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Emphasizing FoE UNHAS Smart Campus Roles for Creating the Neighboring Smart Societies



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Towards FoE UNHAS Green Campus



→ Globalization influences the local communities → may impact the negative way of interaction in the global communities



→ Proactive, innovative and sustainable efforts that could be contributed from many intelligent "young generations" of FoE UNHAS



→ Strong points of FoE Unhas → human resources (HR), infrastructure and support facilities (quantity and quality).

→ Big populations of Agent of Development (AoD) and Agent of Change (AoC) are currently involving in various impressive R&D projects at JK-COT, CoE-AIT → more contributions in terms applied intelligent technologies could be dedicated to local vicinity societies of neighboring villages



Towards FoE UNHAS Green Campus

-The R&D project related to "Green Campus and Smart Villages" → adopt various common well-known principles of the easy access to the various services of sustainable energy sources; provides highly potential opportunity for the provision of education and health services in very good manner; easy access and reliable on the sources of clean water; the quality level of sanitation and nutrition, growth and acceleration economical business units are increasing to strengthen the fundamentals of the economy of the surrounding community, increasing the degree of safety and comfort of staying in a residential area and its surroundings, gender equality and the practice of democratic life of dignity.



All the above mentioned points will act as the catalyst for the development of local surrounding area (smart Societies)



Towards FoE UNHAS Green Campus



Projects of Green campus and smart society

→ Environmental-friendly electrical power generation → Assessments and implementation of smart grid technology for the better distribution and management of electrical energy → smarter and more efficient ← Smart Card Technologies

