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THE ELECTRONIC CARD FOR THE AUTOMATED TRAINING SYSTEM WITH THE PROPERTIES OF ADAPTATION BASED ON THE COGNITIVE MODELS

The electronic card (iCardVAN) acts as the additional component of the automated training system with the properties of adaptation based on the parametrical cognitive models block (www.vetrovan.(spb).ru):
1) is executed by the classical architecture "proto-frame↔frame-instance";
2) functions in the several basic modes, which allow to provide:
SMART-card (the storing of parameters of the parametrical cognitive models block and others);
FLASH-card (the storing of the profile of user for the realization of the wandering profile – the parameters of the operating system, programs, desktop, the folder "My documents" and others);
PROXY-card (the authentication of nominal holder of the card directly at the interaction with the physical field of the reader);
TOUCH-card (the authentication of nominal holder of the card directly at the galvanic contact with the reader and other);
3) includes the several basic elements of the modern architecture;
3.1) SMART-card (the parameters of the parametrical cognitive models block and others): the main parameters of the educational establishment (the code, the name, the location, the management and others); the main parameters of the faculty (the code, the name, the location, the management and others), the main parameters of the chair (the code, the name, the location, the management and others), the parameters of the group of users (the codifier and the name of the group of users), user parameters of user (the codifier, L.F.P., the gender, the age, the password and the photo), the basic parameters of user (the home and work address: the country, the city, the post code, the street, the house, the flat, the phone, the fax and others), the additional parameters of user for the working in the environment of adaptive training (the codifier, the name, the average value and the value of cognitive model, the portrait, the kind of properties, the elementary property, the vector of parameters, the elementary parameter with the possibility of adding and removing of the elements), the parameters of discipline (the codifier, the name and others), the parameters of language (the codifier, the name and others), the parameters of attempt of the passing of testing (the codifier, the name, the date and the time), the extended parameters of attempt of the passing of testing (the quantity of correct and incorrect answers, the level of knowledge on the coarse scale, the sum of scores (penalty) points for each (in)correct variant of answer, the estimation on the exact scale based on the sum of scored points);

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the parameters of the cognitive model of the subject of training for the information-educational environment:
RP.1.1. "The physiological portrait of the cognitive model";
KP.1.1. "The sensory perception of the eye as an optical device and biological construct";
Pr.1.1. "The visual system (the eye as an optical device and biological construct)";
VP.1.1. "The anomalies of refraction of the eye as an optical device and biological construct" (P.1.1. "astigmatism", P.1.2. "myopia", P.1.3. "hypermetropia" and others);
VP.1.2. "The anomalies of perception of the eye as an optical device and biological construct" (P.1.4. "the acuity of vision", P.1.5. "the field of vision", P.1.6. "the estimation of distance" and others);
VP.1.3. "The color vision of the eye as an optical device and biological construct" (P.1.7. "achromasia", P.1.8. "protanopia", P.1.9. "deuteranopia", P.1.10. "tritanopia" and others);
Pr.1.2. "The auditory analyzer (the auditory sensory system of the human)";
VP.1.4. "The functions of the external, middle and internal ear" (P.1.11. "the absolute sensitivity", P.1.12. "the thresholds of sensitivity", P.1.13. "the maximal sensitivity of the auditory sensory system" and others);
PR.1.2. "The psychological portrait of the cognitive model of the subject of training";
KP.1.2. "The intellectual abilities"; Pr.1.3. "The level properties of intelligence";
VP.1.5. "The convergent intellectual abilities" (P.1.14. "verbalization", P.1.15. "deductivity and generalization", P.1.16. "associativity and combinatorics", P.1.17. "classification and reasoning", P.1.18. "mathematical analysis", P.1.19. "numerical induction", P.1.20. "mnemonic and memory", P.1.21. "plane thinking", P.1.22. "volumetric thinking");
Pr.1.4. "The divergent intellectual abilities of the subject of training";
VP.1.6. "The verbal creativity" (P.1.23. "associativity", P.1.24. "originality", P.1.25. "uniqueness", P.1.26. "selectivity");
VP.1.7. "The figurative creativity" (P.1.27. "associativity", P.1.28. "originality", P.1.29. "uniqueness", P.1.30. "selectivity");
Pr.1.5. "The cognitive styles of the subject of training";
VP.1.8. "field-dependence (P.1.31) / field-independence (P.1.32)";
VP.1.9. "impulsivity (P.1.33) / reflexivity (P.1.34)";
VP.1.10. "rigidity (P.1.35) / flexibility (P.1.36)";
VP.1.11. "concretization (P.1.37) / abstraction (P.1.38)";
VP.1.12. "simplicity (P.1.39) / difficulty (P.1.40)";
VP.1.13. "narrowness (P.1.41) / width (P.1.42)";
Pr.1.6. "The learning-ability of the subject of training";
VP.1.14. "The type of learning-ability" (P.1.43. "implicit", P.1.44. "explicit");
PR.1.3. "The linguistic portrait of the cognitive model";
KP.1.3. "The language communication of the subject of training"; Pr.1.7. "The language of statement";
VP.1.15. "The level of proficiency" (P.1.45. "the level of proficiency in the language of statement", P.1.46. "the level of proficiency in terms", P.1.47. "the level of proficiency in the elements of interface");

