

Project TwoPager | EuroTeQathon III

Our third EuroTeQathon will be hosted in Prague (CTU) from Saturday June 10th until Monday June 12th 2023. In preparation of this event every (selected) Collider project is asked to submit a TwoPager on their project according to the locally communicated deadline and procedure. This document will be used by the jury to complement the final presentation on Monday and have a good overview of all the different projects

PROJECT DETAILS

Challenge Collaborator: n/a

Team name: TestWell

Team slogan: Test well with TestWell!

Team members (full name | study program | university)



Aleksandra Isabel Pillmann	Open University/Cyber Security (MSc)	TalTech
Johannes Theodor Kollist	Digital Health (MSc)	TalTech
Laura Palling	Digital Health (MSc)	TalTech
Merit Marquis	Digital Health (MSc)	TalTech
Tiina Soots	Digital Health (MSc)	TalTech

What is the target problem for your project (in one sentence)?

The problem we aim to tackle is the prevalence of redundant and duplicate medical laboratory tests, which not only waste resources but also lead to increased healthcare costs and potential patient discomfort.

How do you solve it (in max. three sentences)?

TestWell provides decision support to clinical staff by cross-checking patient information and giving a choice to proceed or cancel the order of a test in case the test has already been performed on the patient.

Potential for impact

TestWell will create a more sustainable future for the world by reducing laboratory tests, and therefore lowering financial burden, costs associated with extra testing, and improving patient safety and well-being. From an environmental point of view – laboratories use a significant amount of energy and resources, including electricity, water, and consumables like reagents and plastics. Reducing laboratory tests can decrease the amount of waste generated by laboratories, leading to lower carbon emissions and a reduced environmental impact. From an economic aspect laboratory tests are very expensive for both patients and healthcare providers. These savings can make healthcare more affordable and accessible for everyone. Overall, reducing laboratory tests would impact the whole population because it can lead to a more sustainable healthcare system by reducing waste and energy use, minimising patient discomfort and inconvenience, improving patient safety and lowering costs for both healthcare providers and patients.

Innovation

TestWell specifically focuses on reducing the number of unnecessary laboratory tests conducted, addressing a common problem in healthcare settings, setting it apart from general healthcare information systems. TestWell does not just check whether the test has been done before, it will show the healthcare specialist when the test was done and what was the result. This allows for quicker decision-making and improved patient care. The solution can be adapted to the specific needs of healthcare facilities, providing a competitive advantage over existing vendors who may lack the resources or agility to meet customer-specific requirements.

The main competitors for TestWell are vendors who develop and maintain current hospital information systems. However, TestWell's innovative approach, customization capabilities, and efficient delivery of test results give it a competitive edge in the market. This real-time functionality sets it apart from existing systems. It is important for TestWell to continue monitoring the competitive landscape and adapting its strategies to maintain a strong position.

Feasibility

Upon successful integration of TestWell into a healthcare facility, it can function as a self-sustaining system, requiring minimal intervention from administrators or developers. Our team boasts a wealth of expertise in both healthcare and IT, enabling us to overcome any potential hurdles that may arise. Moreover, our unwavering commitment to providing superior services ensures that our clients benefit from an uninterrupted and seamless experience. Moving forward, our focus will be on securing funding through means such as seeking out angel investors or applying for grants. With the necessary resources in place, we can embark on the development of TestWell, ultimately enhancing the quality of healthcare services and contributing to a more efficient and effective healthcare system.

Inclusivity

The key stakeholders involved in the solution development include healthcare facilities, such as small clinics and hospitals (i.e., the primary purchasers of the solution), software developers, analysts, and legal advisors. In addition, vendors responsible for information systems used in these healthcare facilities, as well as the Estonian Health Information System from which data is received, are important stakeholders. The main users of the solution are healthcare professionals, including general practitioners, nurses, and hospital doctors. Feedback from healthcare professionals revealed valuable insights. Among general practitioners, 51% expressed the belief that there is an excessive amount of laboratory tests being performed. Among hospital doctors, the percentage was even higher at 64%. When asked about their interest in the solution being offered, 66% responded as being very interested, 22% expressed interest but required more information about how it works, and only 7% showed no interest. These findings indicate a clear demand for a device that can reduce the number of laboratory tests, resulting in cost savings and reduced workload for doctors, nurses, and laboratory staff. By addressing this need, the solution not only provides financial benefits but also alleviates the burden on healthcare professionals, leading to improved efficiency and effectiveness. This contributes to a more sustainable healthcare system by reducing unnecessary tests and optimizing resource utilization.



LIISA

Unit: ICU beds | Doctor's name: John Doe | Speciality: E182 - anesthesiologist

PATIENT
Jane Doe
Personal code: 473...
DOB: 20...
Nationality: Est
Phone number: 50...
Email address: kai...

CLIENT
John Doe
Inner spec: ICU...
Outer spec: unde...
Address: Ehit...
Doctor's code: KSA...

Diagnosis

Comments

Testing reasons Percentage: 50%

My Profile

Warning: The test you ordered have been done before! Do you wish to proceed?

Date	Time	Test	Location	Result	
22.04.2021	12:23	Hemoglobin	PERH	150 g/L	More info
22.03.2021	13:11	Hemoglobin	ITK	120 g/L	More info
22.02.2021	07:56	Hemoglobin	PERH	130 g/L	More info

← 1 2 3 4 5 6 ... → Portraying: 3

Cancel Proceed

TestWeij

← 1 2 3 4 5 6 ... → Kuvaa korraga: 3

8:00 AM 6/24/2021