

# Workplan for Prototypes

A Learner Plan with three separate modules that looks at the learner's past, present and future.

- Past studies as mapped as competencies
- Competence profile with current competencies
- Feedback system on learning opportunities

(In Finnish below)

## 1. PREMISES

CompLeap draws its name from the words "Competence Leap". CompLeap is a two-year project funded by the European Union, which aims to create solutions to improve the matching of supply and demand of competence. The project was launched in December 2017 and will continue until November 2019. The aim of the project is to model the functionalities of the service and build a pilotable version with open source code in order for the service to be deployed in other EU-countries.

The CompLeap project is aiming to pilot searching methods for users to collect and find their own competence, skills and interest into a personal competence profile. The solutions developed in CompLeap offer an opportunity for the personalization of educational offer based on the learner's existing competence and interests. The solutions and services developed in CompLeap are used for the learner's competence mapping, presenting said competence and transferring it as a tool for educational comparison. Through the service, the user can map their competence and build their own personal competence profile.

Up until this point, an InVision-prototype (<https://projects.invisionapp.com/share/T5P4U1PHBDC#/screens/331537816>) and an HTML-prototype (<https://comp leap-proto.testiopinpolku.fi/>) have been designed. The goal of the prototypes has been to create a generic implementation of the services that could be utilized in other EU-countries as well. These prototypes have no linkages or connections to other registers or databases.

## 2. AIMS AND CONTENTS

In the final prototype being developed right now, the aim is to produce a user interface, with which showing both the accredited and non-accredited competence of the learner in the competence profile can be tested. Another aim is to create a link between the competence profile (including interests and existing competencies) and the provision of educational opportunities. Compared to prior prototypes, this prototype includes real competencies as well as proper educational offers. This way the utilization of national (educational) databases within the service can be illustrated.

The prototype is implemented in Finnish and English. This is due to the possible hindrances in terms of the naturality of experiences which using the prototype in a foreign language brings forth. If the prototype were to be tested only in English, the project wouldn't receive the most authentic user experiences.

The most central user group for the service are youth not in employment, education or training (NEET), youth between stages of education and immigrants.

The aim of this prototype is to present vocational education and training (VET) records as competencies. The educational aims of completed degrees can possibly be attached to these competencies. Other records are framed outside of this prototype, as one of the aims of this prototype is to investigate the transformation of VET education and degrees into competencies specifically. This is due to the availability of VET core curriculum and competence requirements. The result of the project is a Proof of Concept (PoC), with which the properties of the service can be tested.

In this prototype, a competence profile and the opportunity to compare educational opportunities based on personal interest and existing competence are implemented. The competence profile is formed based on prior, accredited competence and information provided by the learner themselves. Through analytics, competences are formed based on this information. The ability to provide one's own interests and competencies is crucial, as accredited competence is not available to all focus group members. The learner can also provide their own interests in this prototype. The learner is then offered suitable education to supplement their competence through analytics based on their educational background, other competencies and interests.

Under current legislation, the prototype cannot utilize real personal data, even though it would be possible to access it via the KOSKI-service. Therefore, the prototype employs pre-confined test data. In practice, this implies that some test users, representing some of the most general user groups will be created. Similar data to that of the KOSKI-service will be shown on these fabricated users.

Strong authentication is not implemented into this prototype. The interface is created primarily focusing on the interface of a strongly authenticated learner and provides the interface of an unauthenticated learner secondarily.

## 3. PHASES AND TIMETABLE

A prototype ready for piloting and deployment will be reported to the European Commission before the 30<sup>th</sup> of May 2019. After this date, the prototype can be refined during the summer, due to the unfortunate timing of the piloting during the summer months. Therefore, a version of the prototype fit for piloting should be ready on the 2<sup>nd</sup> of May 2019.

The version deployed on the 30<sup>th</sup> of May 2019 has to be fit for the testing of the usability of the prototype. This is approached from two perspectives:

- The prototype needs to be usable from the user point of view
- The data and analytics behind the prototype should be validated; is the data of the right sort? Does the competence profile provide experienced value to the learner? (Both in independent use or in guidance situations)

Phase	Planned start date (MM/YYYY)	Planned end date (MM/YYYY)
Specification	01/2019	continuous
User interface design	02/2019	08/2019
Implementation	02/2019	05/2019
Finishing and refining	06/2019	08/2019
Testing	04/2019	09/2019
Piloting	06/2019	11/2019

The working method follows a "Scrumban-hybrid" approach, in which the objective state is approached one functionality at a time.

The project roadmap is public on eDuuni. Public demos are presented every two weeks. The working method includes continuous testing in collaboration with Ohjaamo and the specification of properties.

### 3.1. The phasing of implementation

The phasing of the implementation is the following:

Implemented by the 30<sup>th</sup> of May 2019:

1. An MVP (Minimum Viable Product) of the competence profile
  - a. the learner's educational background is shown in accordance to data on KOSKI
  - b. the analytics, with which the existing competence can be shown, is implemented
    - Various alternatives of implementation, which are under analysis
      - forming competence via ePerusteet
      - forming competence via the competence required in professions
      - forming competence in other ways
      - Possible use of the ESCO classification
  - c. Possibility to provide personal interests
2. An MVP on recommended educational offers
  - a. based on competence
  - b. based on interests

By the 30<sup>th</sup> of August 2019, revisions based on needs recognized during piloting are implemented. Possible implementations by this date include the ability for the learner to include their Europass documents as well as open badges to their competence profile.

Confined outside the project:

- the implementation of authentication
- Linkages to Työmarkkinatori and employment
- The learner map
- Providing prior vocational experience
- EU Key competences <https://eur-lex.europa.eu/legal-content/FI/TXT/HTML/?uri=LEGISSUM:c11090&from=EN>

### 3.2. Workload estimate

The creation of the prototype is afforded ca. 250 person-days (PDs). This enables the resourcing illustrated in the table below. One month is ca. 22 PDs.

Month	Developers	UI designers
02/2019	1	1

03/2019	1,5	1
04/2019	1,8	0,4
05/2019	1,8	0,4
06/2019	1,8	0,4
08/2019	1	0,4

Additionally service designer affordances for ~8 PDs can be included.

In sum ca. 250 PDs ~= 250 000 euro.

## 4. ORGANISATION, FORMATION AND CO-OPERATION

Continuous dialogue between other services and projects in EDUFI related to CompLeap is crucial during the development. All development projects in EDUFIs Services for Learners- unit are co-dependent and therefore controlled direction and communication is crucial during design and implementation.