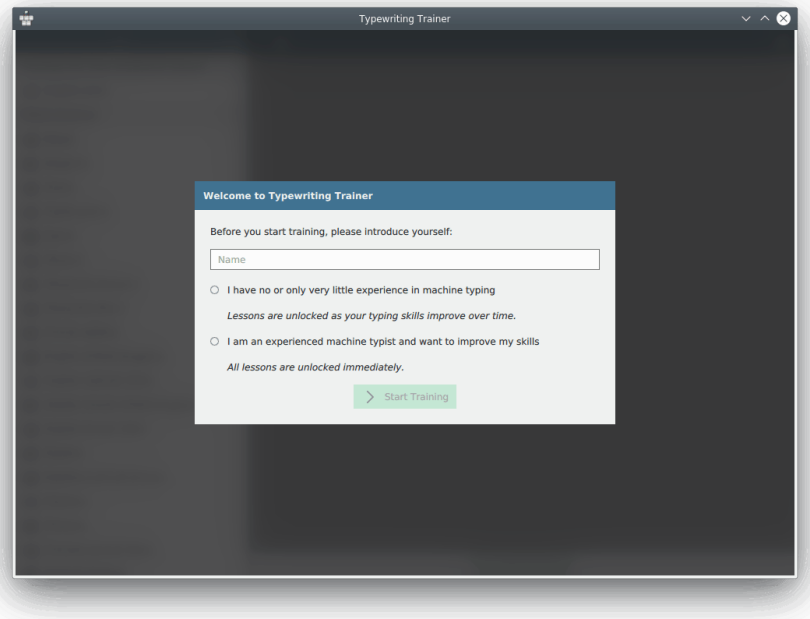
Even though learning touch typing with Typewriting Trainer and using the program should be very simple we will look a bit closer at Typewriting Trainer in the following sections.

1.2.1 Creating your first profile

The first time you start Typewriting Trainer it will open a special screen helping you to create your first profile. You can choose the name of your profile and the level of your typing skills.

> TIP
> The level you choose determines the general operation of Typewriting Trainer. In beginner mode lessons are unlocked one by one after you pass them, for advanced typist all lessons are available right from the beginning.

> **NOTE**
> Think about your choice, you won't able to change the type of a profile later. But you can always create new profiles to revisit this decision.



After pressing **Start Training** you will be taken to the home screen. This screen will also be the first screen visible when you run Typewriting Trainer the next time.

1.2.2 Picking a lesson

The home screen of Typewriting Trainer consists of a toolbar and the course selector. For more information see Section 1.3.

Typewriting Trainer will show you the first course available for your current keyboard layout.

You can switch between courses or choose custom lessons by clicking their thumbnails in the right part of the window.

> **NOTE**
> On some platforms, especially on Microsoft® Windows®, automatic keyboard layout detection is not available. In that case you have to click on the button in the toolbar, select **Configure Keyboard...** submenu and choose the name of keyboard layout or some keyboard layout which is similar to yours. If your keyboard is not included, you can define your own keyboard layout yourself, see Section 2.2.

Choose your lesson from the list on left of the window. You cannot choose the locked lessons with as they are too difficult for your current skills. Pass lessons to unlock new ones. The preview of the selected lesson will be shown on the right of lessons list.

> **TIP**
> More information about the selected course can be shown and hidden again using button next to the course title.

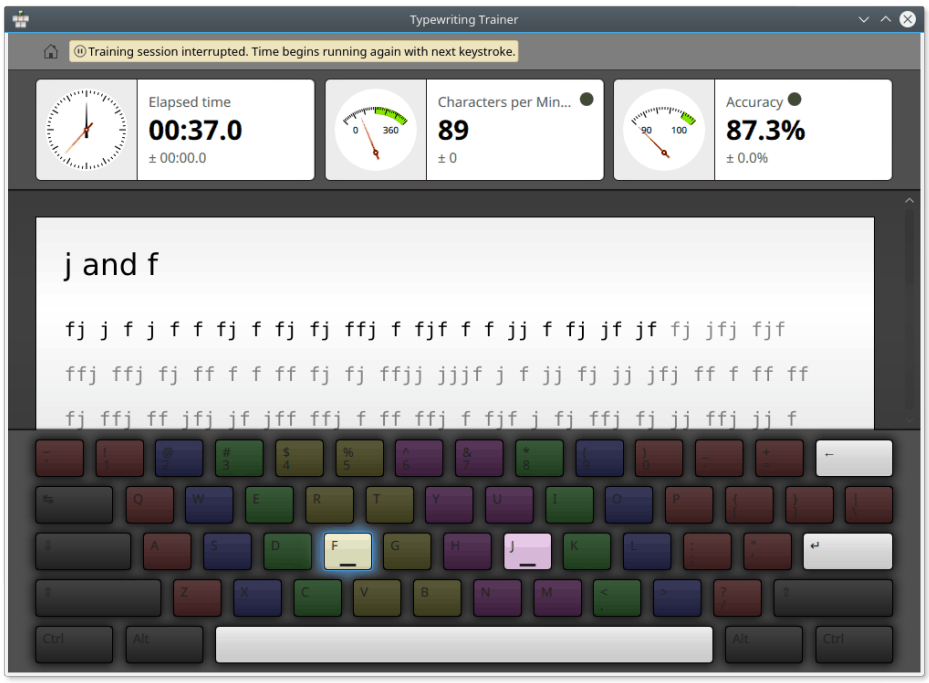
When you finished with the selection click on **Start Training** to go to the training Typewriting Trainer screen.

1.2.3 Training

The training window of Typewriting Trainer shows three main sections:

1. Some typing statistics in info boxes at the top

2. The text you need to type
3. The keyboard visualization



> **NOTE**
> Visibility of training screen parts can be configured using Typewriting Trainer configuration dialog.

Place your two index fingers on the two keys on your keyboard with the two little tactile markers near the center of the middle character row. With that done your other fingers will find their intended keys almost automatically. Your thumbs should rest above the space key, the only key you will ever use them for when touch typing. The other fingers should be placed on the three keys adjacent to the marked keys on the center row. Keys for the same finger are grouped together through their color. Try to move your hands as little as possible and always try to return your fingers to their resting positions after you have typed a character.

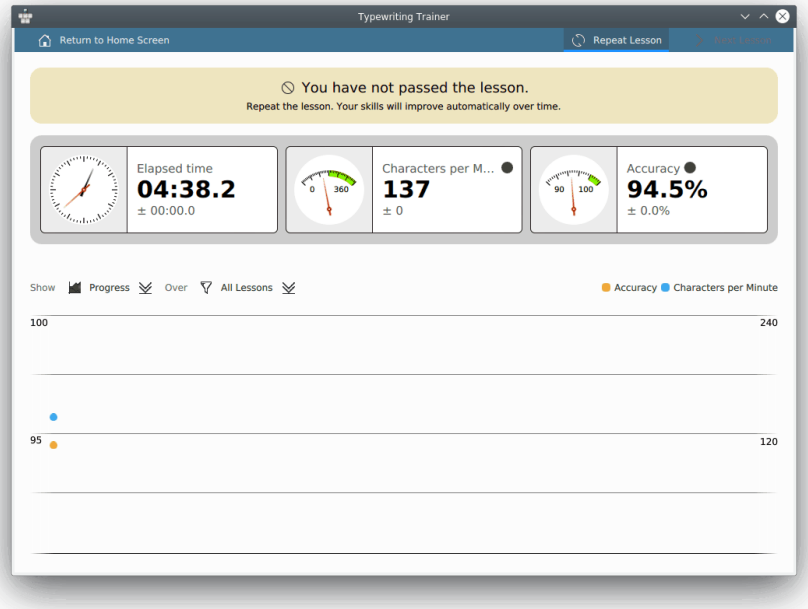
Start typing the text in the middle of the screen. The next key you have to press is always highlighted on the keyboard visualization. While you type you may make mistakes and hit the wrong key. In that case the characters will displayed in red and you have to hit **Backspace** as often as necessary to erase the wrongly typed characters.

When you have successfully completed a line of text you need to press the **Enter** to advance to the next line.

> **TIP**
> The key used to advance to the next line can be changed using Typewriting Trainer configuration dialog

1.2.4 Review your progress

When you have completed a lesson Typewriting Trainer will switch to the score screen. It displays your current training and lesson statistics and shows a graphical history of previous training sessions.



In the statistics dialog you can select to show a particular lesson or **All Lessons**. This is useful to distinguish between overall performance and skill in certain lessons.

If you feel ready for the next lesson press **Next lesson** button in the toolbar to continue with the next lesson of the current course or **Repeat lesson** button to try your skills on the current lesson again. The **Next lesson** button will be only available if you have passed the lesson.

If you want to switch to some other lesson or course press **Return to Home Screen**.

If you do not want to continue the training with Typewriting Trainer just close the application window.

