DJANGONING VEB-DASTURLASHDAGI ROLI

Tursunbek Sadriddinovich Jalolov

Asian International University, Bukhara, Uzbekistan

Email: jalolovtursunbeksadriddinovich@oxu.uz

Annotatsiya: *Django - bu veb-ilovalarni yaratish usulini inqilob qilgan mashhur veb-ishlab chiqish ramkasi . Uning kuchli xususiyatlari va mustahkam arxitekturasi uni butun dunyo bo'ylab ishlab chiquvchilar uchun afzal tanlovga aylantiradi. Ushbu maqola Django-ning veb-dasturlashdagi rolini o'rganadi , uning asosiy xususiyatlari va afzalliklarini ta'kidlaydi.*

Kalit so'zlar: *Django , veb-dasturlash, ramkalar, Python, veb-ishlab chiqish*

Kirish:

Django - bu Model-View-Shablon (MVT) arxitektura naqshiga amal qiladigan Python-da yozilgan ochiq manbali veb-ishlab chiqish tizimi. U ishlab chiquvchilarga murakkab veb-ilovalarni samarali yaratish uchun vositalar va kutubxonalar to'plamini taqdim etish orqali veb-ishlab chiqishni tez va oson qilish maqsadida yaratilgan . Djangoning "batareyalar bilan ta'minlangan" yondashuvi shuni anglatadiki, u ORM (Ob'ektga aloqador xaritalash) tizimi, shablonlarni yaratish mexanizmi, shakllarni qayta ishlash, autentifikatsiya va boshqalar kabi ko'plab o'rnatilgan xususiyatlar bilan birga keladi .

Django-dan foydalanishning asosiy afzalliklaridan biri uning kengaytirilishi va moslashuvchanligidir. Bu ishlab chiquvchilarga umumiy vazifalar uchun g'ildirakni qayta kashf qilmasdan tezda xavfsiz va kengaytiriladigan veb-ilovalarni yaratishga imkon beradi . Django-ning mustahkam xavfsizlik xususiyatlari, shuningdek, uni nozik ma'lumotlar bilan ishlaydigan ilovalarni yaratish uchun ishonchli tanlovga aylantiradi.

Djangoning veb-dasturlashdagi o'rni :

Django murakkab veb-saytlar va veb-ilovalarni yaratish jarayonini soddalashtirish orqali zamonaviy veb-dasturlashda hal qiluvchi rol o'ynaydi. Uning yuqori darajadagi abstraktsiyalari foydalanuvchi autentifikatsiyasi, ma'lumotlar bazasi o'zaro ta'siri, shakllarni qayta ishlash va URL-marshrutlash kabi umumiy funktsiyalarni amalga oshirish uchun zarur bo'lgan kod miqdorini kamaytiradi. Bu ishlab chiquvchilarga takroriy vazifalar bilan shug'ullanmasdan, o'z ilovalari uchun noyob va innovatsion xususiyatlarni yaratishga e'tibor qaratish imkonini beradi .

Django -ning yana bir muhim jihati - bu eng yaxshi amaliyotlarga urg'u berish va kodlash standartlariga rioya qilishdir. Ramka DRY (O'zingni takrorlama) tamoyiliga va boshqa kodlash qoidalariga qat'iy rioya qilish orqali toza va barqaror kodni rag'batlantiradi. Bu nafaqat ishlab chiquvchilarning loyihalarda hamkorlik qilishini osonlashtiradi, balki Django bilan yaratilgan ilovalar mustahkam va uzoq muddatda xizmat ko'rsatish oson bo'lishini ta'minlaydi .

Bundan tashqari, Djangoning keng qamrovli hujjatlari va faol hamjamiyat yordami ishlab chiquvchilarga ramka bilan ishlashni boshlash va yo'lda duch keladigan muammolarni bartaraf etishni osonlashtiradi . Django paketlar ombori orqali uchinchi tomon paketlarining mavjudligi, shuningdek, uning imkoniyatlarini yanada kengaytirib, ishlab chiquvchilarga o'z ilovalariga osonlik bilan yangi xususiyatlar yoki funksiyalarni qo'shish imkonini beradi.

