EKFI – Exchange Knowledge for Future Innovation

Educational & technical aspects of the platform

May 2019, Athens

Scope

- The platform is designed to exchange (learning) material between platform participants

Goals

- Improve sharing of knowledge of erasmus projects
- Create an active sharing community

Important details

- It is a limited access platform
- Risks of copyright enfringement must be mitigated
- Content management effort by project members must be minimised
- Guaranteed technical lifetime at least 5 years after end of project

European Qualifications Framework (EQF)

The EQF uses 8 reference levels based on learning outcomes The EQF shifts the focus from input (lengths of a learning experience, type of institution) to what a person holding a particular qualification actually knows and is able to do. By shifting the focus to learning outcomes it helps to:

- support a better match between the needs of the labour market (for knowledge, skills and competences) and education and training provision

- facilitate the validation of non-formal and informal learning

- facilitate the transfer and use of qualifications across different countries and education and training systems

The 8 reference levels of EQF (1/2)

- **Level 1:** Basic general knowledge
- **Level 2:** Basic factual knowledge of a field of work or study
- **Level 3:** Knowledge of facts, principles, processes and general concepts, in a field of work or study
- **Level 4:** Factual and theoretical knowledge in broad contexts within a field of work or study

The 8 reference levels of EQF (2/2)

- **Level 5:** Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge

- **Level 6:** Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles

- **Level 7:** Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research

  Critical awareness of knowledge issues in a field and at the interface between different fields

- **Level 8:** Knowledge at the most advanced frontier of a field of work or study and at the interface between fields

THE EUROPEAN QUALIFICATIONS FRAMEWORK
FOR LIFELONG LEARNING

http://ec.europa.eu/dgs/education_culture

The main objective of the project EKFI is to create an Exchange platform to facilitate the availability of innovative learning and research material, map the competence needs and match those needs with the appropriate learning/research module(s) on the web-based platform.

The uploading process of the material will be supported by the Intake application (O2) where the learning/research material will be described and meet educational standard/formats in order to pass the initial requirements.
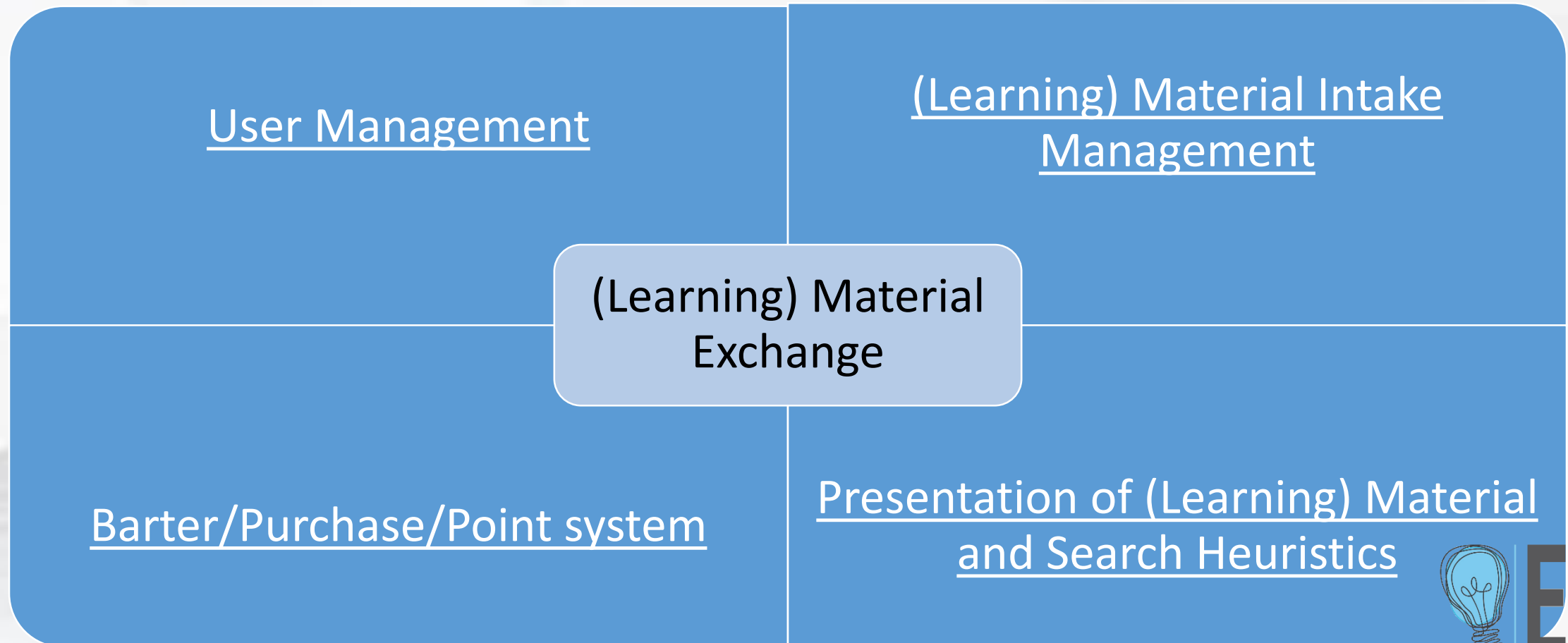
Model description