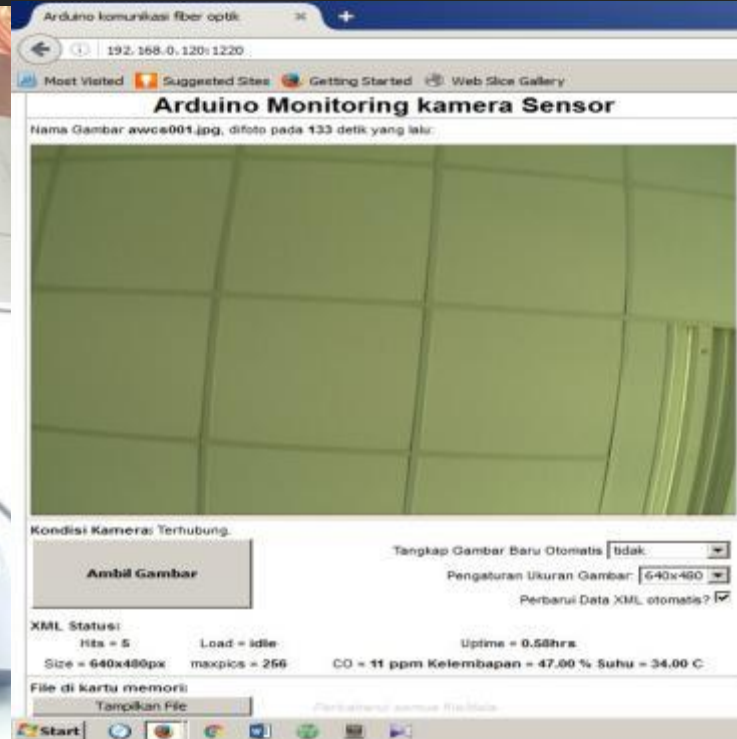
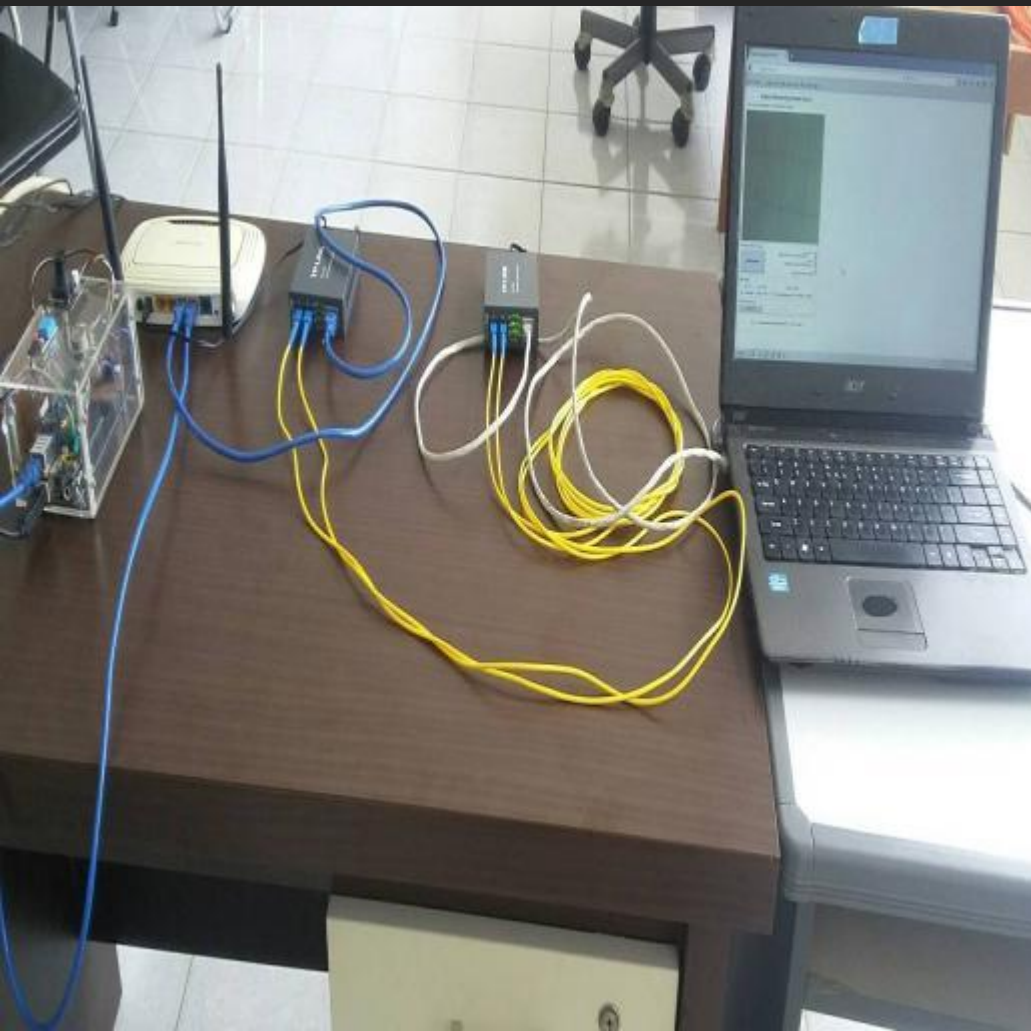
→ Innovations and development of various smart card applications for a wide range of holistic applications, both within the college / high school as a system of an integrated academic services by utilizing one student card for the whole academic services include lectures and information management systems of smart classrooms, smart assessment, and reliable students monitoring mechanism; development and application of smart card applications for library services and smart parking system in every local community (or inside campus area)

→ To further improve insight and expand the capabilities of the business/ enterprise pilot communities living in the area around FoE campus, Gowa regency through a number of consistent programs on utilization of ICT technology in a more optimal, both for the purposes of education and business / potentially creative jobs, transformation of well being mindset and behavior to whole digital village societies. Some applications are uploaded with high moral messages and can be accessed within the digital villages environment.

→ R & D project concerned "Green campus and Smart villages" performed at Center of Excellence for Applied Intelligent Technologies (COE-AIT) will be focused on a number of studies and implementation of various waste processing technologies (both categories of organic and non-organic) produced every day in the Engineering Campus, Gowa Regency and in the neighborhood residential communities. Many technical and non-technical mechanisms will be a serious issue to be followed up, including methods of rubbish recycling-friendly environment, the system of power generation using wasted energy resources such as elements of waste products from humans, animals and many others, Fertilizer materials/technology produced from tree leaf and other type of waste.



