CASE Study: healcon+ - Patient Health Record system:

·   Schedule appointments, reschedule, send patients reminders, track missed appointments and much more in one interface.

·   Advanced appointment calendar also provides a very useful feature of tracking missed/checkedin/upcoming appointments in realtime. Appointment reminders ensures that your patients never miss scheduled appointments.

·   Digitize electronic medical records of the patients and also manage interaction between clinic & patient at one central location like past appointments, treatments, bills, payments, prescriptions, medical documents, SMS/Email communication etc.

·   Add/Update medical history and all vital health stats of patient with single click. Create, Schedule & Track compleltion of treatments centrally.

·   At Healcon Labs we know doctors are short of time while attending their patients and hence we created a simple e-Prescription module in healcon practice management software to help doctors write digital prescrpition fast.

·   Add/View bills & receipts from central billing module.Tightly integrated with treatments & appointments for seamless experience. You can add/invite doctors, clinic admins, visiting doctors, receptionist, front desk etc centrally from this module and also control access level of all staff members centrally .

·   Powerful analytics to help you analyze and improve your clinic performance. Financial reporting helps keeps earnings,expenses & profits and check.

Question: Plot an efficient use case diagram for the project "**healcon+**". Identify the relevant actors and its use cases. Relate the use cases with relevant relationships and stereotypes.

CASE STUDY : Smart Farming using IOT

Smart farming is a capital-intensive and hi-tech system of growing food cleanly and sustainable for the masses. It is the application of modern ICT (Information and Communication Technologies) into agriculture. In IoT-based smart farming, a system is built for monitoring the crop field with the help of sensors (light, humidity, temperature, soil moisture, etc.) and automating the irrigation system.
The farmers can monitor the field conditions from anywhere. IoT-based smart farming is highly efficient when compared with the conventional approach. The applications of IoT-based smart farming not only target conventional, large farming operations, but could also be new levers to uplift other growing or common trends in agricultural like organic farming, family farming (complex or small spaces, particular cattle and/or cultures, preservation of particular or high quality varieties etc.), and enhance highly transparent farming.In terms of environmental issues, IoT-based smart farming can provide great benefits including more efficient water usage, or optimization of inputs and treatments.

Question: Assume that Agile software model is implemented for the application "**Smart Farming using IOT**" . Explain the advantages and disadvantages of the software process model with detailed justifications.

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Question: Identify the class and objects required for the project "**Smart Farming using IOT**". Provide a detailed narration on types of inheritance possible in the project development of "**Smart Farming using IOT**" app and plot an efficient class diagram.