**An abstract of the waste management app**

**Abstract in English**

The video presents an innovative mobile application designed to revolutionize waste management practices. The app, developed by Alex Murimi, aims to address the growing challenges in waste disposal due to urbanization and population growth. It leverages modern technology, including IoT, data analytics, and mobile platforms, to enhance waste collection, recycling, and user engagement. Key features include waste collection scheduling, recycling guides, a marketplace for recyclable materials, and integration with local waste management systems. The app's technical architecture ensures scalability and security, while its user-friendly interface makes it accessible to a broad audience. The document also discusses the app's impact through case studies, future development plans, and its broader societal and environmental benefits. The ultimate goal is to foster sustainable waste management practices, reduce landfill waste, and promote environmental awareness.

**Abstract in Kiswahili**

Video hii inawasilisha programu ya simu ya ubunifu iliyoundwa kubadilisha mbinu za usimamizi wa taka. Programu hii, iliyotengenezwa na Alex Murimi, inalenga kushughulikia changamoto zinazoendelea katika utupaji wa taka kutokana na ukuaji wa mijini na ongezeko la idadi ya watu. Inatumia teknolojia ya kisasa, ikijumuisha vifaa vya IoT, uchambuzi wa data, na majukwaa ya simu, kuboresha ukusanyaji wa taka, urejeleaji, na ushirikishwaji wa watumiaji. Vipengele muhimu ni pamoja na upangaji wa ukusanyaji wa taka, miongozo ya urejeleaji, soko la vifaa vya urejeleaji, na ujumuishaji na mifumo ya usimamizi wa taka za mitaa. Muundo wa kiufundi wa programu unahakikisha upanuzi na usalama, huku kiolesura chake cha kirafiki kikifanya kiwe rahisi kufikiwa na watumiaji wengi. Hati hii pia inajadili athari za programu kupitia tafiti za kesi, mipango ya maendeleo ya baadaye, na manufaa yake kwa jamii na mazingira kwa ujumla. Lengo kuu ni kukuza mbinu endelevu za usimamizi wa taka, kupunguza taka zinazofika dampo, na kuhamasisha ufahamu wa mazingira.

**Abstract in Kikuyu**

Murangiri ũyũ nĩugĩta thirikari ya kũmbi ya mũthenya wa hinya wa kũrũma ushirikirio wa kũhoya ũkũnyũ a thagana thĩinĩ wa ngirigaca ya thũmbũri wa kũnyũũra maũndũ. Thirikari ĩyo, ῖtanῖrwo ni Alex Murimi, nῖ ya kũrutĩra mwako wathinĩ wa thũmbũri cῖokoro itunyagwo ni wathi wa mwaki na rũthiomi rwa mũnene. Ĩgĩkorwo nῖ ĩgũitania na mĩtĩrĩrĩrĩ ya ndũrĩrĩrĩ ya IoT, kũcaria maũndũ maĩkirwo, na mĩhoko ya wĩra wa kũmbi ya mũthenya, kũrutĩra mwako wa thũmbũri, gũkũrĩra mwĩteithie, na kwĩrũa cĩrũ. Kĩmenya kĩa gũtũmĩrĩrĩra kĩagĩĩtĩkanwo kũrĩ kũrĩka wa kũrũgama thũmbũri cῖokoro, mĩthuthũ rĩa ũkũrũra thũmbũri, ũkũrũra ngiria gũkorwo rũcaro rwĩra, na kũina na kũmũrũrĩrĩrĩa na ndĩrĩ mĩthuthũ ya mũthenya wa thũmbũri wa ngirigaca. Mũgambo wa mũndũ nĩ wĩrũka ũkũrĩna na kũrũrĩrĩrĩa thirikari, nĩ tondũ ciathĩni thĩna wa gĩtũmĩrĩrĩra. Murangiri ũyũ o mũngĩ onamũhe mwaki na ithatĩrĩrĩo rĩa kũrĩka wa mũndũ na kũrĩrĩrĩa gĩkenya kĩa thirikari, rũnene rũrutagwo thĩna wa thũmbũri na gĩthaka na wĩra wa ngirigaca.