On Going Prospective R&D at Jusuf-Kalla Center of Technology, Faculty of Engineering, UNHAS



Applicable for various fields including ITS, Environmental surveillance etc.

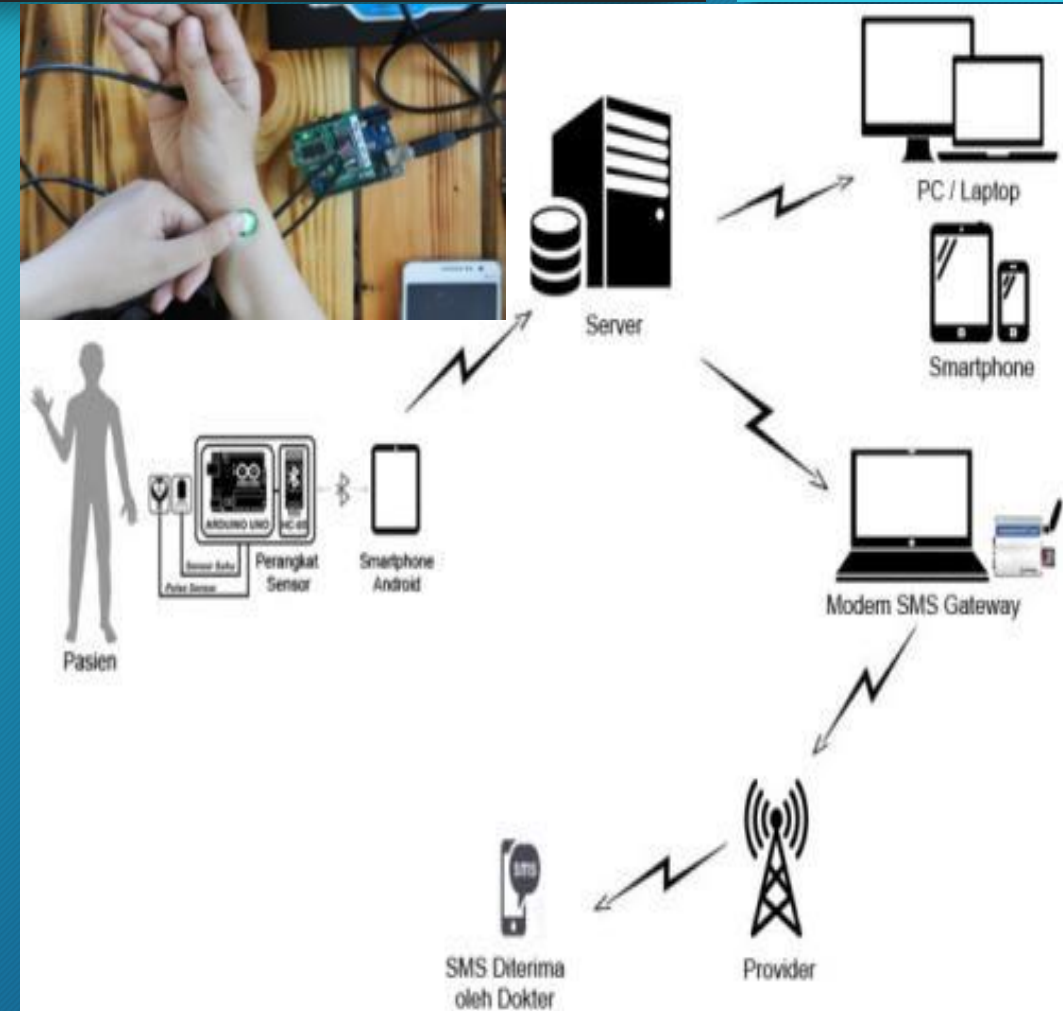


On Going Prospective R&D at Jusuf-Kalla Center of Technology, Faculty of Engineering, UNHAS



