MOBIL ILOVALAR YARATISHDA MA'LUMOTLAR BAZASIDAN FOYDALANISH TEXNOLOGIYALARI

Hakimova Feruzaxon Xasanboy qizi
Qo'qon Davlat Pedagogika Inisituti.

Ma'lumki, vaqt o'tishi bilan, yangi texnologiyalar asosida ishlaydigan qurilmalar yaratilishi bilan birgalikda ularga yoziladigan dasturiy mahsulotlarga bo'lgan talab kundan kunga ortib bormoqda. Shu jumladan, Android smartfonlariga va tablet kompyuterlarga yoziladigan dasturlar bunga misol bo'laoladi. So'nggi yillarda mamlakatimizda android smartfonlariga ko'plab dasturiy mahsulotlar yaratilib kelinmoqda. Bunga misol qilib o'zbek yoshlarining ushbu sohada egallab kelayotgan yutuqlarini keltirishimiz mumkin. Barchamizga ma'lumki, android operatsion tizimi yaratilishida Linux operatsion tizimining afzallik tomonlaridan eskizlar olingan, ya'ni xavfsizlik, moslashuvchanlik va h.k larni aytib o'tishimiz mumkin. Statistikaga asosan, 2013 yilga kelib Android operatsion tizimida, iOS va Mac OS tizimlaridan ancha ilgarilab ketdi. Shu yilning o'zida Android smartfonlarining jahon bozorida tashkil etgan qismi 81.3 foizga yetdi .

Boshqacha qilib aytganda bugungi kunga kelib android smartfonlariga va ularga yoziladigan dasturiy ta'minotlari ma'lumotlar bazasini yaratishga bo'lgan talab kundan kunga ortib bormoqda.

Xususan, SQLite ma'lumotlar bazasidan foydalangan holda dasturiy mahsulotlarni Yaratishni asosiy maqsad qilib qo'yishdir.

- ^ veb index
- % mobile internet users
- using the following
- operating systems
- O Апшom
- O Windows Phone
- O BlackBerry OS
- O Symbian
- O Other

Mobil qurilmalar uchun operatsion tizimlarning qo'llanilish ko'rsatkichlari.

Mobil qurilmalar uchun dasturiy vositalar fanining asosiy maqsadi talabalar uchun mobil ilovalar yaratishning asosiy prinsip lari, qoidalari va ko'nikmalarini hosil qilish bo'lib, yuqorida aytib o'tganimizdek mobil qurilmalar uchun kerakli asosiy komponentadan biri bu SQLite ma'lumotlar bazasini boshqarish tizimidir.

SQLite - bu ochiq kodli ma'lumotlar bazasi hisoblanib, bu relyatsion ma'lumotlar bazasining standart imkoniyatlariga egadir. Bundan tashqari SQLite ma'lumotlar Omborida ishlash uchun xotiradan uncha katta bo'lmagan miqdorda joy talab etiladi (taxminan 250 kb). SQLite ni Android OT da ishlatish uchun ma'lumotlar omborini o'matish va sozlash talab etilmaydi.

SQLite arxitekturasi Bunda ma'lumotlar ombori bilan ishlash uchun faqat SQL so'rovlami amalga oshirish talab etiladi. Demak bu narsa shuni ko'rsatadiki, Ma'lumotlar bazasi va banki fani bocyicha umumiy ko'nikmalarga ega bo'lgan talaba SQLite dan foydalanish imkoniyatiga

ega bo'ladi. 0'z navbatida SQLite obyektga yo'naltirilgan dasturlash asosida yaratilgan bo'lib, barcha ajratilgan modullar uchun maxsus paketlar, sinflar va funksiyalar (metodlar) mavjud. Masalan, android.database - paketi barcha kerakli boigan sinflarni o'z

ichiga oladi, android. database.sqlite - paketi SQLite uchun barcha kerakli boclgan

sinflarni o'z ichiga oladi. 0 'z navbatida SQLiteOpenHelper, SQLiteDatabase –

sinfi ma'lumotlar bazasini yaratish va ishlov berish uchun ishlatiladi. Bundan

tashqari maxsus metodlari mavjud:

- insertQ - m a'lumotlar bazasiga ma'lumot yozish
- update () - m a'lumotlar bazasi dag i yozilgan ma'lumotlami qayta o'zgartirish
- deteteQ - m a'lumotlami bazadan 0'chirish
- execSQLQ-SQL so'rovni yuklash
- rmvQueryO -jadvalning satr ma'lmotlami kiritish uchun so'rovni yuklash
- quetyQ - kiritilgan so'rovni chaqirish va h.k.lar
- openQ - ma'lumotlar bazasi bilan ishlash uchun oqim hosil qilish
- ctoseQ — ma'lumotlar bazasi bilan ishlash uchun yaratilgan oqimni yopish

SQLite ni MySQL va boshqa ma'lumotlar omboridan farqi shundan iboratki,

MySQL, MS SQL, ORACLE, PostgreeSQL laming ishlashi uchun alohida server talab etiladi hamda server - mijoz munosabatini tashkil etish uchun ham oldindan aniqlangan eshituvchi port belgilangan boiishi shart, SQL ite ma'lumotlar omborida esa hech qanaqa sender 0'rnatilishi talab etilmaydi va turli xil turdagi operatsiyalami bajarish boshqa ma'lumotlar bazasiga qaraganda ancha oson hisoblanadi.

 SQL ite quyidagi turdagi ma'lumotlar toifalari uchun o'rinli hisoblanadi, ya'ni TE XT(Java dasturlash tilidagi String toifaga o'xshash), INTEGER (Java dasturlash tilidagi Long toifaga o'xshash) va REAL (Java dasturlash tilidagi Double toifaga o'xshash).

Bugungi kunga kelib kocplab smartfonlarga yozilayotgan dasturiy mahsulotlarning ma'lumotlar bazasi ishlab chiqishda SQL ite dan foydalanilyapti. Bunga asosiy sabab qilib, SQLite ning ishlash tezligini olishimiz mumkin hamda ushbu ma'lumotlar bazasi barcha turdagi operatsion tizimlarida bir xilda ishlay oladi. SQLite ma'lumotlar omborida 140 terabayt hajmdagi axborotni saqlash mumkin ya'ni 2 bayt gacha. Darhaqiqat, Android OS sida SQL ite ma'lumotlar omborining ishlash prinsipiga tocxtaladigan bo'lsak, MS SQL ma'lumotlar omboridan foydalanadigan bo'lsak bizga JDBC kerak bo'ladi ya'ni Java Database

Connector, lekin Android OS sida ishlaydigan bo'lsak JDBC ni ko'chirib olib ocmatishni zaruriyati yoq. Demak, bundan kelib chiqadiki hech qanaqa qo'shimcha driver keragi yo'q.

Xulosa qilib aytganda, yuqorida keltirib o'tilganlardan kelib chiqqan holda shuni ayta olamizki, mobil ilovalar uchun ma'lumotlar bazasini yaratish texnologiyalaridan biri boclgan SQL ite texnologiyasidan foydalanish bizga qo'shimcha imkoniyatlami hamda Android smartfonlari uchun bugungi kundagi dolzarb bo'lgan dasturiy mahsulotlami yaratishda muhim omil bo'lib hisoblanadi

Adabiyotlar:

1. Abduqodirov. A, Xaitov A, Shodiev R. Axborot texnologiyalari. Toshkent-2 0 0 2 y.
2.Juraev, Muzaffarjon Mansurjonovich. "Prospects for the development of professional
training of students of professional educational institutions using electronic educational
resources in the environment of digital transformation." Academicia Globe: Inderscience
Research 3.10 (2022): 158-162.

3.Juraev, Muzaffarjon Mansurjonovich. "The value of open mass competitions in the process of digitalization of extracurricular activities of schoolchildren." Web of Scientist: International Scientific Research Journal 3.10 (2022): 338-344.

