Dear Sir,

Thank you for your email!

😊

Subject: Thesis Topic Selection and Introduction

Dear Mr. Pitlik,

I hope this message finds you well and I'm sorry for sending you this late
. As per your request, I've engaged with ChatGPT to generate 10 potential
thesis titles along with detailed descriptions. Following that, I have
chosen one!!! 😊 topic for my final thesis, which I've slightly modified!!! 😊 to align
more closely with my interests and aspirations!!! 😊.
Here's the compilation of the initial suggestions:

1.Enhancing Healthcare Data Security Using Artificial Intelligence
2.Automation in Agricultural Informatics: Optimizing Crop Yield Prediction
Models
3.Integrating Artificial Intelligence into Software Testing: A Case Study
on Automated Test Generation
4.Leveraging Data Science for Precision Agriculture: Predictive Analytics
for Crop Disease Detection
5.Enhancing Health Informatics with Data Mining: Predictive Analytics for
Personalized Medicine
6.Securing IoT Devices Using Artificial Intelligence: An Adaptive Intrusion
Detection System
7.Intelligent Automation in Healthcare: Streamlining Electronic Health
Record Management
8.Data-driven Decision Support Systems for Precision Agriculture:
Optimizing Fertilizer Application
9.Machine Learning Approaches for Early Disease Prediction in Health
Informatics
10.Automated Vulnerability Assessment in Software Security: A Comparative
Study

After careful consideration, I have decided to pursue a modified version of
the second!!! 😊 topic, integrating IoT and app development for farmers (c.f. one of the relevant targeted groups:-) and
professionals in a community-oriented approach:

As I chose my topic this is a short review of my thesis and just the start
of it.

Thesis: Empowering Agriculture Communities through IoT and App Development:
A Community-Centric Approach for Farmers and Professionals

🡨accepted! 😊

Empowering: If somebody does use a kind of abstraction like empowering, then the core challenge can immediately be defined as trivial: WE NEED AN ARTIFICIAL SCALE, WHERE YOU/WE/… CAN PROOF, WHICH CONSTELLATION OF IoT AND APPS CAN BE SEEN AS A BETTER CONSTELLATION COMPARED ALL CONSTELLATIONS WITH EACH OTHER ONES!? Without this artificial intelligence-based measuring (scale), even the title does become a trap and source for problems.

On the other hand: The above-declared constellations may not lead to a maximizing strategy: it means that the constellations should always be set based on the particular circumstances of the observed farmers!!! If I, as farmer do not have cows, I may not need to have cow/milk management applications/systems/…! And so on…

Introduction:

Agricultural communities (objects??? Or farmers are the objects??? Or both??:-) face various challenges, ranging from crop
management to market access. To address these challenges effectively, there
is a growing need to leverage technology, particularly IoT and mobile
applications, to foster collaboration and knowledge sharing among farmers
and agricultural professionals. This thesis aims to explore the development
of an integrated!!! platform that facilitates communication, data exchange,
and decision-making within agriculture communities.

Estimating Integration Levels = If somebody does use a kind of abstraction like “integration”, then the parallel core challenge can immediately and also be defined as trivial: WE NEED AN ARTIFICIAL SCALE, WHERE YOU/WE/… CAN PROOF, WHICH CONSTELLATION CAN BE SEEN AS A BETTER CONSTELLATION COMPARED ALL CONSTELLATIONS WITH EACH OTHER ONES!? Without this artificial intelligence-based measuring (scale), even this task/goal does become a trap and source for problems.

Problem Statement:

Traditional agricultural practices often lack connectivity (attribute1? = a1) and real-time
data sharing mechanisms (a2?), hindering effective collaboration and resource
optimization. Farmers and professionals (objects?) operate in silos, leading to
inefficiencies in crop management, resource allocation, and market access.
There is a need for a unified??? platform that connects stakeholders,
facilitates knowledge exchange, and empowers agriculture communities.

UNIFIED c.f. INTEGRATED c.f. EMPOWERED!!!

😊

Abstractions always are the core problems!!!

Goals:

The primary goal of this thesis is to develop!!! an IoT-enabled mobile
application!!! that serves??? as a community-centric platform (object???) for farmers and
agricultural professionals. The platform will enable real-time data
collection, analysis, and sharing, fostering collaboration, and
decision-making. <--one realistic goal is better, than a lot of goals without any chance to realize them! 😊

Additionally, the thesis aims to evaluate the impact of
the platform on improving agricultural productivity, sustainability, and
socio-economic outcomes within agriculture communities.

