TEST TIZMDA AVTOMATLASHTIRILGAN DASTURNI YARATISH BOSQICHLARI

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Pedagogik innovatsiyalarda alohida yo'nalish bu - kompyuter testi paydo bo'ldi, unda testlarni taqdim etish, talabalar natijalarini baholash va ularga natijalarni berish shaxsiy kompyuter yordamida amalga oshiriladi.

ABSTRACT

O'zbekiston Respublikasi Vazirlar Mahkamasining 1993-yil, 5-fevraldagi «O'zbekiston Respublikasi Oliy o'quv yurtlari uchun talabalarni test usulida qabul qilish to'g'risida»gi Qarori O'zbekistonda MDH davlatlari ichida birinchi bo'lib testdan foydalanishga keng yo'l ochib berdi. Jahon pedagogikasi va psixologiyasida mustahkam o'rin olgan test usuli mamlakatimiz ta`lim tizimida jadallik bilan tadbiq qilinmoqda.

Pedagogik innovatsiyalarda alohida yo'nalish bu - kompyuter testi paydo bo'ldi, unda testlarni taqdim etish, talabalar natijalarini baholash va ularga natijalarni berish shaxsiy kompyuter yordamida amalga oshiriladi. Test yaratish bosqichi texnologik jihatdan turli yo'llar bilan, shu jumladan kompyuterga bo'sh testlarni kiritish orqali davom etishi mumkin. Bugungi kunga kelib, kompyuter sinovlari bo'yicha ko'plab nashrlar mavjud, testlarni yaratish va taqdim etish uchun dasturiy ta'minot va vositalar ishlab chiqilgan. Test nima? Test-berilgan alternativ javoblardan to'g'risini tanlash shaklidagi nazorat topshirig`idir. O'quv fani bo'yicha tuziladigan nazorat testlari, boshqa o'quv topshiriqlariga o'xshab, to'rt xil elementlardan tarkib topadi; mazmun, maqsad, funksiya, metod.

O'zbekiston Respublikasi Vazirlar Mahkamasining 1993-yil, 5-fevraldagi «O'zbekiston Respublikasi Oliy o'quv yurtlari uchun talabalarni test usulida qabul qilish to'g'risida»gi Qarori O'zbekistonda MDH davlatlari ichida birinchi bo'lib testdan foydalanishga keng yo'l ochib berdi. Jahon pedagogikasi va psixologiyasida mustahkam o'rin olgan test usuli mamlakatimiz ta`lim tizimida jadallik bilan tadbiq qilinmoqda. Respublika Davlat Test markazining faoliyat ko'rsatayotganligi mamlakatimizda testshunoslikning davlat ahamiyatiga ega bo'lgan masala darajasiga ko'tarilganligining yaqqol dalilidir.

Ushbu ro'yxatga asosan turmush darajasi yuqori bo'lgan mamlakatlar kirganligi tasodif emas. Bunda quyidagi zanjirli bog'lanish mavjud: testlarni qo'llash ta`lim sifatiga ijobiy ta`sir

ko'rsatadi; ta`lim sifati esa boshqaruv sifati bilan bog'liq; oqilona boshqaruv esa aholi turmush darajasini oshirish uchun zamin yaratadi.

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Test jarayonini avtomatlashtirish dasturini istalgan dasturlash tilida yaratish mumkin. Tizimda bu dasturni hozirda juda imkoniyatlari keng, reytingi yuqori bo'lgan dasturlash tillaridan biri bo'lgan Python dasturlash tilida tuzib chiqsa bo'ladi.

Python dasturlash tilining imkonyatlari va qo'llanilish sohalari:

- Python dasturlash tilining keng miqyosda qo'llanilishi mumkin bo'lgan uch asosiy soha bor: veb-dasturlash (backend – vebserver uchun ilovalar yozish), sun'iy intellekt masalalari, kompyuterda foydalanuvchi juda ko'p marta bajaradigan mayda ishlar (elektron xatlarni jo'natish, fayllarni izlash va bosmalash, elektron jadvaldan biror-bir ma'lumotlarni ajratib olish va xakozolar).

