

AN APPLICATION FOR THE EVALUATION OF PROFESSIONAL KNOWLEDGE -REFERRING TO THE CFR EMPLOYERS-

Dr. Ing. Mocuța Georgeta Emilia*
Stud. Hălmăgean Amalia*

** Universitatea POLITEHNICA din Timișoara*

*Piața Victoriei nr.2 Timișoara
e-mail: emiliamocuta@yahoo.co.uk
e-mail: amalia_stancuta@yahoo.com*

Abstract: The paper presents our point of view in connection with efficient and objective testing of professional knowledge of the CFR staff that is realized through an application created especially for this purpose.

The application is based on Visual Basic and uses a reach testing database from which the questions are stochastically chosen.

Key words: evaluation, knowledge testing, application.

1. INTRODUCTION

Nowadays the need of professional knowledge testing has become a very important problem in the management of human resources. In every trading company the results of the whole activity are influenced of the professional knowledge level.

There are a lot of technical regulations, which should be known for the different categories of employers. Besides the fact that the regulations must be known exactly as they are, they must be applied in different real situations.

Considering this, it is necessary to improve the training of personnel by testing the employers in connection with the possible variants that can occur.

At the moment the evaluation is realized in a laboriously manner that needs a long time and many different resources and it is affected either by human errors or subjective appreciations.

From this point of view, there can be created tests with different variants of responses that were conceived especially to reflect real situations.

We can also take into consider the fact that there could be introduced between the variants of responses some cases which represent inopportune and disastrous situations demonstrated in practice.

It's important for an employer to be familiar with all the situations that can occur, as he could be able to recognize them in his practical activity and to act precise for avoiding these situations, without doing a great memory effort.

2. DESIGN AND CONCEPTION OF THE TESTING APPLICATIONS

To realize a testing project on the computer, every evaluator must take into consider the following elements:

- ✎ The project must be created so as to reflect the preparation style and the evaluator's interests.
- ✎ The project can either contain some specific forms or personal instruction activities, which use the computer.
- ✎ The project can contain only one lesson, ore more lessons, but with a detailed description for the others who want to utilize the application. In the project must exist differences, which depend of the category of the person being evaluated.
- ✎ The project reflects the thoughts and the efforts of the evaluator in creating the questions, in organizing the ideas. It must offer the possibility of continuously improving and redefining its characteristics. The conception is surely personal and specific to every evaluator, but the others' opinions and experience can influence it

3. REALIZING THE MODEL OF THE PROJECT

3.1. First Sequence:

The Determination of the Requisite, Objectives, Resource Collecting, Contents Comprehension and Idea Engendering (fig.1). This section refers to a complete study of the possibilities that already exist, either material or non-material as thoughts, ideas, feelings, tastes, opinions, etc. which give the particularity of the project. At this stage the evaluator needs to determine the general objective (followed by the final one, after studying conclusions), the specific parts, the parts of the material being tested, as well as to make a category list of the persons being evaluated. Time and its estimation is also an element which should be taken in consider.

3.2. Second Sequence:

Decisions on the Testing Strategies. Gaining all the information together, the evaluator must decide which is the most appropriate mode to present the questions. We have chosen Visual Basic because it's easy to learn, it's a visual program language, based on object programming, we didn't need sophisticated resources.

3.3. Third Sequence:

Conception of the Graphical User Interface. This must be easy to understand and friendly to the user, with a simple and modern design, according to the type of test that was adopted in the previous sequence. We built an interface that can be seen in figure 2. The principal form's name is "Test Grila". It contains the following elements:

- a test-box
- an image
- 2 frames
- 2 command buttons
- 5 check buttons

3.4. Fourth sequence:

The Logic (Functional) Scheme & Screen Succession: This means the code writing in the programmer's language that was also chosen before. At this level we wrote only the general procedures, functions and made a program that worked, but had to be improved