Is going to be transformed for wearable smart devices suitable for Healthcare services application ← Smartcard roles for service payment

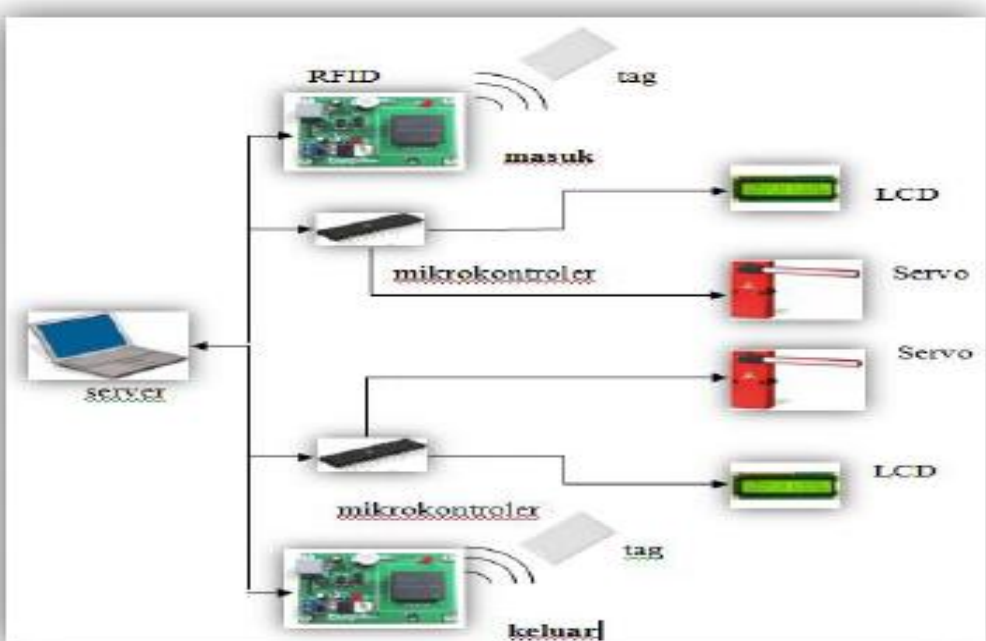
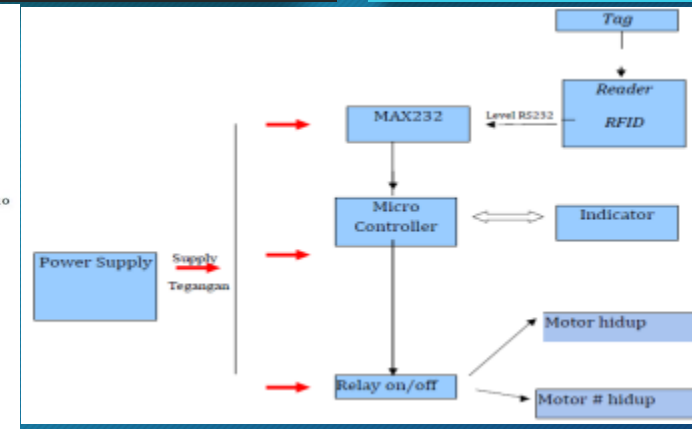
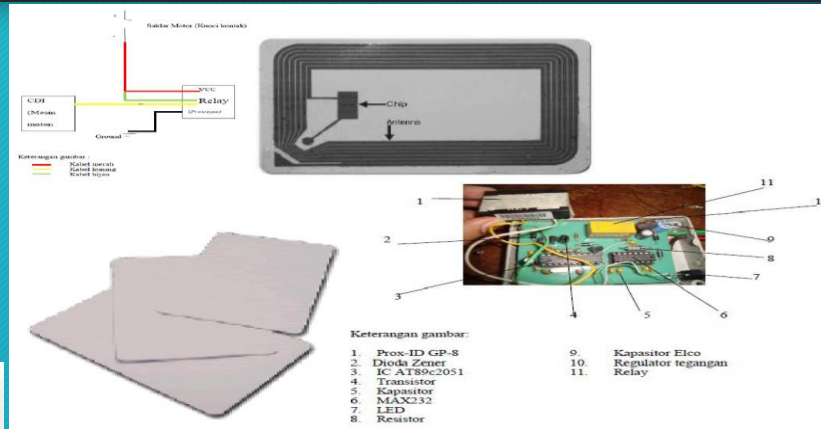
- Accurate Fever Monitoring
- Intelligent database system
- Supported mobile applications
- Various medical monitoring systems are highly possible to be incorporated with into single telemedicine networks/applications (Fetal Monitoring, Blood sugar monitoring, breast cancer detection and monitoring , ECG and many more could be further developed at JK-COT, CoE-AIT Faculty of Engineering UNHAS