1.3 Training Preparation

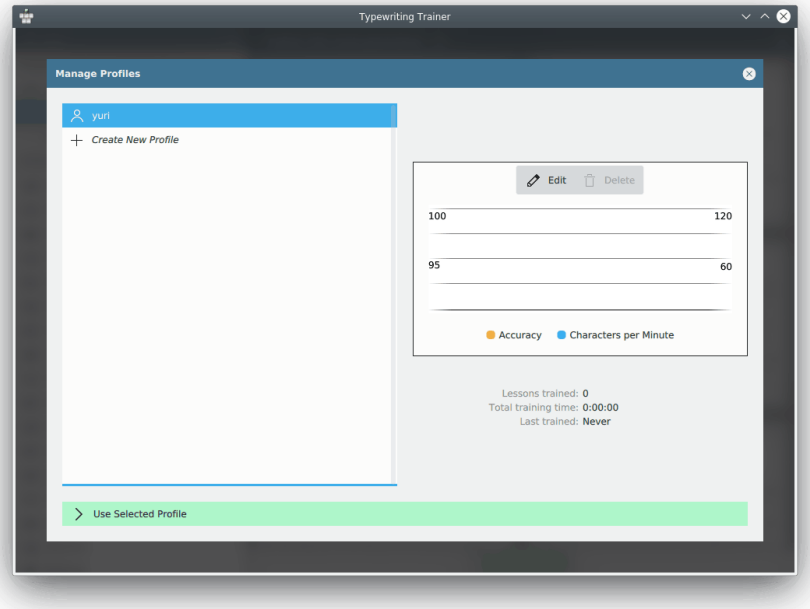
Pretty much everything in the Typewriting Trainer home screen should be self-explanatory. The top toolbar is meant to be the place where you can view and configure Typewriting Trainer settings. The course selector can be used to view the information about the courses and switch between them.

1.3.1 Typewriting Trainer toolbar

The toolbar of Typewriting Trainer houses the profile button at the left and the application menu button at the right.

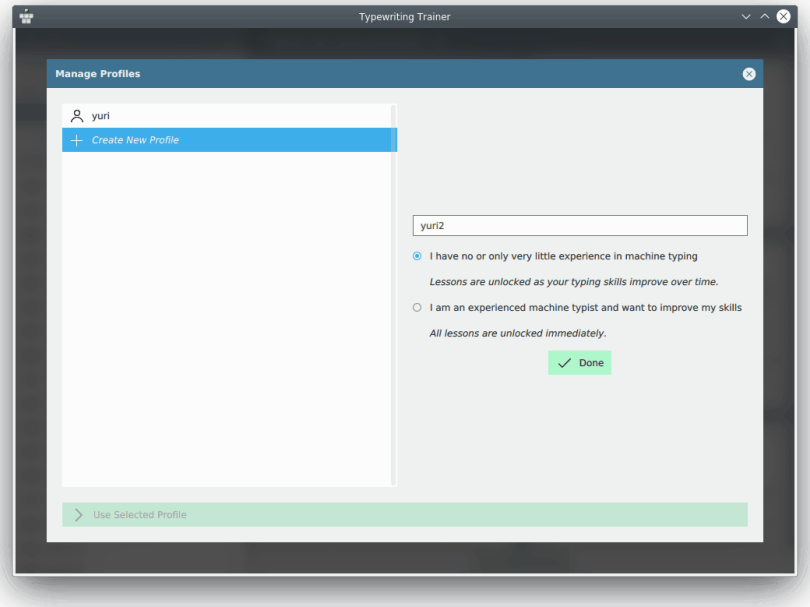
1.3.1.1 Profile management

The profile button with the name of your profile at the left of home screen toolbar can be used to manage Typewriting Trainer profiles.



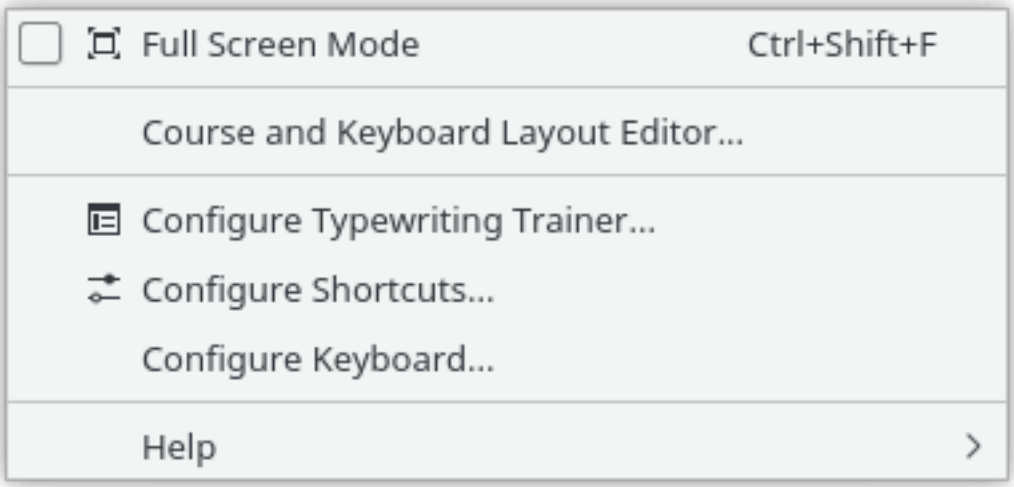
You can review the settings of the existing profiles, delete them or create a new profile using + button.

To switch to the review mode press **Edit**. To select a profile and return to the home screen press **Use Selected Profile** .



1.3.1.2 Typewriting Trainer menu

Typewriting Trainer menu can be opened using button in the toolbar of the home screen.



You can find a list of the menu items with their short descriptions below.

Full Screen Mode (Ctrl+Shift+F)
: Toggle full screen mode of Typewriting Trainer on and off

Course and Keyboard Layout Editor...
: Open the Typewriting Trainer editor window

Configure Typewriting Trainer...
: Display the Typewriting Trainer configuration dialog

Configure Shortcuts...
: Configure the shortcuts you want to associate with some actions

Configure Keyboard...
: A shortcut to the System Settings module to configure the keyboard settings. Useful to prepare for training on a different keyboard layout.

> NOTE
> On platforms lacking the support for detecting the keyboard layout automatically, especially Microsoft® Windows®, this entry is replaced with a submenu to select Typewriting Trainer's keyboard layout manually.

Typewriting Trainer has the common KDE **Help** menu item, for more information read the section about the Help Menu of the KDE Fundamentals.

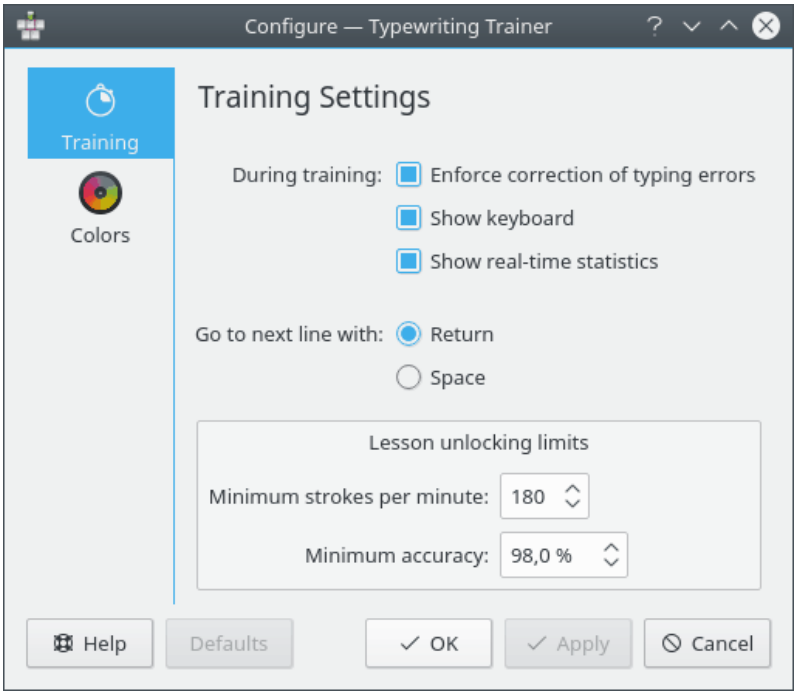
1.3.1.3 Configuration dialog

You can customize Typewriting Trainer quite a bit. The settings apply for all profiles globally.

Open the configuration dialog by pressing button at the right of the top toolbar of the home screen then choosing **Configure Typewriting Trainer...**.

Training Settings

In this dialog you can select the options that control tutor window appearance and how Typewriting Trainer behaves during training.



The **Enforce correction of typing errors** check box can be used to control whether typing errors have to be corrected.

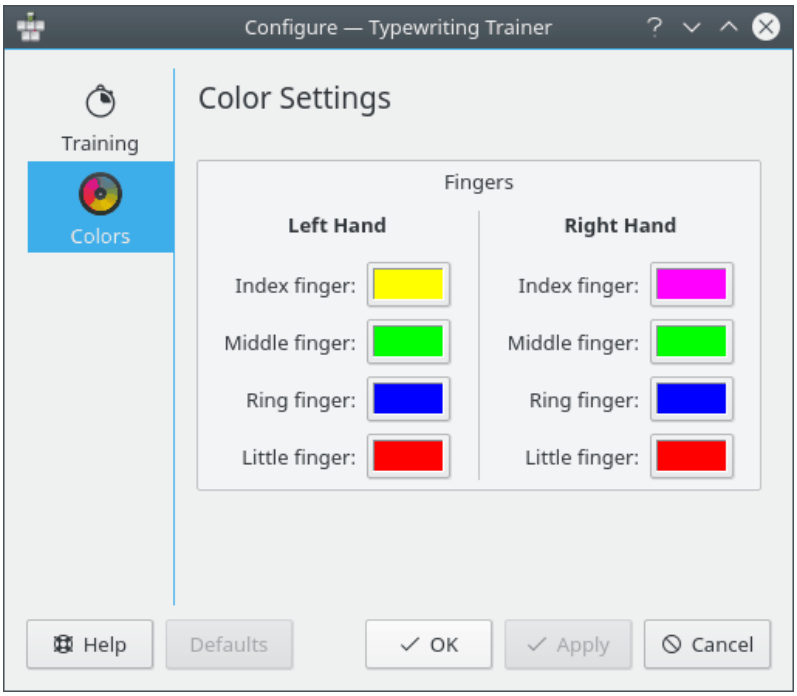
You can control the visibility of statistics and keyboard panes during training using **Show keyboard** and **Show real-time statistics** check boxes.

