uOttawa

SEG 3125 (Analysis and Design of User Interfaces)
Winter 2018

Lab 2 -
Medical Follow-up Website Prototype

February 12th to March 5th

Work in groups of two or individually

Introduction

For this lab, you will create a medical patient follow-up website prototype. This tool will be used in the context of Hair Transplants surgeries in which the nurse must monitor the patient's healing process for the first **five consecutive days after the surgery.**

The website must allow nurses to:

1. Enter information about the patient
2. Enter patient's information of the follow-up. A follow-up consists of checking the patient's state after the surgery. Following-up with the patient must be repeated up to 5 times (the day after the surgery (day 1) and 4 more consecutive days)
3. Search for a particular patient to see his/her follow-up information

Website Pages Description

The number and structure of the pages that constitute your website is left to your discretion. Nonetheless, to give you some ideas on how to start, the following is a description of the main pages of your website.

Page	Description
Home Page	The Home page gives two options to the nurses: • Add a new patient • Search for an existing patient
Add a new patient Page	This page allows to enter the following information about the patient: • Name, Date of Birth • Address, Phone number • Health concerns • Medications taken • Emergency Contact (name and phone number) Once the main information about the patient has been collected, the nurse can proceed to the patient's follow-up page.
Follow-up Page	This page allows the nurse to monitor the healing process of the patient. In particular, the nurse monitors the healing process of the donor area (back of the head) and the recipient area (where the implants are).

	Please see below for more details about the follow-up.
Search for an existing Patient Page	In this page, the nurse can search a patient by their last name or by their date of birth.

The descriptions above ***possibly*** do not summarize all the pages on the website. Nor should they restrict your creativity in designing your website prototype. They are merely suggestions. You are free to structure the website in any way you want as long as you include all the functions described in the **Introduction**.

REPEATED FIVE TIMES (Days)

THE FOLLOW-UP

During the five days follow-up, the nurse must **monitor the healing process** of the **recipient** and **donor** area.

At the **recipient area** the nurse checks:

- Pain: (none, moderate, severe)
- Bleeding: (Yes/No)
- Scab formation: (Yes/No)

At the **donor area** the nurse checks:

- Pain: (none, moderate, severe)
- Bruising: (minor, major)
- Bleeding: (Yes/No)

Finally, in each follow-up day, nurses must monitors the **medications** that are taking by the patient (Tylenol, oxycodin or Advil).

A set of **instructions** must be explained to the patient. The nurse must make sure that the patient understands the following instructions in the first day follow-up (only).

- Don't touch the recipient/donor areas (YES/NO)
- Wash hair only with water (YES/NO)
- No heavy weights (YES/NO)
- Always wear a cap (YES/NO)
- Sleep in a 45 degrees position (YES/NO)

Implementation

Obviously, since this is a prototype and you are not expected to implement a fully functional website (running on a web server with a database to store the patient's information and their follow-ups). This is a user interface course and therefore, the focus is on the design of the user interface. Consequently, at the very least, this is what you have to do:

- You must build an HTML website that showcases your user interface design.
- You must support dynamically generated **error messages**. You should handle all the possible error scenarios, especially when it comes to entering information into a form (e.g. incorrect format, missing mandatory field…). It is your task to identify these error scenarios and handle them gracefully. Javascript (or any Javascript based APIs) can be used to generate these messages.

This is what you do **not** have to do:

- Any content that is supposed to be pulled from a database can be coded statically into the website. Therefore, when the user searches for a patient, the Search Page will always show you the same list of patient regardless of your search query. This is a mockup of the search function.

Evaluation

This lab is not intended as an exercise in website building. That is why we have drastically simplified the task of implementing the website prototype. Nonetheless, your focus should be on your user interface design. You are expected to apply the design principles we have learned in class. Pay particular attention to consistency (e.g. fonts and colour schemes), icon design, use of metaphors, general page layout (maybe you can apply some of the patterns seen in class), error prevention mechanisms and user feedback. It is strongly recommended that you produce paper sketches for your first design ideas. Evolve these sketches into the eventual website using the procedure studied in class. For the demo, you do not have to show your paper sketches or storyboards. Simply present the completed prototype.

This is the marking scheme:

- Website supports all the functions specified in the Introduction (30 points)
- User interface is well designed and follows the Heuristic principles seen in class (40 points)
- TA questions are answered correctly (30 points)

Frequently Asked Questions

What to submit?
Nothing! You will simply show a demo of your application to the TA. The TA will also ask you questions about your design decisions.

When can I demo?
You have four lab sessions to complete and demo your application. Demos are performed on a first come first serve basis. Therefore, the TA might have lots of demos to go through on the very last session. Consequently, if you finish early, it is advisable to demo your work immediately and not way until the end.