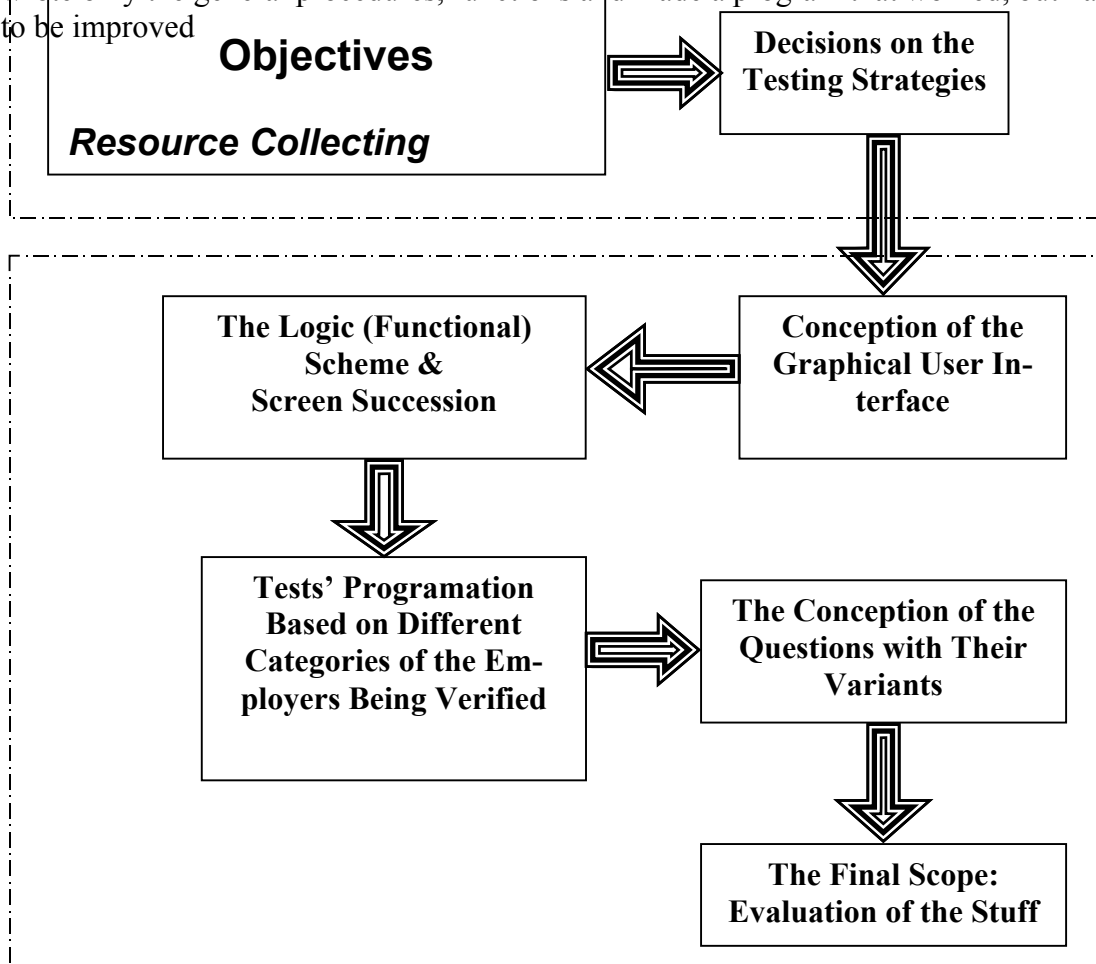


Fig.1 The stages in the conception of a testing project

3.5. Fifth sequence:

Tests' Programmatic Based on Different Categories of the Employers Being Verified, this is the most laborious part of the whole project, because there are different themes, depending on the position that needs to be occupied by the person that makes the test. These themes are organized in maximum 20 category files, each containing an instruction or a different unit. These are the files with the resources, written in ordinary text programs, as Notepad, but which limit the undesired access through a codification method. The application extracts the questions aleatory from the categories indicated by the evaluator and "mixes" the variants when presenting them. The user also indicates the number of questions from each file. At the end of the application, a message box with the score appears.