The keystroke to go to the next line of training text can be chosen from two options, **Enter** or **Space**.

The **Lesson unlocking limits** can be used to choose settings that control unlocking of higher level lessons. Typewriting Trainer checks the given limits at the end of each level and decides whether to unlock the next lesson. If the typing speed in characters per minute and correctness are *both* above or equal to the **Lesson unlocking limits** Typewriting Trainer will unlock the next higher level lesson.

Color Settings

In this dialog you can tweak the colors used by Typewriting Trainer.



You can select the background color for each finger keys.

1.3.2 Course and lesson selection

Typewriting Trainer automatically detects your keyboard layout and shows only the courses optimized for this layout.

> NOTE
> On some platforms, especially Windows®, keyboard layout auto-detection is not available. Use the application menu to select your keyboard layout manually.

1.3.2.1 Switching courses

Should there are more than one course available for your keyboard layout you can choose your favorite one using < and > buttons to the right of the label with course name. If there is only one course the buttons won't be visible.

1.3.2.2 Unlocking lessons

If you have chosen **I have no or only very little experience in machine typing** during initial profile creation you will find that some lessons are locked. These items are marked with 🔒 icon and cannot be accessed until you pass the previous lessons.

> NOTE
> The settings to pass lessons can be changed using Typewriting Trainer configuration dialog.

1.3.2.3 Training on a different keyboard layout

With Typewriting Trainer it is possible to use any keyboard layout for training. Just press the buttons that are highlighted by the trainer, regardless to the labels on your physical keyboard.

Select **Configure Keyboard...** in the application menu to select a different keyboard layout. After that Typewriting Trainer will adapt accordingly and present you its courses for this layout.

> NOTE
> On platforms without keyboard layout auto-detection, especially Microsoft® Windows®, you have first configure your operating system to use the layout you want to train on and then select the same layout in Typewriting Trainer via the application menu.

1.4 Efficient training

1.4.1 Training techniques

Hereafter, you can find some general advice about techniques for learning touch typing.

1.4.1.1 Steady speed

To be efficient when learning touch typing it is important not to simply try to type as fast as possible but to keep a steady speed and find a natural rhythm to press the keys.

1.4.1.2 Accuracy is a king

The next important thing is to focus one's attention on accuracy. Only if you mastered the use of the currently unlocked keys, which means you make only very few errors with them still, you will have chance in the following lessons with even more keys to handle. You will notice you become almost automatically master if you make only very little errors and you will save precious time if you don't have to correct that many errors.

> NOTE
> That is also the reason why the default accuracy level to unlock the next lesson is at 98% while the speed requirements are pretty moderate with just 180 characters per minute.

1.4.1.3 Correcting mistakes

If you made mistakes it's important to correct them efficiently. Correcting single characters is almost always slower than correcting the whole word. For the latter you have just to press **Ctrl-Backspace**, and retype the word. The mental overhead for this is very small. For the first you have to first locate the your mistake, delete precisely to the location of the error, determine the missing part of the word re-type it. This requires way more concentration when retyping the whole word.

1.4.2 Pausing the training session

1.4.2.1 Automatically

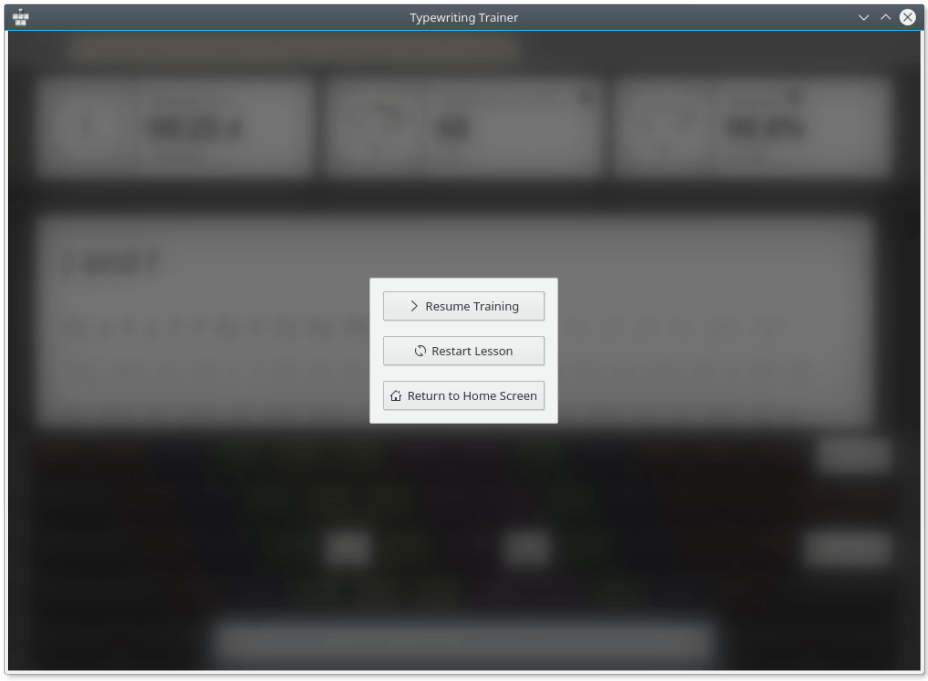
If you open any dialog or switch to different application while you are in a training session the training is paused and the timer is stopped until you focus Typewriting Trainer window again and hit any key.

The training session will also be paused if there will be no activity by the user for five seconds.

1.4.2.2 Manually

You can pause the current session manually using button in the toolbar.

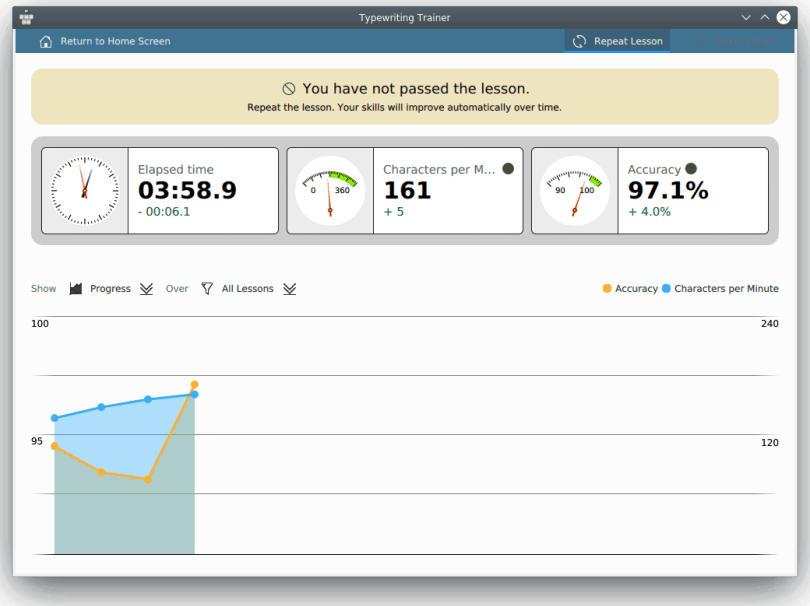
If you click on button in the toolbar Typewriting Trainer will pause the current session and show an overlay menu with some further actions.



1.5 Tracking the learning progress

After completing a lesson, you will not return immediately to the home screen. Instead a special summary and statistics screen is shown.