User Management

(Learning) Material Intake Management

(Learning) Material Exchange

Barter/Purchase/Point system

Presentation of (Learning) Material and Search Heuristics

Platform Overview

- Web based
- Modular, scalable

User Management	LM Intake Management	Barter System	Search Robot	
Web Application Framework				**Service API**
Web Server		Web API		**Database**
Server				
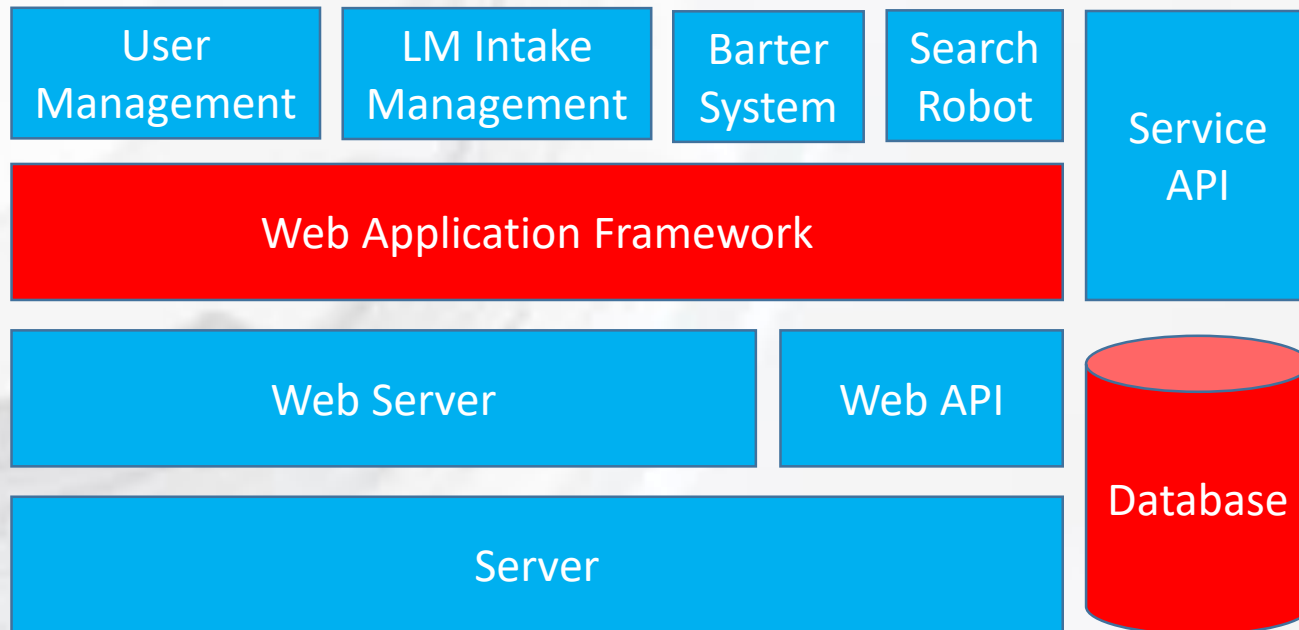
4 main modules

- User management
- (Learning) material Intake Management
- Barter System
- Search Robot