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the parameters of the cognitive model of the means of training for the information-educational environment:
RP.2.1. "The physiological portrait of the cognitive model of the means of training"; KP.2.1. "The visual representation"; Pr.2.1. "The properties of visual presentation of the inf."; VP.2.1. "The parameters of background" (P.2.1. "the type of pattern", P.2.2. "the color of background", P.2.3. "the combination of colors"); VP.2.2. "The parameters of font" (P.2.4. "the typeface of font", P.2.5. "the size of symbol", P.2.6. "the color of symbol"); VP.2.3. "The color schemes" (P.2.7. "at achromasia", P.2.8. "at protanopia", P.2.9. "at deuteranopia", P.2.10. "at tritanopia"); Pr.2.2. "The properties of sound representation of the information fragments"; VP.2.4. "The parameters of playback of the sound stream by the means of training" (P.2.11. "volume", P.2.12. "timbre", P.2.13. "the type of flow", P.2.14. "the type of stream"); PR.2.2. "The psychological portrait of the cognitive model of the means of training"; KP.2.2. "The way of representation"; Pr.2.3. "The kind of information of the means of training"; VP.2.5. "The kind of information" (P.2.15. "textual (text)", P.2.16. "tabular (table)", P.2.17. "the flat scheme", P.2.18. "the volumetric scheme", P.2.19. "the sound basic", P.2.20. "the sound accompanying", P.2.21. "the combined scheme", P.2.22. "the spec. scheme"); Pr.2.4. "The add. capabilities of the means of training"; VP.2.6. "The add. parameters" (P.2.23. "the navigation on course", P.2.24. "the addition of modules", P.2.25. "the selection of the kind of inf.", P.2.26. "the selection of the style of presentation", P.2.27. "the selection of speed", P.2.28. "the creative tasks", P.2.29. "the add. modules", P.2.30. "the add. literature"); Pr.2.5. "The style of presentation of the information by the means of training"; VP.2.7. "the complete (P.2.31) / detailed presentation (P.2.32)"; VP.2.8. "the automatic (P.2.33) / manual switching (P.2.34)"; VP.2.9. "the constant (P.2.35) / variable type (P.2.36)"; VP.2.10. "the concretization (P.2.37) / abstraction (P.2.38)"; VP.2.11. "the simplicity (P.2.39) / difficulty of statement (P.2.40)"; VP.2.12. "the wide (P.2.41) / narrow set of terms (P.2.42)"; Pr.2.6. "The speed of presentation of the information fragments"; VP.2.13. "The speed of displaying" (P.2.43. "fast", P.2.44. "slow"); PR.2.3. "The linguistic portrait of the cognitive model of the means of training"; KP.2.3. "The language communication"; Pr.2.7. "The language of statement in the means of training" (P.2.45. "the level of statement of the information", P.2.46. "the level of statement (set) of the dictionary of terms", P.2.47. "the level of presentation (set) of the elements of interface");
3.2) FLASH-card – the carrier with the file system (NTFS, FAT32, FAT16 and others) allows to store the (non)protected objects (folders, files and shortcuts) of the user;
3.3) PROXIMITY (or Touch Memory) card – iButton Dallas Semiconductor DS1990A-FS (for the access into the room), DS1996 (for the transfer of information).

CMT allows to realize the system analysis of the information-educational environment and to increase the efficiency of functioning of the automated training system with the properties of adaptation based on the cognitive models of the educational establishment as the subject of the system of education at the creation, distribution and use of the educational products.