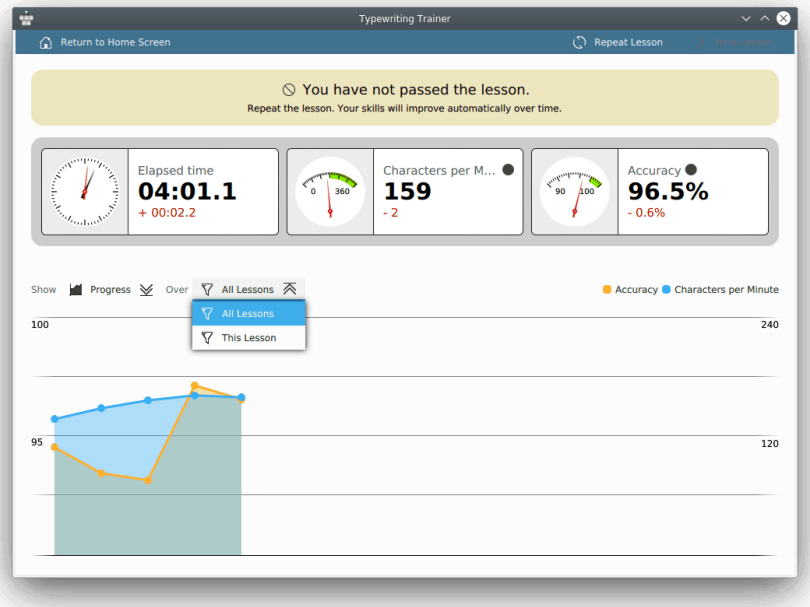
1.5.1 Speed and accuracy statistics



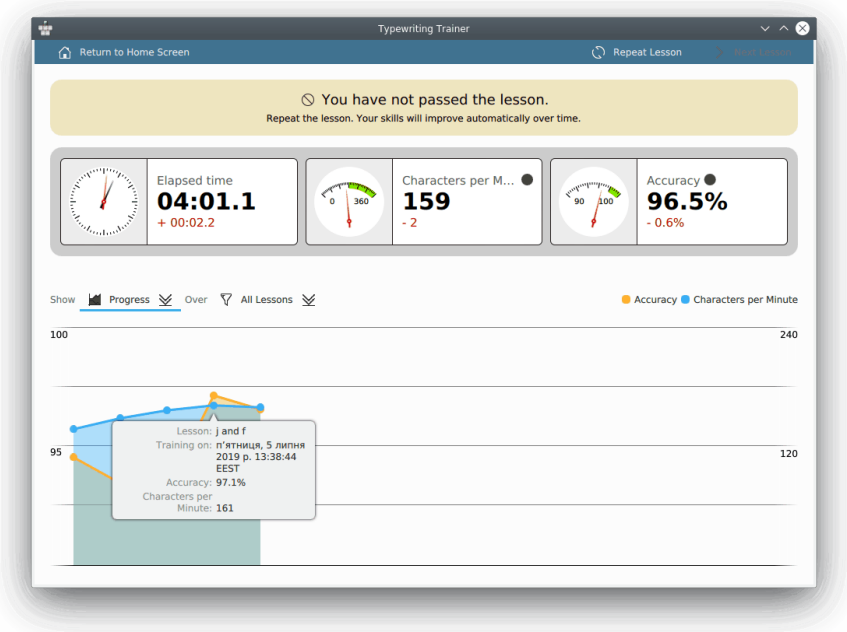
1.5.1.1 Filter per lesson

With the help of the speed and accuracy statistics page you can review your learning progress and identify your weaknesses.

The statistics data can be filtered by lesson using drop down box next to the **Over** label. This feature can be useful to control you progress in the current lesson and compare this progress with the progress in other lessons.

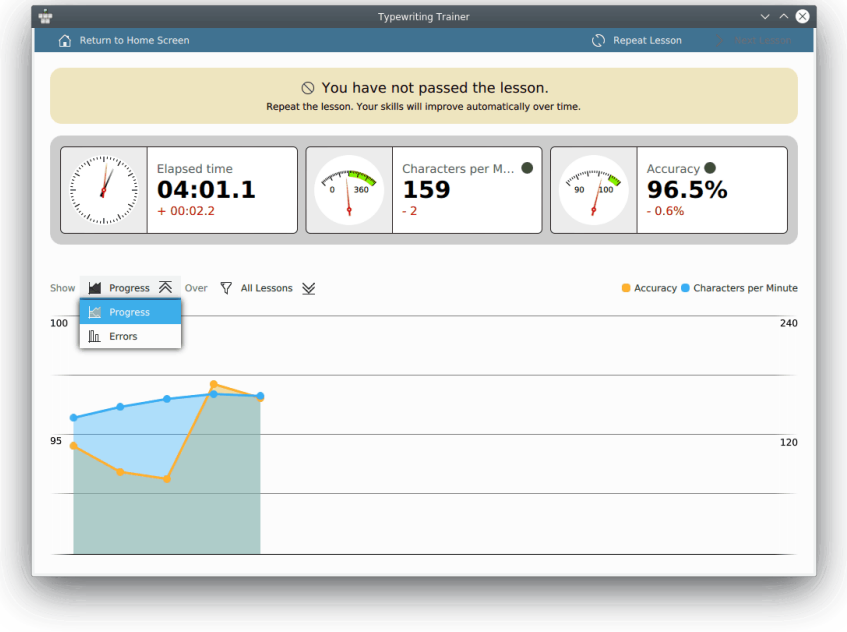


Additional data about the session can be viewed in overlays. If you hover the mouse cursor on a point on the graph Typewriting Trainer will show the statistics of the corresponding session.

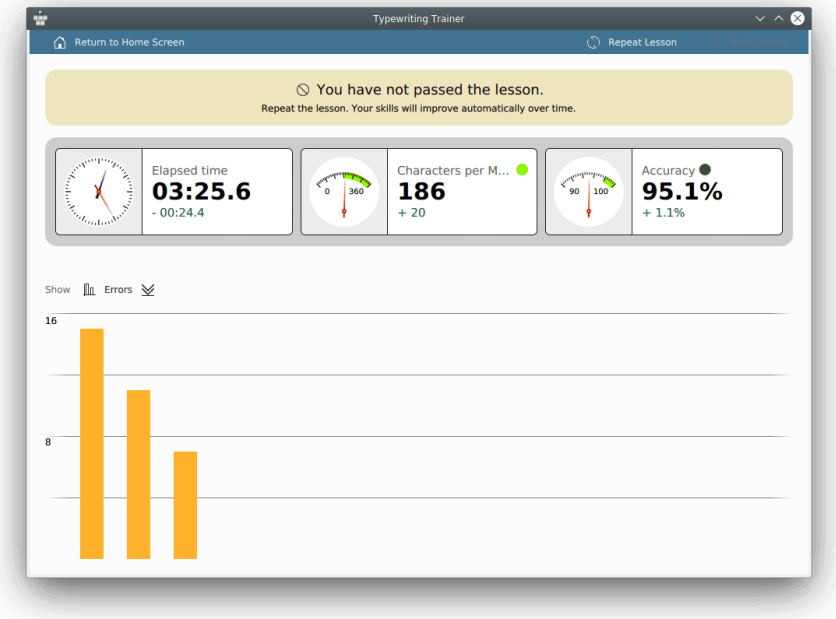


1.5.2 Errors statistics

The score screen can be switched to show errors rate for each key using drop down menu next to the **Show** label.



In this mode, Typewriting Trainer shows a bar diagram of errors for each key in the last training session.



You can switch back to the lessons graph using the same drop down menu next to the **Show** label.

If you have passed the lesson you may choose to start training on the next lesson right away by pressing **Next lesson** in the toolbar. Otherwise you can repeat the current lesson with **Repeat lesson** or return to the home screen with the remaining button.

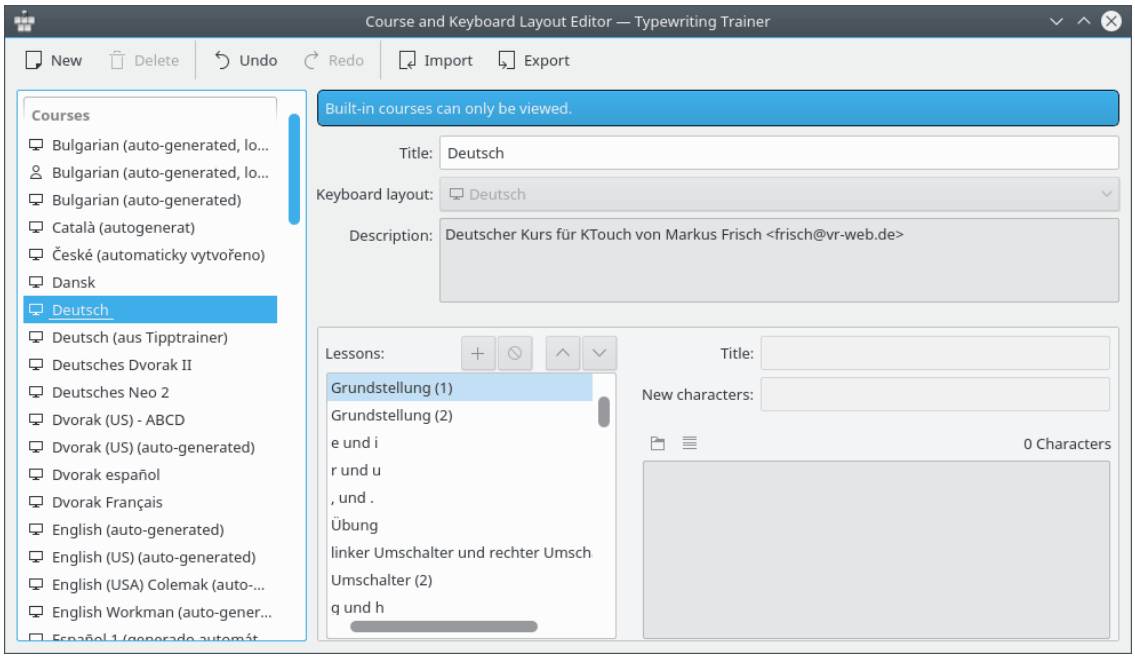
Chapter 2

Extending Typewriting Trainer

2.1 Creating courses

You can easily create your own training course using the built-in Typewriting Trainer course and keyboard layout editor. Press button at the right of the home screen toolbar then choose **Course and Keyboard Layout Editor...**. You can choose open a course file or create an empty course from scratch or using an existing course as a template.