IF you want to develop a platform/application, then

* The planning phase must ensure that the potential platform/application parameters are rational enough!
* Rationality = abstraction (see above) – you/we need a scale to know, which plan-constellation is the best COMPARED TO THE ESTIMATED COSTS/RESOURCES?!
* **It is forbidden to work in a [L’art pour l’art](https://www.bing.com/ck/a?!&&p=900cd4304b53ef0bJmltdHM9MTcwOTg1NjAwMCZpZ3VpZD0yOTI1NzBjNi00NjNjLTY0ZjItMzA0Yy02MzQ3NDcyMTY1NjMmaW5zaWQ9NTIyMg&ptn=3&ver=2&hsh=3&fclid=292570c6-463c-64f2-304c-634747216563&psq=L%c3%81R+P%c3%9aR+L%c3%81R&u=a1aHR0cHM6Ly9odS53aWtpcGVkaWEub3JnL3dpa2kvTCVFMiU4MCU5OWFydF9wb3VyX2wlRTIlODAlOTlhcnRfVCVDMyVBMXJzdWxhdA&ntb=1" \t "_blank) logic! (arbitrary)**
* **It is forbidden to create an only-descriptive thesis…**
* **It is necessary to involve AI into the development process and not only on the field of programming and chatting but also on the field of planning/optimization…**

😊

Yoe have to estimate a kind of information added-value from now on concerning each plan-constellation!

Tasks:

Conduct a comprehensive literature (at least ChatGPT :-) review on IoT applications in
agriculture, community development, and mobile app development
methodologies.
Identify key requirements and functionalities = which alternative plan-parameter-set LEAD US to the best price/performance ratio?! for the community-centric
platform through stakeholder consultations and user surveys.
Design and develop the IoT infrastructure for data collection, including
sensors, actuators, and communication protocols.
Implement the mobile application interface for farmers and professionals,
integrating features for data visualization, decision support, and
community engagement.
Deploy the platform in selected agriculture communities and conduct
usability testing and user feedback analysis.
Evaluate the impact of the platform on agricultural practices, community
dynamics, and socio-economic indicators through quantitative and
qualitative assessments.
Targeted Audience:

The developed platform will cater to a diverse range of stakeholders,
including farmers, agricultural extension agents, researchers,
policymakers, and agribusiness professionals.

Benefits/Utilities:

Facilitated knowledge exchange and collaboration among agriculture
communities.
Improved access to real-time data for informed decision-making and resource
optimization.
Enhanced productivity, sustainability, and resilience of agriculture
systems.
Strengthened social networks and community resilience through collective
action and shared learning.

I am excited about delving into this interdisciplinary research area and am
committed to developing innovative solutions that empower agriculture
communities.

Thank you for your guidance and support throughout this process.

Best regards,

Yaruu-aldar Enkhtur

As you can see, there are a lot of micro-problems (see abstraction-oriented challenges)! These micro-problems are our rapid projects!

One of them should be solved in this semester.

A solution needs always an OAM!

In your case, there are a lot of PARALLEL challenges.

I try to interpret the last one = price/performance-optimization for alternative platform-constellations (plan-parameter-settings).

OAM = object-attribute-matrix =

Row-headers = objects = alternative plan-parameter-settings = O1…On n >=20

Column-headers = attribute = planned functionalities = A1…Am m >= 10 (independent variable = performance descriptors = Xi)

A(m+1) is the Y = price=costs and/or development TIME (c.f. GANTT)

Task: analysing which object has the best price/performance ratio!?

Deadline for the OAM = 2024.III.11.- 24.00 (CET)

Support = mentoring by ptlklszl@my-x.hu

The OAM can be generated, or the OAM can be defined by you in a manual-driven way…

The OAM-generation can be seen as a general problem for ALL STUDENTS!

Title: Empowering Agriculture Communities through IoT and App Development:
A Community-Centric Approach for Farmers and Professionals

Subtitle: How to integrate AI into the planning of alternative solutions?!

Each other layers of tasks and goals can be set freely AFTER the first rapid project, which results must be published in this semester e.g. in an online conference e.g. in Türkiye…

Good luck!