EKFI
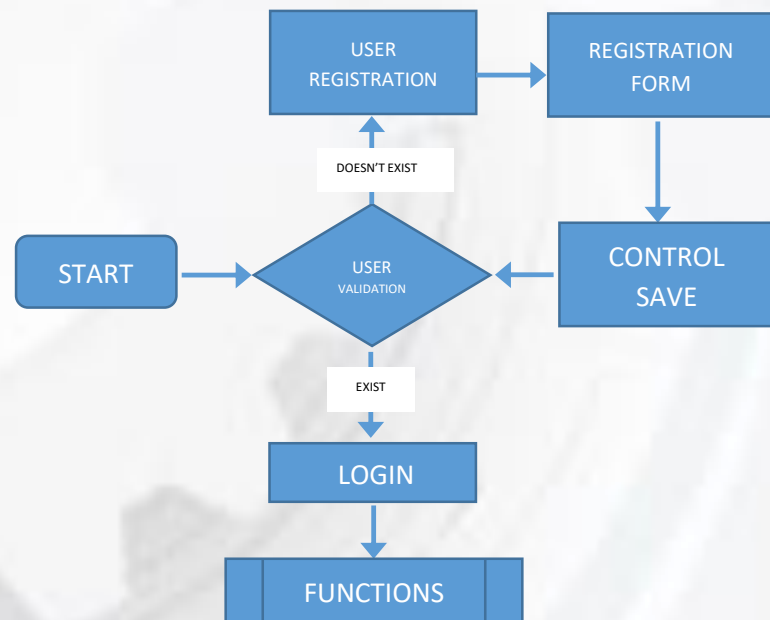Exchange Knowledge for Future Innovation

Erasmus+

Intake Application – General

```
    ┌──────────────┐         ┌──────────────┐
    │     USER     │────────▶│ REGISTRATION │
    │ REGISTRATION │         │     FORM     │
    └──────────────┘         └──────────────┘
           ▲                         │
      DOESN'T EXIST                  │
           │                         ▼
  ┌─────┐  ◇                  ┌──────────────┐
  │START│─▶│    USER     │◀───│   CONTROL    │
  └─────┘  │  VALIDATION │    │     SAVE     │
           ◇                  └──────────────┘
           │
         EXIST
           │
           ▼
    ┌──────────────┐
    │    LOGIN     │
    └──────────────┘
           │
           ▼
    ┌──────────────┐
    │   FUNCTIONS  │
    └──────────────┘
```

- Users need to be registered

- Cross platform design for user registration

- GDPR compliant

- Groups of users with different rights (users, admins, evaluators)

- Levels and reward badges

EKFI
Exchange Knowledge for Future Innovation

Erasmus+

Material Upload Fields 1/2

Metadata	Type	Required for Robot Search
Title	Text field	NO (keyword search)
Learning Outcomes (knowledge)	Text area	NO (keyword search)
Target group	Drop down list	**YES**
Type	Drop down list	**YES**
Abstract	Text area	NO (keyword search)
Estimated study time	Text field	NO (keyword search)
Required Software	Yes/No	**YES**
Distant Education	Yes/No	**YES**
Teacher Oriented	Yes/No	**YES**

Material Upload Form Basic Fields 2/2

Metadata	Type	Required for Robot Search
Origin	Drop down list	**YES**
Extended Description	Text area	NO (keyword search)
Included exercises	Yes/No	**YES**
Bibliography	Text area	NO (keyword search)
Editor / editors	Text field	NO (keyword search)
Competencies	Drop down list	**YES**
Copyright	Yes/No	**YES**
Type of file	Drop down list	**YES**
Size of file	Text field	NO (keyword search)
Includes subfiles (if zip)	Yes/No	NO

EKFI
Exchange Knowledge for Future Innovation

Erasmus+

Learning Material Intake Management – Upload Form Mockup

Text field

First Name   Last Name

Address #1

Address #2

City   State

Country

Type of material   Title

Editor / Editors

drop-down

File type (check one)
- Doc
- Pdf
- Ppt
- Zip
- Avi

Target Group (check all that apply)
- Teacher
- Student
- Professional
- Academic
- Individual

radio buttons

check boxes

Abstract:

text area

form button

Submit   Cancel

EKFI

Exchange Knowledge for Future Innovation

Erasmus+

13

Barter/Purchase/Point system

- Barter system:

  Own content/contribution is rated by peers and give access to content

- Purchase system:

  Buying content using online payments providers

- Point system:

  Activity on the system can credit predetermined points which you can use to purchase content

EKFI

Exchange Knowledge for Future Innovation

14

Erasmus+

Presentation of (Learning) Material and Search

- 3 types of search system: Simple search – advanced search – directories
- Search is done with keywords
- The search engine finds and sorts related entries
- The order in which the terms are typed affects the search results
- In advanced search we can use logical terms like and, or, not
- Searching for certain types of files will also be possible