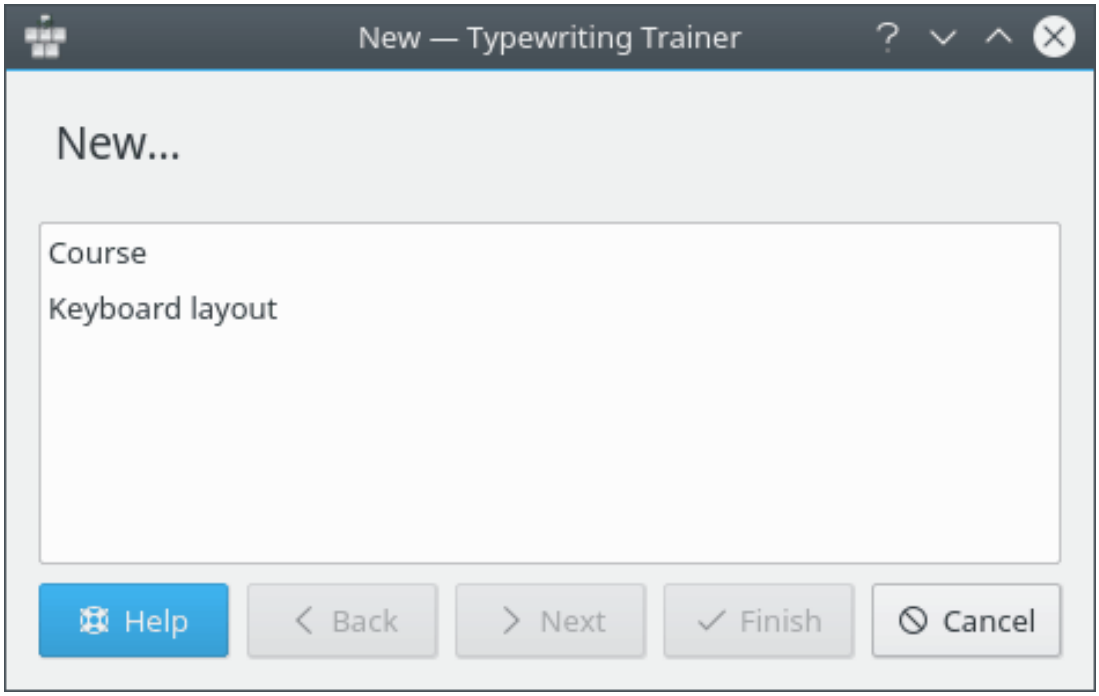
> IMPORTANT
> You cannot edit the built-in courses, even if you have the write access to the installation folder.



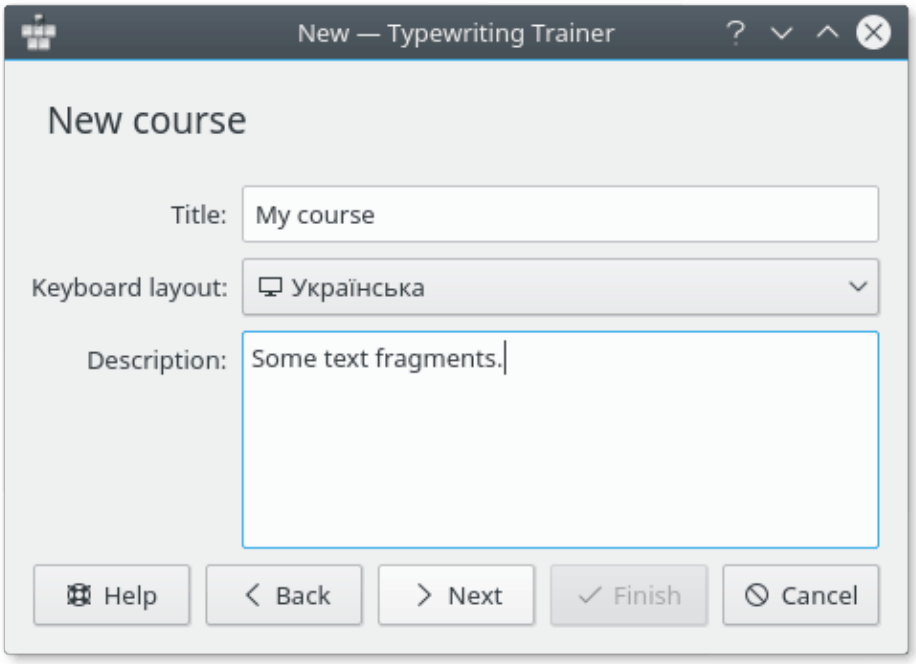
2.1.1 Course properties

The course properties can be chosen using Typewriting Trainer course creation wizard. To invoke this wizard you should press button in the toolbar of **Course and Keyboard Layout Editor**

window.
The first page of creation Typewriting Trainer wizard allows you to choose the type of the data. Select **Course** and press **Next**.

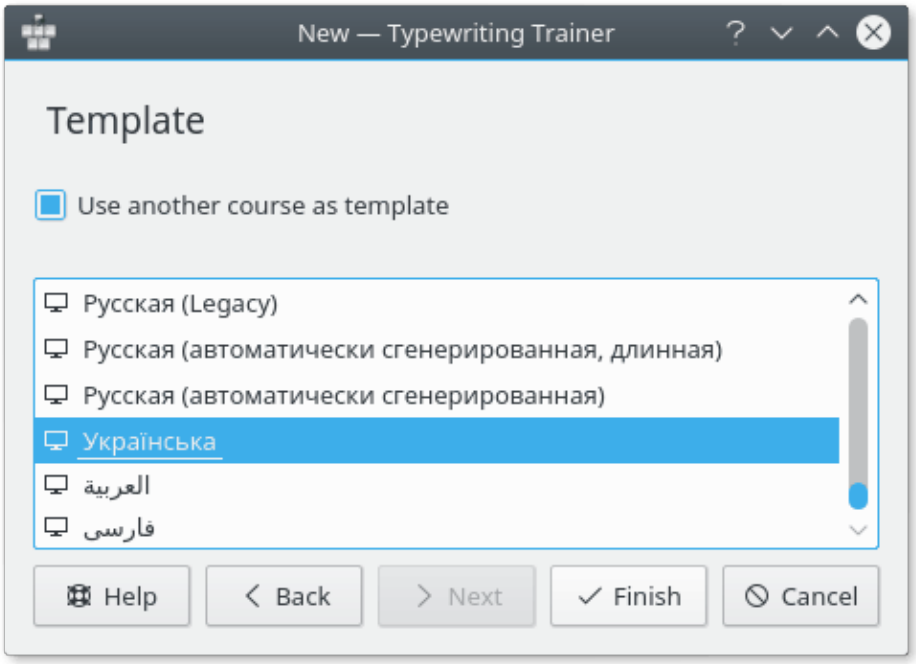


The second page of wizard allows you to choose the title, the keyboard layout and the description of the course.

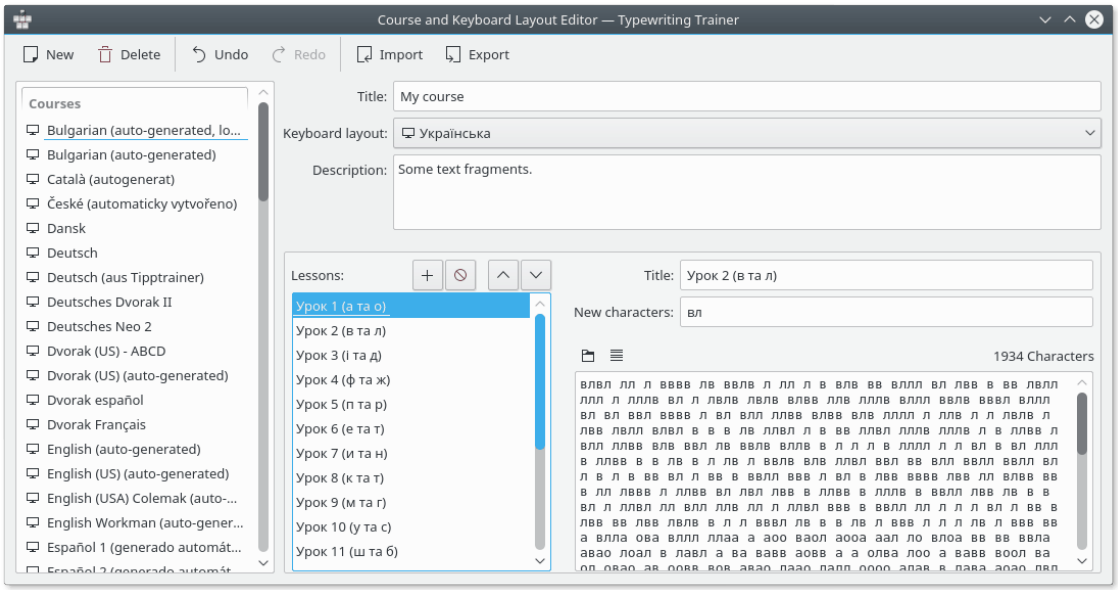


The course title is important for the quick-select menu entry in the course list and for the statistics. The description should be used to include information about the lesson author and source of lesson data if any. This description can be shown by pressing button in the home screen of Typewriting Trainer.

When you finished with entering appropriate values press **Next**.



Using the third page of wizard you can choose an other course as a template for your course. Select the course from the list and press **Finish**.



Typewriting Trainer will open the course editor window prepared to entering your course data.

2.1.2 Adding lessons

A course is an ordered set of lessons. To be efficient for learning touch typing the content of the course should meet a few requirements.