4.Joʻrayev, Muzaffarjon. "Professional taʼlim jarayonida fanlararo uzvilik va uzliksizlikni taʼminlash o ʻquvchilari kasbiy tayyorgarligining muhim omili sifatida." Zamonaviy dunyoda amaliy fanlar: Muammolar va yechimlar 1.29 (2022): 43-46.

5.Juraev, M. M. "OA Qo ʻysinov Description of the methodological basis for ensuring interdisciplinary continuity of the subject "Computer Science and Information Technology" in vocational education." JournalNX-A Multidisciplinary Peer Reviewed 7.10 (2021).

6.Mansurjonovich, Juraev Muzaffarjon. "Description of the Methodological Basis for Ensuring Interdisciplinary Continuity of the Subject" Computer Science and Information TECHNOLOGY" in Vocational Education." JournalNX 7.10: 223-225.

7.Khasanov, A. R. (2022). LEARNING IS A COMPETENCY-BASED APPROACH AS A CONTENT UPDATE STEP. Galaxy International Interdisciplinary Research Journal, 10(12), 217-223.

8. Khasanov, A. R. (2022). Development of information competence of future informatics teachers as a pedagogical problem. Open Access Repository, 9(12), 73-79.

9. Xasanov, A. R. (2021, May). USE OF MODERN PEDAGOGICAL TECHNOLOGIES AND INTERACTIVE METHODS IN TEACHING COMPUTER SCIENCE. In E-Conference Globe (pp. 198-199).

10.Mansurjonovich, Juraev Muzaffarjon. "CURRENT STATUS OF THE SCIENCE OF INFORMATICS AND INFORMATION TECHNOLOGIES IN THE PROFESSIONAL EDUCATION SYSTEM, EXISTING PROBLEMS AND SOLUTIONS, PRINCIPLES AND CONTENT OF THE SCIENCE ORGANIZATION." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 327-331.

11.Mansurjonovich, Juraev Muzaffarjon. "Professional Educational Institutions Theoretical and Practical Basis of Development of the Content of Pedagogical Activity of Teachers of" Information and Information Technologies"." Open Access Repository 9.12 (2022): 85-89.

12.Mansurjonovich, Juraev Muzaffarjon. "Experience Of Cambridge Curricula In Ensuring The Continuity Of Curricula In The Field Of "Computer Science And Information Technology" In The System Of Professional Education." The American Journal of Interdisciplinary Innovations and Research 3.11 (2021): 26-32.

13.Juraev, Muzaffarjon Mansurjonovich. "Theoretical and practical principles of improving the content of the pedagogical activity of ICT teachers of professional educational institutions in the conditions of information of education." (2022).

14.Juraev, Muzaffarjon Mansurjonovich. "Methodological foundations for improving the content of training future ict teachers in the conditions of digital transformation of education." (2022): 9-11.

15.Melikyzievich, Siddikov Ilkhom, et al. "THE METHOD OF REFERENCE TESTS FOR THE DIAGNOSIS OF DIGITAL DEVICES." International Journal of Early Childhood Special Education 14.7 (2022).

16.Mansurjonovich, Juraev Muzaffarjon. "Designing an electronic didactic environment to ensure interdisciplinary integration in the teaching of" Informatics and information technologies" during professional education." Confrencea 11.11 (2023): 78-82.

17.Mansurjonovich, Juraev Muzaffarjon, and Aroyev Dilshod Davronovich. "INTERDISCIPLINARY INTEGRATION IS AN IMPORTANT PART OF DEVELOPING THE PROFESSIONAL TRAINING OF STUDENTS." Open Access Repository 9.1 (2023): 93-101.

18.Juraev, M. M. "ZY Xudoyberdiyev Theoretical analysis of the continuity model of computer science and information technology in the System of professional education." European Scholar Journal (ESJ)//ISSN (E): 2660-5562.

19.Xudayberdiyev, Zayniddin Yavkachevich, and Muzaffarjon Mansurjonovich Juraev. "Theoretical analysis of the continuity model of computer science and information technology in the system of professional education." (2021).