3.6. Sixth sequence:

The Conception of the Questions with Their Variants. The questions must be well formulated, to exclude any ambiguous or obscure expression. The images must be suggestive for the problem in discussion, and must have a good quality.

3.7. Seventh sequence:

The Final Scope: Evaluation of the Stuff. It is known that the medium, as well as the given time influence people activity. It is recommended to repeat the test or to continue it, from many different reasons. The program offers the possibility to continue a test with a start score, obtained before.

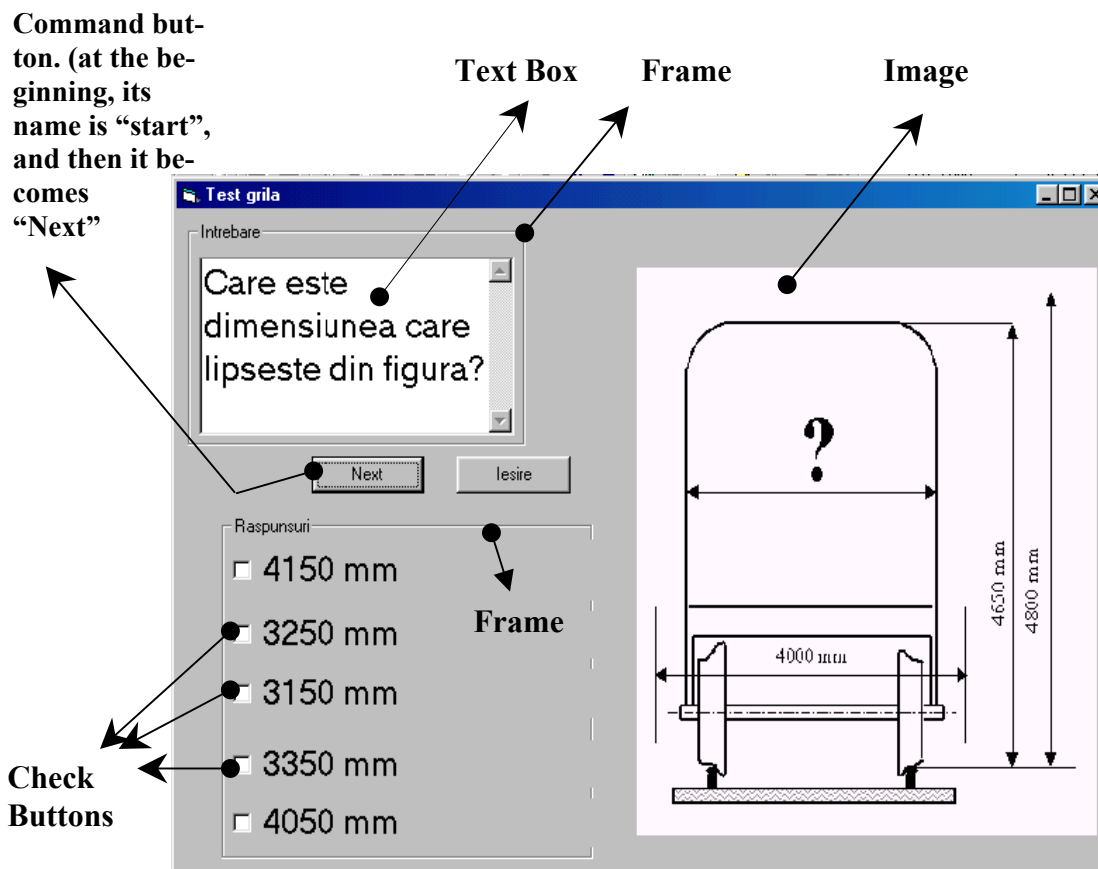


Fig 2. Graphical User Interface

4. CONCLUSIONS - PLANS FOR THE FUTURE

This application refers especially to the CFR employers, but it can be used in other domains, too. Now we improve our work and elaborate more questions and other facilities, hoping that we'll be able to make the application stronger.

5. REFERENCES

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