On Going Prospective R&D at Jusuf-Kalla Center of Technology, Faculty of Engineering, UNHAS



→ Smart and high secure parking system developed at JK-COT, CoE-AIT Faculty of Engineering UNHAS → integrate mobile computing content to allow user flexibly access the actual info of the parking area in office/super market/ universities etc



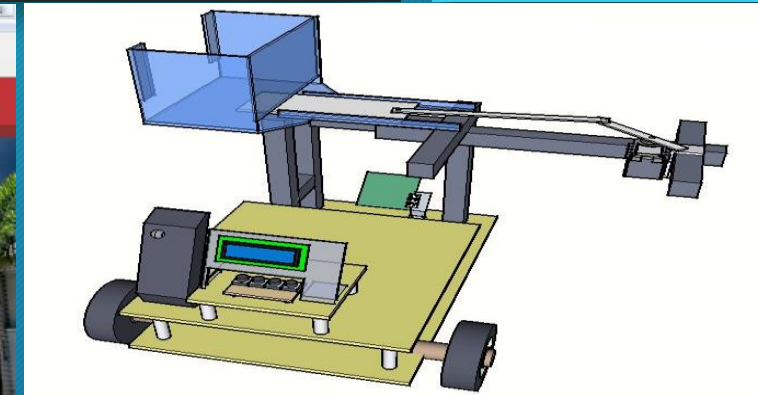
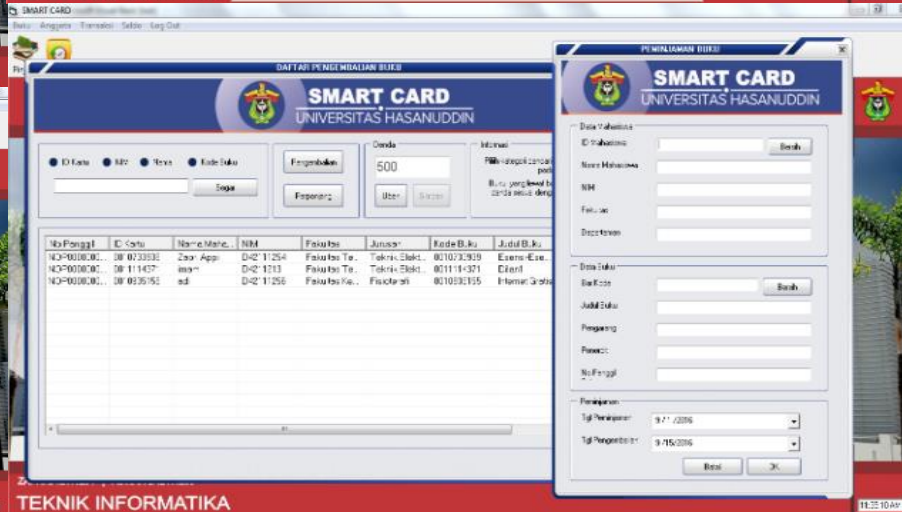
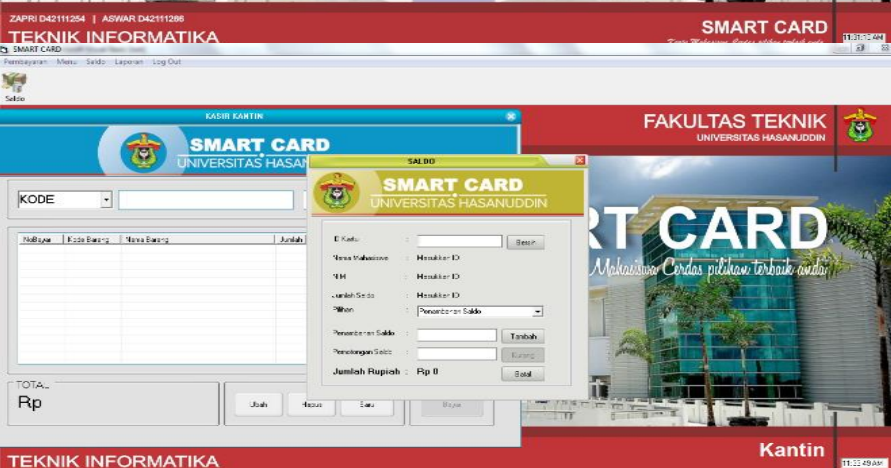
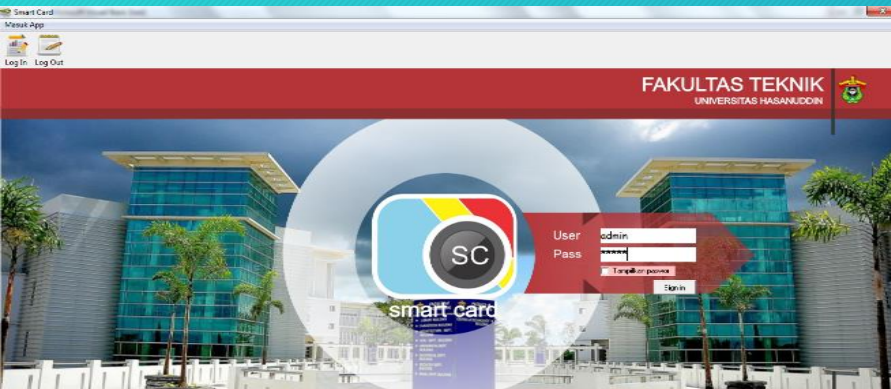
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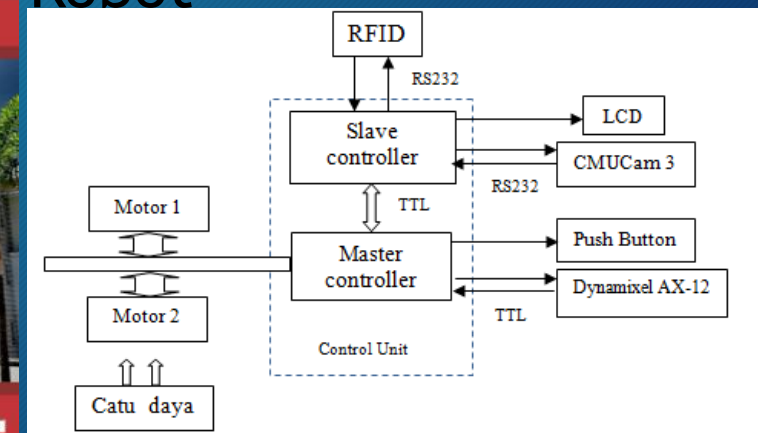


Intelligent Library Services

→ Smartcard Students/Staffs



Intelligent Library Services → Librarian Robot



On Going Prospective R&D at Jusuf-Kalla Center of Technology, Faculty of Engineering, UNHAS



Energy management for FoE Smart Campus is pretty important and critical issue → independence and sustainable of energy supply especially the electrical power generation → smart academic and other services



Robust energy management system



Hybrid power system

Thermoelectric generator (TEG)

Rechargeable smart card