Django - bu tezkor rivojlanish va toza, pragmatik dizaynni rag'batlantiruvchi yuqori darajadagi Python veb-ramka. Bu model-view-controller (MVC) arxitektura naqshiga amal qiluvchi ochiq manbali veb-ramka . Djangoning asosiy maqsadi ishonchli vositalar va xususiyatlar to'plamini taqdim etish orqali murakkab, ma'lumotlar bazasiga asoslangan veb-saytlarni yaratishni soddalashtirishdir.

Django -ning veb-dasturlashdagi asosiy rollaridan biri bu veb-ishlab chiqishning murakkabliklarini hal qilish qobiliyatidir, bu esa ishlab chiquvchilarga takroriy vazifalarga vaqt sarflashdan ko'ra o'z ilovalarini yozishga e'tibor qaratish imkonini beradi. Django o'rnatilgan administrator paneli, autentifikatsiya tizimi va URL marshrutlash tizimi bilan birga keladi, bu esa kuchli veb-ilovalarni tezda yaratishni osonlashtiradi.

Django shuningdek, ishlab chiquvchilarga xom SQL so'rovlarini yozishdan ko'ra Python ob'ektlaridan foydalangan holda ma'lumotlar bazalari bilan o'zaro ishlash imkonini beruvchi Ob'ekt bilan bog'liq xaritalash (ORM) qatlamini taqdim etadi. Bu ma'lumotlar bazalari bilan ishlashni osonlashtiradi va ma'lumotlar bazasi bilan o'zaro aloqada xatolar ehtimolini kamaytiradi.

Django- ning veb-dasturlashdagi yana bir muhim roli bu xavfsizlikka urg'u berishdir. Django saytlararo skript (XSS), saytlararo so'rovlarni qalbakilashtirish (CSRF) va SQL in'ektsion hujumlari kabi umumiy xavfsizlik zaifliklariga qarshi o'rnatilgan himoyalarga ega. Bu ishlab chiquvchilarga xavfsizlik muammolari haqida tashvishlanmasdan xavfsiz veb-ilovalarni yaratishga yordam beradi.

Django, shuningdek, modulli dizayni orqali kodni qayta ishlatishga yordam beradi. Ishlab chiquvchilar turli loyihalarga osonlik bilan birlashtirilishi mumkin bo'lgan "ilovalar" deb nomlangan qayta foydalanish mumkin bo'lgan komponentlarni yaratishi mumkin. Bu ishlab chiquvchilarga bir nechta loyihalarda kodni qayta ishlatish va izchil kod bazasini saqlash orqali vaqtni tejash imkonini beradi.

Bundan tashqari, Django o'zining funksionalligini yaxshilaydigan plaginlar, kengaytmalar va kutubxonalarga hissa qo'shadigan kuchli ishlab chiquvchilar hamjamiyatiga ega. Ushbu uchinchi tomon paketlari Django imkoniyatlarini kengaytirishga yordam beradi va uni veb-ishlab chiqish uchun yanada kuchliroq qiladi.

Xulosa qilib aytganda, Django murakkab, ma'lumotlar bazasiga asoslangan veb-saytlarni samarali yaratish uchun mustahkam asosni taqdim etish orqali veb-dasturlashda hal qiluvchi rol o'ynaydi. Uning soddaligi, xavfsizligi, qayta ishlatilishi va kengaytirilishiga qaratilganligi uni ishlab chiquvchilar orasida zamonaviy veb-ilovalarni yaratish uchun mashhur tanlovga aylantiradi.

Xulosa :

Xulosa qilib aytganda, Django zamonaviy, imkoniyatlarga boy veb-ilovalarni samarali yaratishga intilayotgan veb-dasturchilar uchun ajralmas vositaga aylandi. Uning boy funksiyalari, kengaytirilishi, xavfsizlikni yaxshilash, ilg'or tajribalarga rioya qilish va faol hamjamiyat yordami uni butun dunyo bo'ylab ishlab chiquvchilar uchun eng yaxshi tanlovga aylantiradi. Djangoning kuchi va moslashuvchanligidan foydalangan holda , ishlab chiquvchilar o'z foydalanuvchilarining ehtiyojlarini qondiradigan zamonaviy veb-ilovalarni yaratishi mumkin, shu bilan birga rivojlanish jarayonlarini soddalashtiradi va bozorga chiqish vaqtini qisqartiradi.

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