Domain Engineering for Weather Information Services

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Publication

- Paper '**Partitioning Microservices: A Domain Engineering Approach**' accepted to SEiA 2018 symposium at ICSE 2018 (`https://www.icse2018.org/track/seia-2018-papers`) on 6th March
  - Processed and addressed reviewers' comments
  - Submitted camera-ready paper **19th March**
  - Conference to be help in Gothenburg, Sweden May 27th - June 3rd 2018

Publication

- Paper '**ICT for Weather Information Dissemination: The way to Improved Agricultural Productivity**' submitted as book chapter (for the book Agricultural and Ecosystem resilience in Sub-Saharan Africa) to be published by Springer.
    - Formatted according to Springer book guidelines
    - Submitted **1st April**
    - Await review process until **May 2018**

WIDS

- Technical testing of the Web and USSD applications
- Feedback used for refining
- USSD menu translated to Luganda, technical testing done **23rd March**
- Compiled summary report of findings from tests

Publication

Paper '**Domain Exploration of Seasonal Weather Information for Farmers in Uganda**'

- Addressing reviewer and advisor comments
- Domain engineering to elicit requirements and structure a domain model
- Targeting journal

Bright Summer School

- Research design techniques - modeling (model driven software development)
  - Meta models and DSLs, role of meta models in defining syntax of a modeling language
- Giving / Receiving constructive criticism of research papers

Thesis structure:

Introduction:
Background from baseline survey paper and technical report

Chapter 1:
Problem and motivation for solution

Chapter 2:
State-of-the-art versus state-of-the-practise of domain engineering (literature review)

Body:
Applying the domain engineering approach – implementation

Chapter 3:
Method description – step-by-step description of processes of domain analysis, design, implementation
- Data gathering process, limitations

Chapter 4:
Resulting design applied to weather information dissemination domain – Magnolia style – resulting DSL
- Domain model
- Vocabulary, types, operations

Chapter 5:
Findings, deductions, inferences

Conclusion:

Chapter 6:

Next Steps

- Come up with concrete thesis structure - fill in sections
- Complete work on '**Domain Exploration of Seasonal Weather Information Dissemination**'
    - Table of review - address each reviewer's comments
    - Find appropriate journal to send to
- Extend '**The Need for an Integrated Effective Weather Dissemination System for Uganda**' as journal paper
    - With comments from co-authors
- Continue work on '**Domain Engineering as a technique for discovering Microservice Functionality**'

WIDS USSD Testing

- End user testing with farmer group
- Refine system using feedback
- Plan for a prototype validation workshop with all stakeholders

Thank you! Feedback?