Nazorat maqsadlari testning mazmuni va tuzilishini belgilaydi. Sinovdan o'tgan bilimlar - bu o'quv fanlari mazmunining bir qismi bo'lib, talabalar tomonidan o'zlashtirilishi yagona ta'lim muassasasida majburiy nazoratga olinadi. Barcha ta'lim muassasalari o'quvchilarida tekshirilishi lozim bo'lgan bilimlar me'yoriy deb ataladi; ular federal ta'lim organi tomonidan ta'lim jarayoni ishtirokchilari rioya qilishlari kerak bo'lgan norma sifatida belgilanadi. Avanesov

- Python o'rganish ancha oson bo'lgan dasturiy tildir. Agar tabiiy tillar bilan o'xshatish qiladigan bo'lsa biror-bir tilda fikrni yetkazish uchun ma'lum vaqt so'zlarni, tilning grammatikasi o'rganish kerak bo'ladi. Qandaydir minimal bilim shakllangandan so'ng, asta-sekin inson o'z fikrini ifoda eta boshlaydi. Dasturlash tillari bilan ham holat xuddi shunday. Biror dasturlash tilida amaliy foyda keltiradigan dastur yozishni boshlash uchun ma'lum bilimlar majmuini egallash kerak, shundan so'nggina dasturlashni boshlash mumkin. Boshqa dasturlash tillaridan farqli ravishda, Python da amaliy ahamiyatga ega dasturlarni ishlab chiqishga ancha ertaroq, hali tilning katta qismini o'rganmasdan turib ham kirishish mumkin.

- Python interpretatsiya qilinadigan dasturiy til. Dasturlash tillarini interpretatsiya qilinadigan va kompilyatsiya qilinadigan dasturlash tillariga bo'lishadi. Aniqroq aytganda, agar dasturlash tilidagi dasturni bajarish interpretatsiya orqali amalga oshirilsa, bunday tillar interpretatsiya qilanadigan til deyiladi. Agar dasturlash tilidagi dasturni bajarish uchun uni avval mashina tiliga o'tkazish talab qilinsa, bunday tillar kompilyatsiya qilinadigan tillar deyiladi. Aslini olganda, kompyuter uchun yozilgan har qanday dastur interpretatsiya qilinadi. Chunki mashina kodlaridagi dastur kompyuterning miyasi bo'lgan protsessor tomonidan interpretatsiya qilinadi. Interpretatsiya qilinadigan tillarda yozilgan dasturlar uchun maxsus – interpretator dastur mavjud. Bu interpretator dastur kodlarini bajarilishini ta'minlab beradi.

Kompyuterlarni avtomatlashtirish dasturi Python 3.11.2 versiyasida tuzilgan bo'lib, bu dasturni tuzish uchun tkinter deb nomlangan Python uchun standart GUI kutubxonasi kerak bo'ladi. Uning yordamida biz ish stoli ilovalarini yaratish mumkin. Bu loyihaning asosidir va biz undan dasturning foydalanuvchi interfeysini yaratish uchun foydalanamiz.

Tasodifiy modul turli xil tarqatish uchun psevdo-tasodifiy sonlar generatorlarini amalga oshiradi. Ushbu modul savollar variantlarini aralashtirishga yordam beradi.

So'rovlar kutubxonasi HTTP / 1.1 so'rovlarini juda oson yuborish imkonini beradi. Ochiq Trivia JB-dan savollar olish uchun kutubxona kerak bo'ladi.

Python sinflari obyektlarni yaratish uchun rejadir. Obyektlar haqiqiy dunyodagi mavjudotlardir. Loyihani ishlab chiqish jarayonida biz turli xil funktsiyalarimizni turli sinflar va usullarga ajratamiz.

Kompyuter testlarini avtomatlashtirish dasturining ish jarayoni:

Biz savollarni json faylga lug'at ko'rinishda yozib chiqamiz (ochiq Trivia DB API-dan savollarni olsak ham bo'ladi).

Har bir olingan savol uchun o'z savollar sinfidan foydalanib, boshqa obyekt yaratish lozim. Bu savol obyektlarining barchasi question_bank ro'yxatga qo'shiladi. Bu question_bankdastur miyasiga o'tadi, QuizBrain va quizobyekt yaratiladi. Ushbu sinf ko'proq savollar mavjudligini tekshirish, keyingi savolni olish, ballarni hisoblash va hokazolar uchun javobgardir. Ushbu quizobyekt QuizInterface sinfiga o'tkaziladi va foydalanuvchi u bilan o'zaro aloqada bo'lishi mumkin.

Bazadan (json fayldan yoki Open Trivia DB API-dan) savollarni olish. Savollarni olish uchun json faylning lug'atidan foydalaniladi(API-ga o'tiladi), toifalar va qiyinchiliklar bilan birga kerakli savollar sonini tanlanadi.

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