"The Vilnius Gediminas technical university"

"The international conference

"Electrical, electronic and information sciences""

the 22nd of April 2021 y.

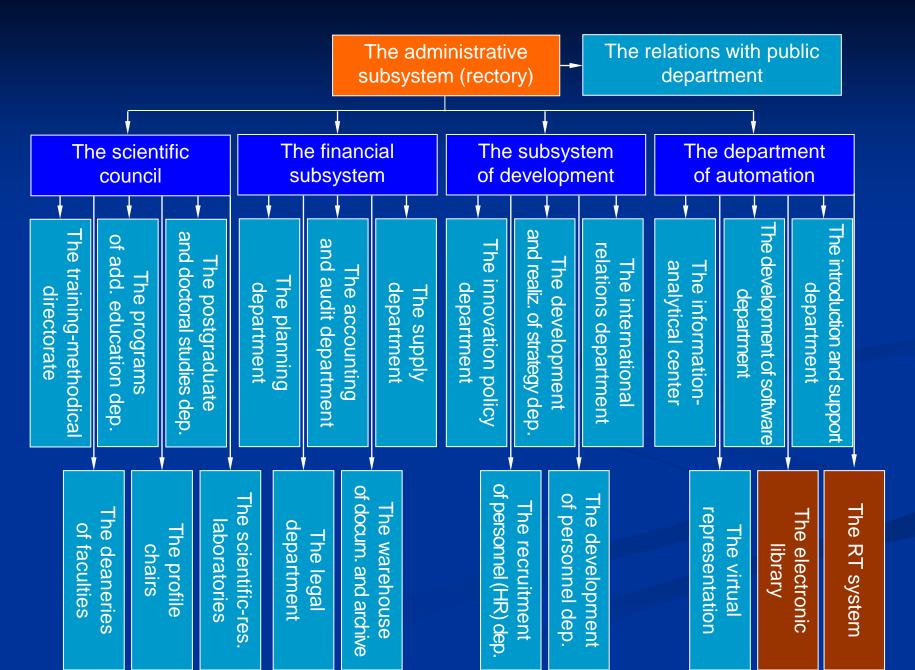
The theme of scientific report
"The features of the electronic card
for the automated training system
with the properties of adaptation
based on the cognitive models"

The section "Information systems"

The reporter: ""the author of the unique technology" of cognitive modeling for the system, financial and complex analysis",
The President of "SIO "Academy of cognitive natural sciences""
Vetrov Anatoly Nikolaevich (The Russian Federation, Saint-Petersburg city)

The republic of Lithuania, Vilnius city, 2021 y.

The features of the organizational structure of the educational establishment at the informatization of the information-educational environment



The genesis and tendences of development of the storages of information and the electronic cards of memory

The storage of information based on the punched-cards

The storage of information based on the punched-tapes

On the paper carrier (196x y.)

STR – Streamer (the storage of information based on the magnetic tape)

FDD – Floppy Disc Drive (the storage of information on the floppy magn. discs)

HDD – Hard Disc Drive (the storage of information on the hard magn. discs)

On the magn. carrier (197x y.)

Flash (external) and Edrive (internal) (the storage of information based on the electronic cards of memory)

SD – Secure Digital Card/ MS – Memory Stick Card (the external port. storage of inf. on the el. cards of memory)

On the electronic carrier (199x y.)

SMART – System Monitoring and Alerting (the storage of inf. based on the chip-cards)

TOUCH/PROXIMITY (the storage of inf. based on the electronic cards for the control of access)

CD-ROM – Compact Disc Read Only Memory (the laser storage of inf. on the optical discs)

CD-R – Compact Disc Recordable (the opt. disc of the single-time technol. cycle of record of the inf.)

CD-RW – Compact Disc ReWritable (the opt. disc of the multi-time technol. cycle of record of the inf.)

DVD-ROM – Digital Video Disc Read Only Memory (the laser storage of inf. on the optical discs)

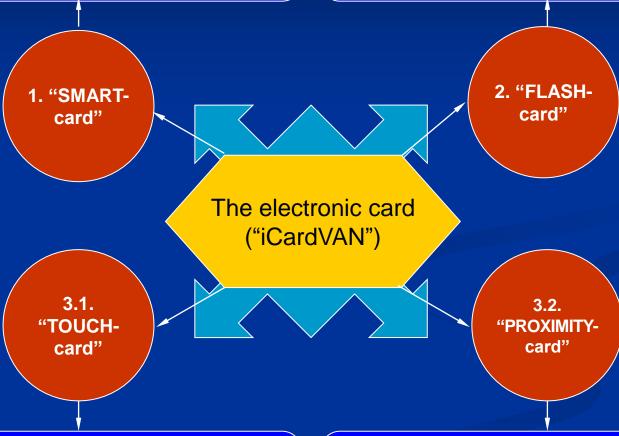
> SS/DS – Single Side/Double Side (one-/ two-sided)

SL/DL – Single Layer/Double Layer (one-/ two-layered)

On the opt. carrier (198x y.)

