



C# Exam

Version 1.0.0

The practical part of the exam consists of two tasks.
Students must complete both tasks.

Task 1

Create an application Dictionaries.

The main purpose of the project is to store dictionaries in many languages and allow the user to find the translation of a word or a phrase.

The interface must provide the following:

- Create a dictionary Specify the type of dictionary at creation. For example, English-Khmer or Khmer-English.
- Add a word and its translation to the already existing dictionary. Because one word may have multiple translations, allow creating multiple translation variants.
- Replace a word or its translation in the dictionary.
- Delete a word or a translation. If one word is deleted, all its translations are deleted as well. One cannot delete a word translation if this is the last translation variant.
- Search for translation of a word.
- Dictionaries must be stored in files.
- One can export a word and its translations to a separate result file.
- When the program starts, display the menu to work with the program. If a selected menu item opens a submenu, provide returning to the previous menu.

Task 2

Create an application Quiz.

Its main objective is to provide users with the possibility to test their knowledge in different areas.

The interface must provide the following:

- When the app starts, the user enters her username and password. If the user is not registered, she must go through the registration process.

- Things to be specified:
 - Username (one cannot register an already existing username);
 - Password;
 - Date of birth.
- After logging in, the user can:
 - Start a new quiz;
 - View the results of her previous quizzes;
 - View top 20 for a specific quiz;
 - Change settings. Edit password and date of birth;
 - Log out.
- To start a new quiz, the user must select the knowledge section, for instance, History, Geography, Biology, etc. Also, provide a mixed quiz, where questions are randomly selected from different quizzes.
- Each quiz consists of 20 questions. Each question may have one or multiple correct answers. If a question has multiple correct answers, and the user selects not all of them, the answer is still wrong.
- After the quiz ends, the user sees the number of correct answers and her place in the table of results among all players.

Also, develop a utility that creates and edits quizzes and their questions. This app must provide a username and password to authenticate users.