Assignment 03

EECS 3461, Winter 2019 v.1, Prepared by: M. Baljko

Submission

- You may work individually or in pairs.
- If you are submitting as a pair, you **must** inform the instructor prior to submission. If no information otherwise is received, then an individual assignment will be assumed.
- To submit your solutions to this assignment, you will use the submission facility on the course website.
- Assignment 03 is worth 10% of your final grade.
- A3 Due Date: Wednesday April 03, 2019, 11:59pm

1. Assignment 3: High(er) Fidelity Prototype

1.1. *Understanding this phase*

In this assignment, you will iterate on the design solution you proposed in Assignment 2. You will start with the low fidelity prototype that was developed in Assignment 2. You will create a variant of the prototype that improves and extends it and also has some elements of interactivity.

An important point here is to be clear about expectations. You are NOT developing a fully functional prototype or a minimal viable product. You are developing a subsequent iteration of your prototype.

1.2. *Getting Started*

On the course website, you will find the information to download and to install a fully-functioning application written in `react.js`. Follow the instructions to install the app so that you can run it on your own machine.

When you invoke the application, you will see that it has three components:

- widget to afford the user the possibility to specify keywords.
- module that employs the YouTube API that, given the specified keywords, fetches a list of videos, which are then displayed (and from which the user can select).
- a player, with auto-launching behaviour.

Familiarize yourself with the architecture of the app, so you can start to imagine how you might revise and modify the app. For instance, you could rearrange the position of the existing widgets, modify the existing widgets, introduce additional stubs, placeholder GUI widgets (not necessarily functional), and graphical elements. You could potentially modify via the javascript or html.

1.3. *Evolving Your Prototype*

Reflect on your low fidelity prototype. In which way would you evolve and elaborate on your design? Identify at least two ways to revise and further elaborate your conceptual model. Note these ideas down, and you will communicate them via your design (and present them verbally during the marking session).

Revise your prototype to include these elaborations. What you do at this point is highly dependent on the conceptual model that you developed for A2. Your goal is to refine the app to communicate the broad strokes of the revised design. It is not expected that functionality will be fully implemented.

You can use any technique you wish to communicates your conceptual design in the high(er) fidelity prototype. For instance, you can implement interactive widgets. You can implement widgets that have superficial functionality (e.g., there are buttons that are clickable, but they don't actually produce any results). You can "fake" functionality by hard-coding behaviours. You can use graphics and stubs to indicate the placement of GUI elements, even if they are not implemented as widgets and instead are superficially

instantiated as graphics via html. However, your prototype should afford some sort of quasi-interactive experience.

If your design makes use of input devices, you can use the 'Wizard of Oz' paradigm to emulate the functionality afforded by the particular input device you are envisioning. You can communicate your ideas about input device in different ways, the choice is up to you (hint: making use of an actual physical mock-up is very powerful for the sake of communication).

The prototype should include at least two system views: (i) the view that will be provided to the staff, and (ii) the view that will be provided to the residents.

1.4. *Success Criteria*

Each of the components will be based on letter grades. A grade of 'C/C+' means the assignment expectations, as described above, have been met in a basic way. Higher grades are awarded for skill and originality in execution (considerable, high degree, exceptional levels of skill; some elements of or great originality).

You must complete your work by the assignment deadline, and you will sign up for a grading appointment. You must bring a hardcopy printout of the functional and non-functional requirements from Assignment 2.

A. Calibre of presentation [weight: 1]
    a. grading appointment is able to start on-time, with app up and running
    b. verbal introduction and presentation of system is clear and concise
    c. hardcopies of the functional and non-functional requirements are available to the grading team
B. Conceptual Model, Staff view [weight: 2]
    a. clarity of the conceptual design for the staff view
    b. completeness, degree to which the design brief has been addressed; degree to which the functional and non-functional requirements have been addressed
    c. input device considerations
    d. evidence of at least one major design revision/elaboration
    e. calibre of the prototype: graphics/visuals
    f. calibre of the prototype: interaction
C. Conceptual Model, Resident view [weight: 2]
    a. clarity of the conceptual design for the resident view
    b. completeness, degree to which the design brief has been addressed; degree to which the functional and non-functional requirements have been addressed
    c. input device considerations
    d. evidence of at least one major design revision/elaboration
    e. calibre of the prototype: graphics/visuals
    f. calibre of the prototype: interaction
D. Overall System Design [weight: 1]
    a. consideration given to the fact that this is a multiuser system; solution to staff-vs-resident view
E. Other [weight: not assigned, to be added as needed, depending on the assignment]
    a. ways in which assignment may have gone beyond the bare minimum requirements