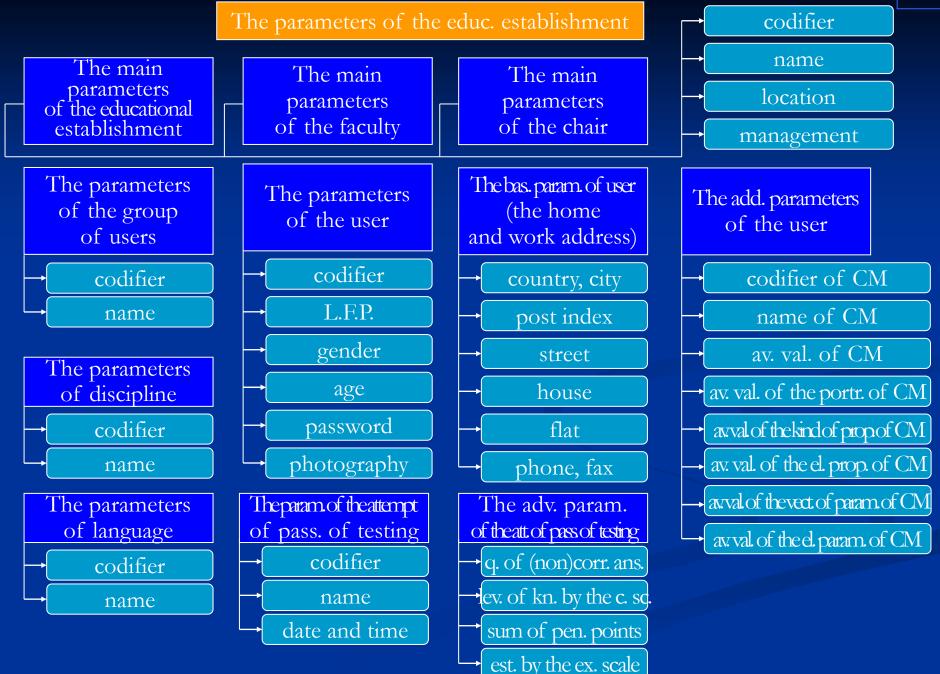
the storing of parameters of the param.
cognitive models block and others
for the authentication of user
in the automated training system
based on PCMB

the storing of the profile of user for the realization of the wandering profile with the purpose of work in any place – the parameters of OS, programs, desktop and folder "My documents"



the authentication of the nominal holder
of the card directly
at the galvanic contact with the reader
for the access into the room of the inf. center

the authentication of the nominal holder of the card at the interaction with the physical field of the reader (the galvanic isolation) for the access into the room of the inf. center



