# HYP 2021-2022

# **Design Project: General Instructions**

### **READ VERY CAREFULLY**

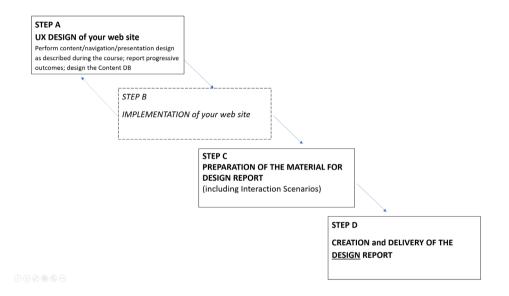
# What you have to do

Consider the general **application requirements assigned for your exam session** – see slides "application domain specifications" in section "Exam") and perform the following steps.

Note: step B is not part of design and is not reported in the design document

### STEP A) UX Design

Perform the design tasks described during the course and report them along the process; design the content DB



### A1) CONTENT DESIGN

Create C-IDM schema in the large and Content TABLES (content design in the small)

Hint: Remember to include the CARDINALITY in your C-IDM schema

# **A2) NAVIGATION DESIGN**

Create Abstract PAGES

**Hints:** remember to mention where each page comes from (name of Topic, Kind of Topic, (Multiple) group); Add additional textual comments only if relevant

Use the 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 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 its teacher)
- 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)
- landmarks are those available in all pages

IMPORTANT: ABSTRACT PAGES must be **CONSISTENT** with C-IDM schema

### A3) PRESENTATION DESIGN

For each abstract page create: create **COMMENTED HIGH FIDELITY WIREFRAMES** 

#### Hints:

Don't forget comments! Use the terminology properly!

In your comments please highlight: the Abstract page corresponding to the wireframe; the meaning of the various elements in the page, e.g., the types of links (structural links, transition links, group links), and the orientation info

#### Important:

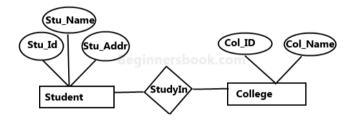
Wireframes must be **CONSISTENT** with Abstract Pages and C-IDM schemas, as well as the final implementation Wireframes might be frequently REVISED during or after implementation to a light them with implementation decisions

### A4) DB design

Create the **E-R diagram and the corresponding Relational Schema** for the **content** and relationships (**links**) of your web site.

You should know about E-R from previous courses, but some basic concepts can be found here: <a href="https://beginnersbook.com/2015/04/e-r-model-in-dbms/">https://beginnersbook.com/2015/04/e-r-model-in-dbms/</a>;

Please use this super simple notation for your ER Diagram



Sample E-R Diagram

A Relational Schema is a set of tables describing entities and relationships, their attributes, and the domain of such attributes.

https://www.tutorialspoint.com/dbms/relational data model.htm

To map ER diagrams into Relational Schemas, some general rules are provided here: <a href="https://www.tutorialspoint.com/dbms/er model">https://www.tutorialspoint.com/dbms/er model</a> to relational model.htm#:~:text=ER%20Model %2C%20when%20conceptualized%20into,relational%20schema%20using%20ER%20diagram.

# STEP B) IMPLEMENT your web site

Implementation is not part of the design work but it is driven by the design specifications generated during step A; it MUST be CONSISTENT WITH THE DESIGN SPECIFICATIONS but it does not have to be reported in the design document

 $IMPORTANT: if for any reason you do not implement 100\% of the design specifications, revise the design specifications to make them CONSISTENT with the \underline{final} implementation$ 

# STEP C) PREPARE THE MATERIAL FOR YOUR DESIGN REPORT

- C1) Revise and clean up the documentation created during the design process and make it consistent you're your final implementation
- C2) Revise Commented Wireframes, and use real **SCREENSHOTS** of your final application as the basis for your **COMMENTED** WIREFRAMES

Hint: find a smart way to highlight the structure (i.e., the different components of) you wire frame

 $IMPORTANT: user \textbf{\it REALISTIC CONTENT} in your Wire frames and in your implementation \,m\text{-}\,see\,example\,below.$ 

You might have created "skeleton" wireframes (i.e., pure page structure with comments but without realistic content) during the design process: please do not include them



#### C3) Define and 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**.

### **SEE SLIDES 1.5 Design Scenarios**

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

For the purpose of your report, an interaction scenario is described by:

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

#### Scenario narrative

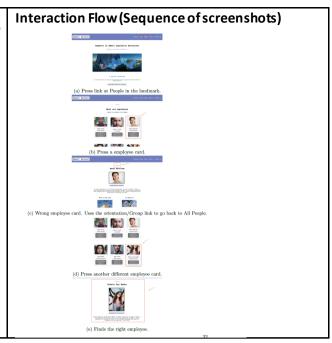
A competitive company providing logistic solutions need to hire more competent employees.

The guy from the competitive company's Human Resources department met a person at a intelligent logistics exhibition.

He noticed this person was very talented when they were speaking. He can not remember his name but do remember that he work at Smart Solver.

The guy enters Smart Solver web-site and start looking in All People landmark. The guy thinks he see the person he is looking for and press on that employee card. It is the wrong person.

The human resources guy makes another try, goes back to All People page and press another card that with a face that seems familiar and finds the guy.



### STEP D) CREATION AND DEPLOYMENT of THE DESIGN REPOR

Create a design document that reports the final output of your **design** process, **NOT** your implementation.

Use the following document structure:

*Cover:* Title + Group members with names and email + Delivery date + <u>LINK TO YOUR RUNNING</u> **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-in-the small Tables
- 5. Abstract Pages
- 6. Final Commented Wireframes (Screenshots)
- 7. Interaction Scenarios

#### **IMPORTANT**

- Include page numbers
- Include team-member names in the footer or header of all pages
- The Design Report MUST have the following FILE NAME format you will loose 2 points if you do not follow this format:

Group-member1 surname, Group-member2 surname, Group-member3 surname-Design Report- delivery date

Where and when to deliver: The design report must be delivered on WeBeep by the official exam date

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