Choose a meaningful name for the lesson

For each level you can specify the new characters/keys in the lesson. It is worth to include the new characters in the lesson title. Click on a name label in the **Lessons:** list and enter some meaningful name.

> RATIONALE
> The text you enter as a lesson title will be shown as lesson information text in the home screen course list. It will be much easier for user to choose the lesson if it has a meaningful title.

The first lesson should cover the home keys

Usually a keyboard has two haptic markers for the keys on the second row belonging to the index fingers. These two keys and the three adjacent keys outwards are the home keys. That's *asdfjkl;* for the US keyboard layout.

> RATIONALE
> Those eight keys are the start position of each finger. One must internalize the location of these keys first to successfully learn touch typing.

Introduce two new keys per lesson

The unlocking order of keys is not fixed, but usually keys are introduced in pairs belonging to the same finger on both hands. Make your way from the home keys to the ones further away. Thus, the forth row should be introduced at last. Prefer keys for important characters of your language, this may require to bend the introduction pattern a bit. For example in French accents are really important, this warrants a lesson early-on focusing on the accent key alone.

> RATIONALE
> If more keys are introduced the trainee might get overwhelmed by the difficulty of the lesson and loose his motivation. Introduce keys for important keys first to able to form real words earlier.

Extra emphasis on the new keys

Make sure the characters belonging to the newly introduced keys are the most or at least very frequently used characters in the lesson text.

> RATIONALE
> If the trainee passes a lesson he should have mastered the new keys. This is only possible if the lesson contains a significant amount of the new characters.

Intersperse lessons with new keys with repetition lessons

Every two to three lessons add a repetition lesson without any new keys. These should have an even character mix covering all already introduced characters.

> RATIONALE
> Such lessons help to strengthen the acquired skills and provide a way to check the overall training level. They are also better suited for repeated training to further improve one's general typing skills.

Dedicated lessons for capitalization

There should be several lessons focusing sorely on capitalization. Ideally capitalization is introduced in multiple steps: At first only the left **Shift** key, then the right, then both and followed by one or more repetition lessons.

> RATIONALE
> Mastering capitalization is the most difficult part of learning touch typing. Therefore extra effort must be spend on these lessons.

Cover the complete keyboard layout

This includes characters and symbols accessible via other modifiers than **Shift**. Ideally every character, number and symbol which is printed on a real keyboard should be covered.

> RATIONALE
> The more complete a course is the more the trainee can learn from it. It also keeps the course interesting for already advanced typists.

Use button to add new lesson to the course, button to remove selected lesson from your course and / buttons to rearrange the lessons in the course.

> IMPORTANT
> Delete lessons only with caution. Doing so may reset the unlocking progress of the users of the course. If you are planning to revise a course thoroughly it is usually better to use the existing course as a base for a new one.

The content of the lesson can be edited using bottom right edit field. You can copy snippets of the text from your favorite text editor and paste them to this field.

Use the button to open a generic text file that will be loaded into the lesson text field.

The button can be used to wrap the lesson text. Typewriting Trainer editor wraps text such that every line of the lesson does not exceed the recommended 60 characters limit.

Let's assume you want to add a new lesson. There are a few guidelines you may want to consider:

Give lessons a descriptive title

Name the new characters if there are any or otherwise state what the lesson is about.

> RATIONALE
> Good titles make it easier to find the right course if one wants to train on something specific.

The lesson text should be composed out of real words and sentences

Optimally a lesson forms a comprehensible contiguous text on a freely chosen subject.

> RATIONALE
> Training with real words and sentences is more effective than with arbitrary random character combinations since that is closer to real typing. And it is more fun.

Avoid non-word character combinations

This may impossible in the very first lessons where only a few characters are available, but as soon as possible only real words should be used. Never use misspelled words.

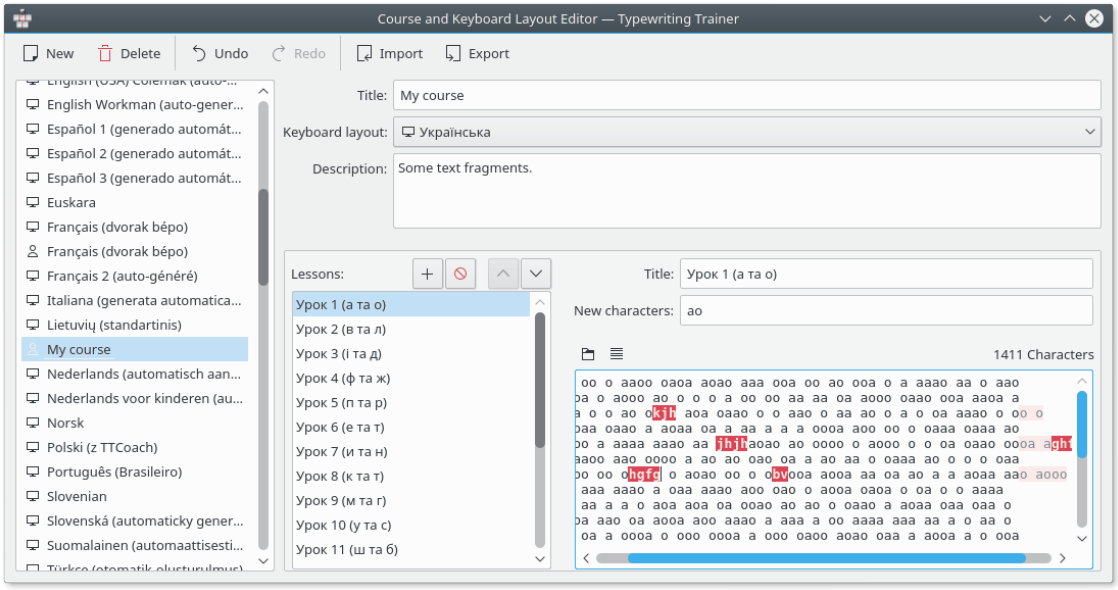
> RATIONALE
> Random character combinations are hard to type and are seldom found in day-to-day typing. Misspelled words on the other hand are confusing and have even a negative learning value, since the trainee may memorize the wrong spelling.

Lesson text should be roughly 600 characters long

They may be longer, up to 1200 characters is okay, but shorter lessons should be avoided. This is especially true for repetition lessons.

> RATIONALE
> Keeping within this range ensures that a untrained typist (~120 characters per minute) can finish a lesson in five to ten minutes. Longer lessons get frustrating, shorter ones are ineffective.

2.1.2.1 Quality checks in the lesson text editor



Above is a screenshot of the course editor with one of a problematic lesson loaded showing one of the built-in quality-assurance checks: if a lesson contains characters not available in that lesson, because they are not among the configured new characters of this lesson or any previous one, they are highlighted in red. There is also a check for too long lines resulting in a muted color for the characters behind the allowed column.

On the left side there is a list over all data files Typewriting Trainer knows about, built-in and user-created alike. If the user selects a built-in resource the editor will degrade to a simple viewer, though. If the user selects a keyboard layout the program will adapt appropriately.

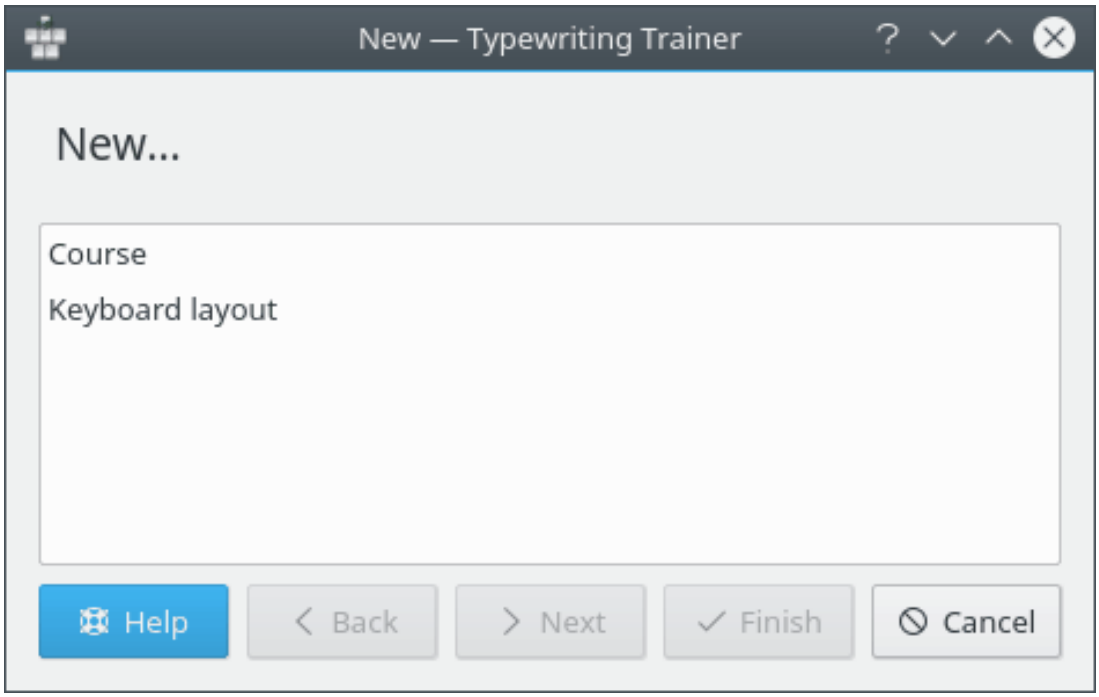
2.2 Creating keyboard layouts

You can create your own keyboard layouts using built-in Typewriting Trainer editor. Usually it's best is to start with an existing layout close to the keyboard layout you want to create, and use that as a base for own layout. That way you can avoid a lot of work.