The examinee (a model) is considered in the range of the three scientific aspects		
Physiological aspect	Psychological aspect	Linguistic aspect
Private physiology of analyzers	Cognitive psychology	Applied linguistics
The cognitive model of subject of training characterizes the individual features of perception, processing and understanding of a content of information fragments, generated by the means of training		
PR ₁ "Physiological portrait"	PR_2^1 "Psychological portrait"	PR ₃ "Linguistic portrait"
KP_1^1 "Sensory perception" Pr_1^1 "Visual system" VP_1^1 "Anomalies of refraction" P_1^1 "astigmatism" P_2^1 "myopia" P_3^1 "hypermetropia" VP_2^1 "Anomalies of perception" P_4^1 "acuity of vision" P_5^1 "field of vision" P_6^1 "estimation of distance" VP_3^1 "Color vision" P_7^1 "achromasia"	KP_2^1 "Mental abilities" Pr_3^{11} "Convergent" VP_5^1 "Level properties" P_{14}^1 "verbalization" P_{15}^1 "deductive generalization" P_{16}^1 "classification and reasoning" P_{18}^1 "the mathematical analysis" P_{19}^1 "numerical induction" P_{20}^1 "minemonics and memory" P_{21}^1 "plane thinking" P_{22}^1 "volumetric thinking" P_{10}^1 "Cognitive styles"	KP_3^1 "Language communication" Pr_7^1 "Language of statement" VP_{45}^1 "Level of proficiency" P_{45}^1 "level of proficiency in language of statement" P_{46}^1 "level of proficiency in the dictionary of terms" P_{47}^1 "level of proficiency in the elements of interface" P_{47}^1 "Oivergent" VP_6^1 "Verbal creativity" P_{23}^1 "associativity" P_{23}^1 "originality" P_{25}^1 "uniqueness" P_7^1 "selectivity"
P_8 "protanopia" P_9 "deuteranopia"	P_{31}^{1}/P_{32}^{1} "field-dependence" (VP_{\circ}^{1}) P_{33}^{1}/P_{34}^{1} "impulsiveness	P_{7}^{1} "Figurative creativity" P_{7}^{1} "associativity"
P_{10}^1 "tritanopia" Pr_2^1 "Acoustic analyzer"	reflexivity" (VP_9^1) P_{35}^1/P_{36}^1 "rigidity / flexibility" (VP_{10}^1)	P_{28}^1 "originality" P_{29}^1 "uniqueness"
VP_1^1 "Functions of external, middle and inner ear" P_1^1 "absolute sensitivity"	P_{37}^{1}/P_{38}^{1} "specification / abstraction" (VP_{11}^{1}) P_{39}^{1}/P_{40}^{1} "cognitive simplicity/difficulty" (VP_{12}^{1})	P_{30}^{1} "selectivity" Pr_{5}^{1} "Learning ability" VP_{14}^{1} "Kind of learning ability"
	P_{41}^1/P_{42}^1 "categorial narrowness / width" (VP_{13}^1)	$\underbrace{ \begin{pmatrix} P_{43}^1 \text{ "implicit"} \\ P_{44}^1 \text{ "explicit"} \end{pmatrix} }_{}$

The structure of the parametrical cognitive model of the means of training

The means of training (a model) is considered in the range of the three scientific aspects Physiological aspect Psychological aspect Linguistic aspect Private physiology Cognitive Applied of analyzers psychology linguistics of information-educational influences in the process of individually-oriented formation of knowledge PR₃ "Linguistic portrait" PR_1^2 "Physiological portrait" PR_2^2 "Psychological portrait" KP_2^2 "Way of representation" KP₃² "Language communication" Pr_3^2 "Type of information" ²"Visual representation' Pr_7^2 "Language of statement" P_1^2 "Parameters of background" "Kind of information" P_{45}^2 "level of statement P_{15}^2 "textual (text)" P_1^2 "type of pattern" of material of subject" P_{46}^2 "set of key "tabular (table)" P_2^2 "color of background" terms and definitions P_{17}^2 "flat scheme" P_{3}^{2} "combination of colors" P_{47}^2 "set of elements P_{18}^2 "volumetric scheme" in the base of interface "Parameters of font" P_{19}^2 "sound main" P^2 "set of font" Pr_4^2 "Additional capabilities" P_{20}^2 "sound accompaniment" P_5^2 "size of symbol pointtype" VP² "Additional parameters" P_{21}^2 "combined scheme" P_{κ}^{2} "color of symbol" P_{22}^2 "special scheme" P_{23}^2 "navigation on course" VP2 "Color schemes" P_{24}^{2} "addition of modules P_7^2 "at achromasia" Pr_5^2 "Style of representation P_{25}^2 "choice of kind of inf. P_{31}^2/P_{32}^2 "complete / detailed $P_{\rm s}^2$ "at protanopia" P_{26}^2 "choice of style of repr' representation" (VP_7^2) Po"at deuteranopia" P_{33}^2/P_{34}^2 "automatic / P_{27}^2 "choice of speed" "at tritanopia" manual switching" (VP₈² P_{28}^2 "creative tasks" P_{35}^2 / P_{36}^2 "constant / Sound representation P_{29}^2 "additional modules" variable type" (VP_9^2 $VP_{_{4}}^{2}$ "Parameters of reproduction P_{20}^2 "additional literature" of sound stream" P_{37}^2/P_{38}^2 "specification / P_{11}^2 "volume" abstraction" (VP_{10}^2 "Speed of representation P_{39}^2/P_{40}^2 "simplicity / P_{12}^2 "timbre" VP_{13}^2 "Speed of display" difficulty of statement" (VP_{11}^2) P_{13}^2 "type of stream" P_{43}^{2} "fast" P_{41}^2/P_{42}^2 "wide set / "sound scheme" narrow set of terms" (VP_1) P_{44}^2 "slow"

The unique device "E-drive"

