Final Project

User Experience

Web21i, Web21j – 5th semester
Arturo Mora-Rioja (amri@kea.dk)
Autumn semester 2021

Delivery
Wiseflow, no later than Friday 17 December 2021, 13:00

Description

The Final Project will consist in the design and construction of a website's Front-End for a Learning Management System (LMS), that is, a CMS for education. An example of an LMS is Fronter. However, the most popular one is the Moodle platform (https://moodle.org/), which I suggest you install and explore locally for inspiration. These LinkedIn Learning courses, or parts of them, may help:

- Foundations of Learning Management Systems (LMS)
- Learning Moodle 3.10

The project will include the following:

- The **public view** for students. It will be responsive and developed using a mobile-first approach.
- The **private, administrative view** for teachers. It will be implemented only for a desktop display.

The hypothetical business situation will consist in the students running their own startup company. The LMS is the company's only project:

- Problem statement: The current LMSs in the market are complex to operate by the students and offer little flexibility to the teachers.
- Vision statement: Our LMS will be lighter, more logical, and with a better UX than present solutions. We will become one of the top three LMS providers in the international market by 2024.
- Form factor: Desktop computer screen (primary), tablet, mobile phone.
- Posture: Sovereign (both for the public and for the private view).
- Input method: Keyboard and mouse (primary), touchscreen.

The design process will follow the phases of Goal-Directed Design:

Research

Creation of an experience map:

- Identify two potential competitors (e.g., Moodle and Fronter, but there are more: https://en.wikipedia.org/wiki/List_of_learning_management_systems)
- Analyse both products from a user point of view. Identify your user goals, the user actions you perform to achieve these goals, and the resulting pain points.
- Generate the corresponding experience map. Since there are no user interviews, there will be no direct quotes. Make sure that your pain points help you find out behaviour patterns that will constitute the basis for your personas

Modelling

- Identification of potential user roles
- Identification of 15 to 30 behavioural variables **per role**
- Mapping of at least 10 fictitious users (**not user roles**) to variables
- Clustering and identification of logical connections in the mapping leading to behaviour patterns
- Definition of personas:
    - Primary personas. At least one for the public view and one for the private view
    - Secondary persona(s)
    - Customer and served persona(s), only if necessary
    - Anti-personas. At least 3

Definition of requirements

- Ideation, using the methods that each group deems appropriate (brainstorming, negative brainstorming, design charrette, others)
- Construction of all relevant persona-based context scenarios
- Identification of data, functional, and contextual design requirements, as well as further requirements if relevant (business, technical, customer and partner).

Interaction framework

- Group and establish hierarchies of data and functional elements
- Sketch the interaction framework
- Construct key path scenarios. Use storyboarding
- Construct validation scenarios (alternative, necessary-use, and edge-case)

Visual framework

- Identify 3 to 5 experience attributes
- Develop at least 3 visual language studies and choose one
- Assign the chosen visual style to a style tile and **build** it

Industrial and service framework

- Create wireframes for, at least, all key path and necessary-use scenarios
- **Build** service prototypes for all wireframes

Usability testing

Design a usability test for your service prototypes:

- Define preference and performance measures
- Prepare the script with scenarios and tasks for the testing session

Information Architecture

Create a sitemap for your website in the format that you deem more appropriate.

Building the style tile and the service prototypes

Use the tools of your choice among the following: HTML5, CSS3 (including media queries, flexbox and/or grid), Sass, JavaScript, jQuery, Front-end UI frameworks (Bootstrap, Tailwind, etc.). No further frameworks or libraries are allowed (e.g., React, Angular, Vue, Svelte). No back-end is necessary.

Deliverables

The **report** will be delivered in one single pdf file, and will include only the following:

Research	Name of the two competitors identified
	Experience map
Modelling	List of user roles
	List of behavioural variables per role
	Mapping of fictitious users to variables
	Identification of behaviour patterns
	Cards for all personas
Definition of requirements	Results of the ideation phase (be brief)
	Context scenarios
	List of design requirements (data, functional, contextual, others)
Interaction framework	Grouping and hierarchy of design requirements
	Sketches
	Key-path scenarios, including storyboarding
	Validation scenarios (alternative, necessary-use, edge-case)
Visual framework	List of experience attributes
	Visual language styles explored
Industrial framework	Wireframes
Information Architecture	Sitemap
Usability testing	Definition of performance and preference measures
	Session script

Please include only the content requested. Textual explanations must be avoided. Do not include links.

The **product** will be delivered in a zip file and will consist of the following:

Visual framework	Style tile
Service framework	Service prototypes

Please make sure that your code works regardless of your local configuration.

This information is not definitive, therefore subject to change