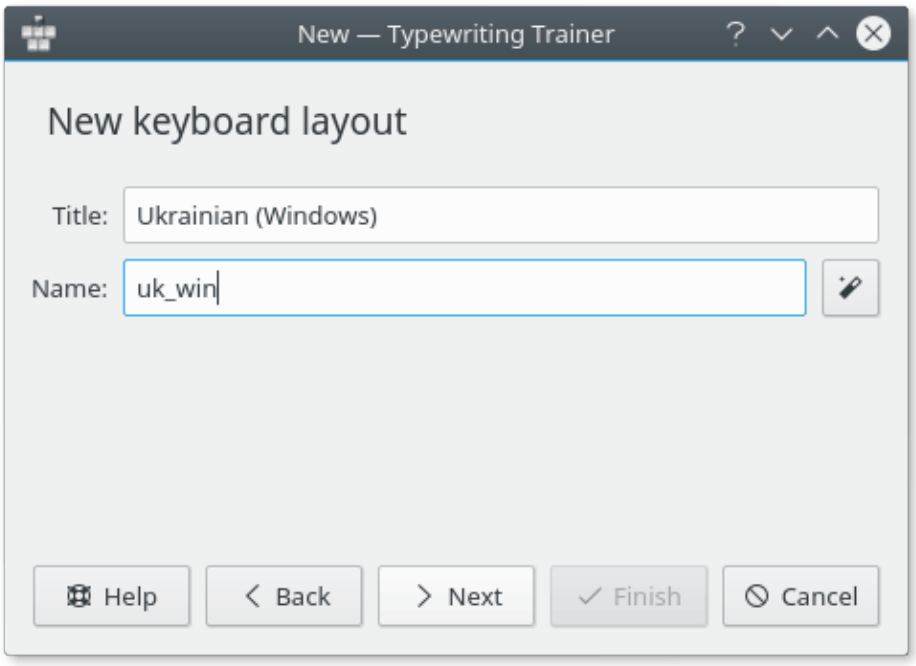
2.2.1 Keyboard layout properties

The keyboard layout properties can be chosen using Typewriting Trainer keyboard layout creation wizard. To invoke this wizard you should press button in the toolbar of **Course and Keyboard Layout Editor** window.

The first page of creation Typewriting Trainer wizard allows you to choose the type of the data. Select **Keyboard layout** and press **Next**.

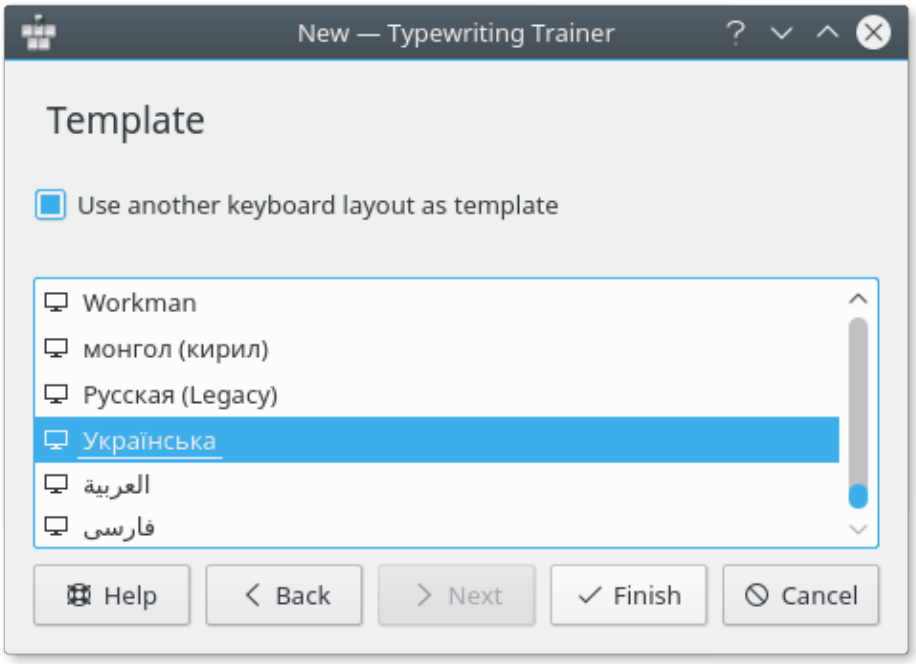


The second page of wizard allows you to choose the title and the name of the layout.

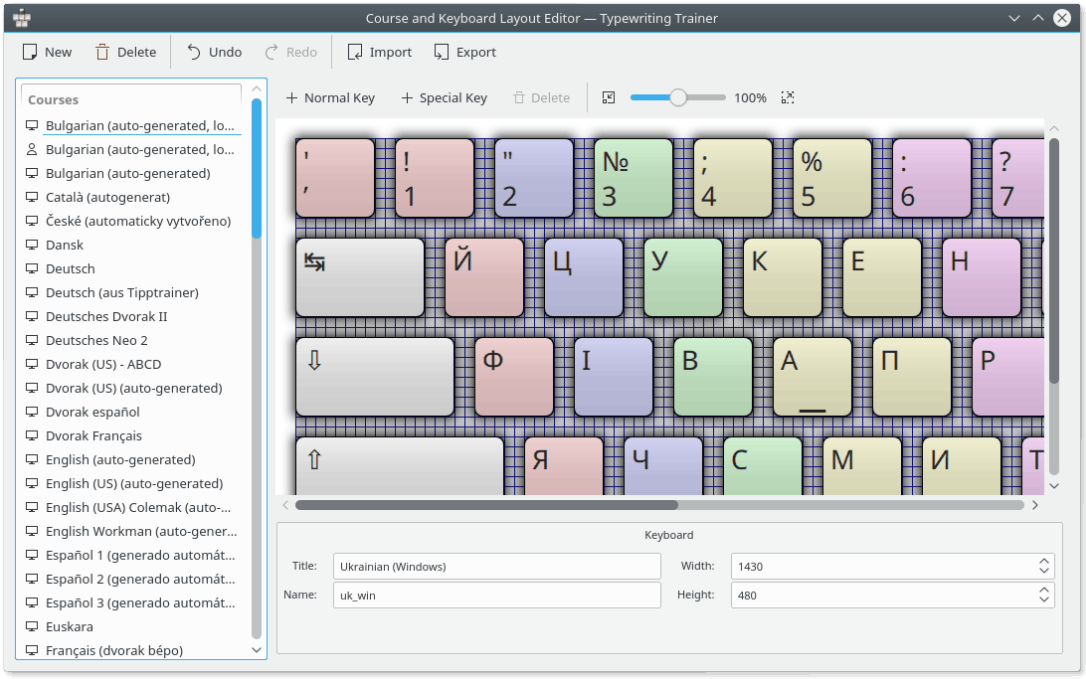


The layout title is important for the quick-select menu entry in the layout list of Typewriting Trainer configuration menu and for the statistics.

The layout name will be used as a name of the layout by Typewriting Trainer internally.



Using the third page of wizard you can choose other layout as a template for your layout. Select the course from the list and press **Finish**.



Typewriting Trainer will open the editor window prepared to entering your keyboard layout data.

2.2.2 Adding keys

Use **Normal Key** button to add new normal key or **Special Key** button to add new special key (modifier keys, **Space**, **Backspace**, **Tab**, **Caps Lock** or **Enter**) to the layout. The **Delete** button can be used to remove a selected key from your layout. The scale can be changed using the slider at the right part of the editor toolbar.

The properties of individual keys can be edited using the bottom pane of the editor window.

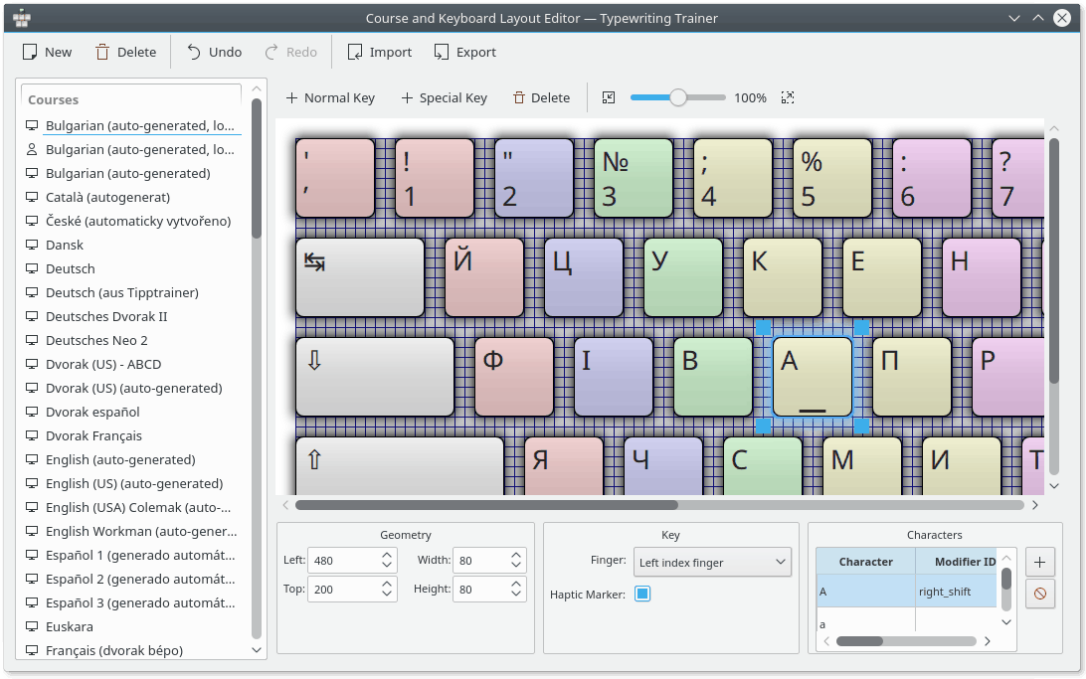
2.2.2.1 Normal keys

It is easy to change the size or properties of a key.

