HYP 2020-21
Design Project
General Instructions – updated April 12, 2021
TO BE READ CAREFULLY

Consider the **application requirements assigned for your exam session**

What do you have to do

1) CONCEPTUAL DESIGN
Create
- **C-IDM schema in the large**
- **Content TABLES** (content design in the small)
- **Mappings Content-Tables->Pages**
- **P-IDM** schema

*Add textual comments only if relevant**;** Remember to include the **CARDINALITY** in your schemas; Remember to include ALL needed **navigation patterns** in **P-IDM***

2) CONCRETE PAGE DESIGN (VISUAL DESIGN)
For the MAIN PAGES create:
- Commented **LOW FIDELITY WIREFRAMES (PAGE STRUCTURES)**
- Commented **HIGH FIDELITY WIREFRAMES (SCREENSHOTS)**

(see example in Figg. 1A and 1.B)

Such "main pages" are:
- **Home page**
- **one P-IDM page for a Topic**
- **one P-IDM page <u>for</u> <u>each</u> Kind of Topic**
- **three Introductory pages (for Groups and/or Multiple groups)** – see also technology project specifications

Comments highlight: the P-IDM page(s) for which the wireframe is created; the meaning of the various elements in the page, e.g., the types of links (structural links, transition links, group links), orientation info, contents that correspond to the different topics, kind of topics, (multiple) groups

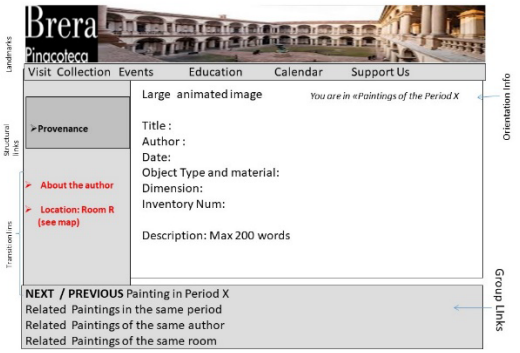
Use the IDM terminology properly! Remember that:
- structural links enable the user to move from a (part of a) page of a given topic to a "component" of the **same** topic (e.g., in a university web site, from a professor's bio to a her publications list)
- transition links enable the user to move from a (part of a) page of a given topic to a (part of a) page of a different topic that have a semantic relationship with it (e.g., in a university web site from a course to the professor teaching it)
- group links enable the user to move across the elements of a group, e.g., from the introductory page of a group (listing all group members) to the pages of each member, from a member to the next or previous member, from a member to the introductory page of the group, from the introductory page of a group t the introductory page of another group (if these groups are members of a higher level group)
- landmark links are those available in all pages

NOTE:
COMMENTS ARE IMPORTANT!

LOW AND HIGH FIDELITY WIREFRAMES must be **CONSISTENT** with conceptual design specifications, particularly C and P-IDM schemas

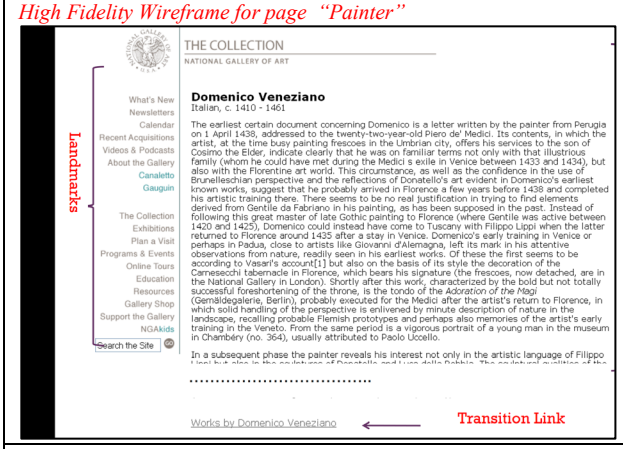
High fidelity wireframes MUST correspond to the **final implemented pages** – the ones that you implement in your running prototype, and contain **REALISTIC CONTENT** and realistic meaningful **LINK LABELS**.

Low Fidelity Wireframe for page "Painting Introduction"



1A: Commented Page Structure (Low Fidelity Wireframe)

High Fidelity Wireframe for page "Painter"



1B: Commented screenshot (high fidelity wireframe)

3) INTERACTION SCENARIOS

Describe min 3 interaction scenarios

An interaction scenario is a "story of use"; it describes a **flow of user interactions** across your web site for users of a given **profile** having a specific **goal**.

An interaction scenario is composed by:

- a short textual **narrative** (describing **user's profile**, **goal**, and **main tasks** to achieve this goal)
- a **sequence** of **(miniaturized) "screenshots"** for the pages that the user traverses to execute the tasks described in the narrative. *IMPORTANT: highlights **the interactive element (link) activated** by the user at that step (e.g., using a circle around/an arrow to the selected link)*

The 3 interaction scenarios should render how the user would navigate across the pages of you web site; in the 3 scenarios, the user should visit all elements of your design specifications (home, pages for all topics, all kind of topics, all groups) and traverse at least once links of all types (structural, group, transition links, and landmarks).

4) **DB design**
   Create the **E-R diagram** + **relational tables** for the **content** and **relevant relationships** of your web site.
   You should know about E-R from previous courses… some basic concepts can be found here:
   https://beginnersbook.com/2015/04/e-r-model-in-dbms/;
   https://en.wikipedia.org/wiki/Entity%E2%80%93relationship_model

5) **REPORTING**
   Report all the previous steps in a **DESIGN DOCUMENT** – see next section

What to deliver

A **Design document** that includes the following sections – REMEMBER to include **page numbers!**

Cover: Title + Group members with names and email + Delivery date + LINK TO YOUR RUNNING PROTOTYPE

1. *Table of Contents ("Index")- WITH PAGE NUMBERS*
2. *Abstract (*3-5 lines that describe what the document is about)
3. *C-IDM Diagram*
4. *Content Tables*
5. *Mapping Content Tables into Pages*
6. *P-IDM diagram*
7. *Visual Design (Wireframes and Screenshots)*
8. *Interaction Scenarios*
9. *DB Design* (E-R diagram and Relational Tables)

Team-member names MUST appear in the footer or header for all pages;

The file **MUST** be named as follows:
Group-member1 surname, Group-member2 surname, Group-member3 surname-Design Report-delivery date

Where and when to deliver

ALL required material must be delivered on **Beep** by the official exam date

REMEMBER TO REGISTER TO THE EXAM! Otherwise there is no way to record your final score