



FUNCTIONAL REQUIREMENTS

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26-5-2019

Version 0.2

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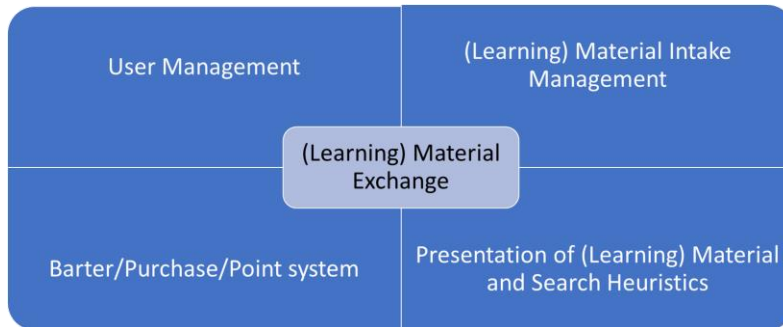
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INTRODUCTION

1.1 Purpose

This document is to set the functional requirements for the application to be developed in the EKFI project. The purpose of this document is to determine the general functions of the aforementioned application and set the general technical requirements.

The application is made up of the following parts.



During the course of the project, this document will be altered to reflect the expectations of the project members.

BUSINESS REQUIREMENTS OVERVIEW

The business requirements are expectations the system end user has. The system end users are the contributors of material and the consumers of material. Both user expectations will have to be met in order for the system to create value.

Contributor

- Easy addition of created material
- Broad exposure

Consumer

- Detailed search capabilities
- Material should fit description

2.1 Assumptions and Constraints

The basis for the texts used in this document is:

- presentation [M1 Preparation Presentations.pptx],
- the December meeting in Schiphol-Rijk,

- The may meeting in Athens

FUNCTIONAL REQUIREMENTS AND USER IMPACTS

How will user requirements be satisfied?

3.1 Usability Requirements

Ease of learning, task efficiency, ease of use, appearance is all based on the different use cases that should be supported by the application. The use cases can be divided into several categories

User management

Create user: It should be easy to create a user. Extra information can be added in the profile page. During user creation the user will get the choice to also create a corresponding organization. The following fields are required:

- First Name *
- Last Name *
- Email *
- Phone number
- Occupation *
- Password *
- Country *
- Language (multiple)
- LinkedIn
- Available for peer review
- Can be contacted
- Newsletter permission []
- Notification (on several levels) permission []

Create organization: Basic information of the organization will be asked. The following fields are required :

- name, address
- contact data
- type of organization (HE, VET, Social Partner, Government, Foundation, Others)
- Description: English (mandatory), Local (two fields) The organization data can be changed by the user that created the organization.

Add user to organization: The admin of an organization can add a user to the organization. The user that is added will receive an email or activation.

Change User: All fields can be changed. For the change of email and/or password a confirmation via email is required, because both are used to log in the application.

Change password: See Change User

Request new password: See Change User

Delete user: A user is never truly deleted. When a user has confirmed deletion all fields that can be traced back to a specific user are anonymized. For deletion a confirmation via email is required.

Anonymizing is done by replacing all fields in the user table with dummy values. In all content tables the field values are replaced by "Deleted content (user request)"

Activate user: A user will receive an email with activation link (with Guid). Clicking this link will start the a page that activated the user account.

Material management

Peer preview of material and possible linking levels of users. Material can be marked peer-reviewed.

Auto-translation of summaries?

Retention period of material? Leave it to uploader?

Transaction management

NA

Search management

NA

3.3 Supportability Requirements

Budget for support is minimal. The hosting environment should be easy to maintain. The business model depends on self regulation by users.

Training of users is done by online manual.

3.4 Security Requirements

The EKFI should at least function for the duration of 5 years. Therefore a brand-new technology can't be used. For this project the following technologies must be used:

- ASP.NET Core 2 MVC
- MS SQL Server

To mitigate the risk of data loss or theft the following technical measures will be taken:

- Certificate on the website

- Encryption on the passwords in the database
- Roles and permissions to manage user access
- Code-injection prevention tools (prevent SQL-injection, XSS attacks)
- Log on limitations to prevent password attacks
- Database backup with 6 month retention

3.5 Interface Requirements

The system must be responsive in order to function on pc, tablet and smartphone. Difference in functionality is allowed between small and large screens in order to maintain operability. Developments main concern is a functional site on pc.

Multiple languages for the interface is supported.

3.6 Assumptions / Constraints

NA

Compliance requirements

The application will hold limited security sensitive data and documents. The data in the application can be divided into two different security related categories:

1. Privacy data: The database will contain usernames, passwords, emails and possibly links to employers. If private purchases are possible, it will also contain personal financial data. This is however not yet applicable. In order to comply the system should be designed GDPR-compliant.
2. Copyright data: All material is copyright protected. Although some can be freely distributed, the possibility of theft must be considered for all copyrighted material.

In case of payments the system should fulfill the local laws of the country where the site is hosted. For the EKFI project this is the Dutch tax law.

4.1 Assumptions / Constraints

It is assumed that all system users reside within the EU area.

APPENDIX A: REFERENCES

Listed below are all documents referenced in this Functional Requirements document.

REFERENCES		
DOCUMENT NAME	DESCRIPTION	LOCATION
BPM_Diagrams.docx	Flowcharts according to BPM-mapping of the parts of user management	
M1 Preparation Presentation.pptx	Presentation PSU-meeting in Schiphol-Rijk	
Muldis Presentation Athens.pptx	Presentation in Athens: EKFI – Exchange Knowledge for Future Innovation	

APPENDIX B: KEY TERMS

Listed below are definitions for terms relevant to this Functional Requirements document.

KEY TERMS	
TERM	DEFINITION