Begin by clicking on the key you want to change. This selects the clicked key as the current key.

There are now 4 squares on the corners of the key. By dragging these squares, you will be able to drag the key border to a new location. Dragging the whole key allows you to change the key position in the layout.

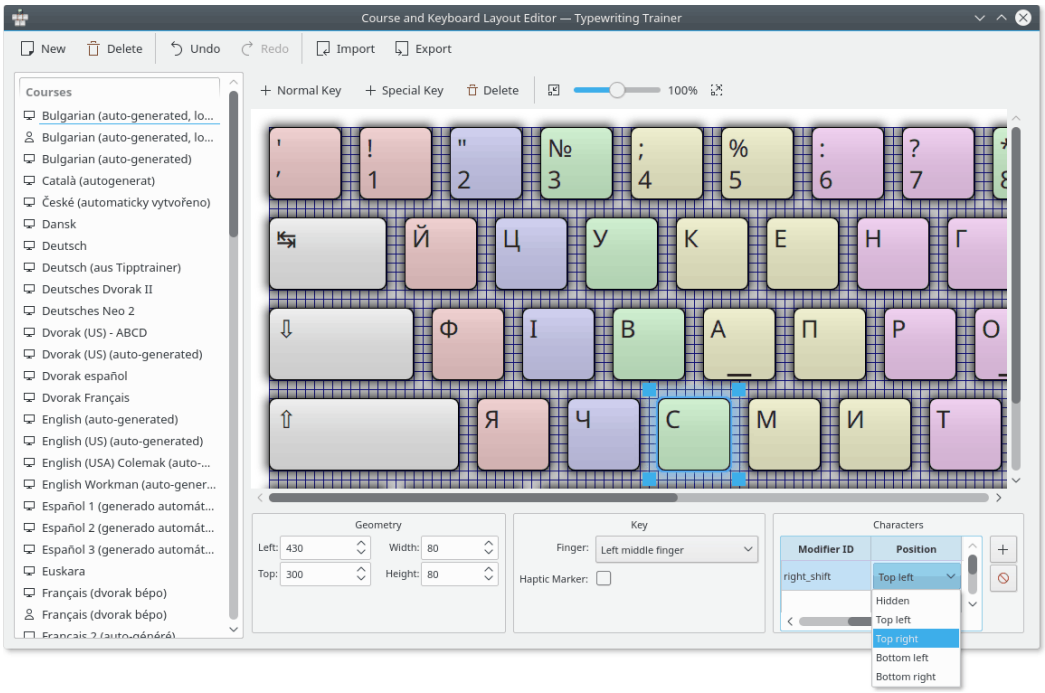
The numerical characteristics of the key geometry can also be changed using the **Geometry** section of the pane at the bottom of the editor window.



The bottom pane can also be used to choose finger to press the key and switch the haptic marker for the key.

2.2.2.1.1 Key characters

The characters that will be shown on a key can be changed using the **Characters** section of the editor bottom pane.



You can add a character by pressing + button. A selected character can be removed by pressing ⊘ button.

You can also select the position of individual characters on the key by double-clicking in the **Position** column.

2.2.2.2 Modifiers

There are several modifier keys that can be defined in Typewriting Trainer. They can be edited as normal keys but it is helpful to know identifier of modifier key to use them as appropriate. The table of modifier keys identifiers is given below.

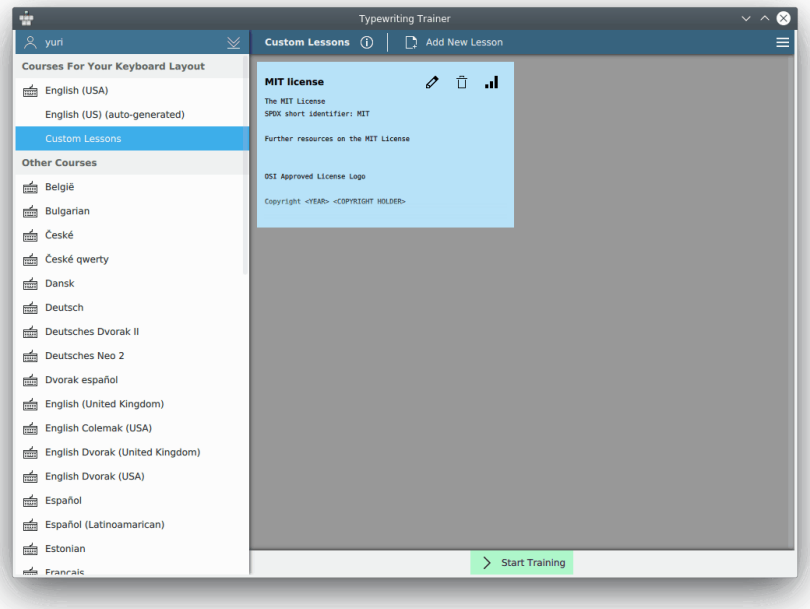
Modifier key	Modifier id in Typewriting Trainer
Alt	`altgr`
Shift	`left_shift` or `right_shift`

Table 2.1: Modifier keys

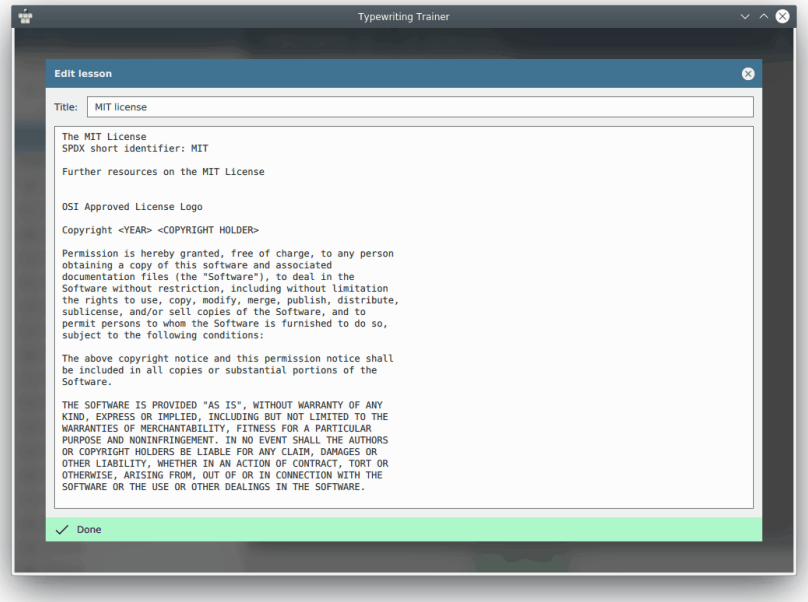
2.3 Custom Lessons

The custom lessons feature allows you to extend your training material in an easy way by choosing some arbitrary text.

The custom lessons are gathered in a special course, the **Custom Lessons** course, always available right next to the normal built-in courses.



This special course mostly acts like any other, training and statistics gathering works as usual. Clicking on **Add New Lesson** or the **Edit** button (the pencil icon for existing lessons) brings up a stripped-down version of the normal lesson editor.



The editor will highlight problematic sections of your lesson texts. Characters which can't by typed on your keyboard layout will be shown on a dark red background, lines which are considered to be too long use a pink background for the excess characters. Typewriting Trainer requires that every line of the lesson does not exceed the recommended 60 characters limit.

Use the **Done** button to confirm your edits or close the editor window to cancel them.

> TIP
> All custom lessons are stored per profile and keyboard layout individually. Use this to manage different sets of lessons depending on the specific training situation.

2.4 Sharing your results

It is possible to save your courses and keyboard layouts in separate files outside of the local Typewriting Trainer database.

2.4.1 Export/Import

To export a course or keyboard layout in a separate file choose the corresponding item in the list at the left part of **Course and Keyboard Layout Editor** window and press **Export** button in the toolbar.

Typewriting Trainer will open a standard KDE save dialog. Description of this dialog in details can be found in the Opening and Saving Files chapter of the KDE Fundamentals.

You can choose the name and the location of the XML file to be saved.

If you find it worth to share your files with over users, please send them with some description to kde-edu mailing list.

> IMPORTANT
> Your data should be licensed under GNU General Public License, version 2 to include them into the default Typewriting Trainer installation.

To import your data files into Typewriting Trainer press **Import** button in the toolbar and choose XML file that was earlier exported using Typewriting Trainer.

Chapter 3

Credits and License

Typewriting Trainer
KTouch, Copyright 1999-2007 by

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Special thanks to all the other (here not mentioned) contributors of keyboard and lesson files.

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