Project 3 Interactive App

project 3 / worth 30% of your course grade / due week 14 – week commencing 18 April

Overview

This project gives you the opportunity to build dynamic web pages that contain data that changes. As a result we will be using Javascript to update the page and control CSS to give the user updates. We will start simply but these will become web Apps, then eventually we will progress to creating an App for a mobile device, using the same knowledge of HTML, CSS and JS. HTML is the content, CSS is the design and JS becomes the behaviour or controls the page interactions.

You will be using repl.it to develop HTML, CSS and JS with.

You will continue prototyping and testing using software such as Adobe XD.

Assessment Brief

Working with the skills you have developed in Assignment 1 and 2, your project brief is to design a **mobile** web application for use away from traditional keyboard and mouse input, based upon the following themes:

Project brief 1 – Enhance the experience of attending Comic Con or similar

You will identify the users of this event and create a single function experience. Stay away from photo sharing, there are enough platforms that cater to those needs, instead focus on a unique problem of the event and how an App might solve this, such as wayfinding, food guide, traveling to and from, attending talks. You can ask your prof if you have a different event to have your project verified.

Project brief 2 – Orientation App

You will identify a location that requires help in navigating in some way and you will come up with a unique solution to this problem, eg Canada's Wonderland, Sheridan campuses, find my car (set geolocation when you park, so you can find it later), where's the washroom, Tick off list of things you want to do at a place. You can ask your prof if you have a different event to have your project verified.

Project brief 3 – Education App

Identify a complicated task and show how users can master this in an interactive (linear or non-linear) format. Consider that this mobile screen could be held next to the task the user is trying to do or even be a second 'help' screen if this is a computer related task.

Project brief 4 – Utility App

Identify a utility such as creating a 'to do' list app, food tracker app (record what you've eaten in a day), geolocation weather app, direction app (take google maps API further to directions), workout calculator (set a run using a map, calculates distance, start/stop timer), geolocation movie app (brings back which cinema's are around you and what they are showing), pizza ordering app (customize toppings, then hit order), busy people dinner app (what you have in and what you can make with those ingredients), a nearby app (restaurants, café, travel), music suggestion app (user puts in what kind of genre they like, brings back new music suggestions, could work with YouTube or SoundCloud) or your own idea (talk to the prof to get it verified).

When we move to creating an App, this type of application has a totally different way of being interacted with and used, predominantly requiring finger movements, gestures and taps, the interface has to reflect the ability to do this. Remember you are not tied to a desktop or office environment and the App could be used *anywhere*. As such building an App is not simply dumping a website into a phone as Apps have different use case scenarios and can access hardware functionality of the phone such as geolocation, accelerometer, etc.

You will need to consider the purpose of the App and what value it adds to a given situation.

While mobile development takes into consideration tablet devices, this project is purely for you to concentrate on small screen device phones. This is partly because of the screen real estate issues that you are forced to address.

What data will it provide? How will you access that data? Will it be embedded in the App or require web services?

What is the 'Utility' value?

What phone features will you use, magnetometer, accelerometer, geo-location, camera, audio/video playback etc?

Will this provide help in planning before an event?

Will this be used during an event?

Will there be longevity to engage after an event?

Please focus on *one feature only* for your App. The best Apps are simple, stay away from **users logging in**, this is being built using web technology for use on the mobile web. Users easily get confused if moving between too many screens, so keep your screens to an ***absolute minimum***.

You probably will not be able to create the full App, however it must be created as a working prototype that demonstrates the core functionality.

Deliverables

Please hand all of the following:

- **Demonstration of the working web page in a presentation.**
- **The project hosted on Repl.it and a URL submitted to Slate.**
- **A PDF citing the source of any images or code snippets used.**

Policy on Use of Sourced Materials

Code can use small sections of code from other sources, ie not a complete page taken from another source. Cite these sources using comments in the code, HTML comments:

<!--Start of code from xxxx --!>

<!--End of code from xxxx --!>

In CSS:

/* Start of code from xxxx */

/* End of code from xxxx */

In JS:

// Start of code from xxxx

// End of code from xxxx

Please also list the sources and the sources of any images that are not your own on a PDF file submitted to Slate with your URL.

For more information on citations, please review: https://ryanwprice.github.io/ixd-resources/cite.html

Deadline

The deadline is stated above, you can submit your work with 10% grade deduction in the week that follows. This is a bad idea, because rarely will students make up that 10%.

If you hand work in **on time** and the work is of a **failing grade**, you will be given the opportunity to **resubmit the work within one week of receiving the grade** from your professor.

If you have an accommodation, you may negotiate a submission date within reason after talking to your professor.

Delivery Format & Instructions

A hosted Firebird URL submitted to SLATE. Zip file submitted to SLATE. PDF submitted to the Assignment Folder in Slate. PDF must be named:

LastName_FirstName_IXD_Beahviours_Project3.pdf

LastName_FirstName_IXD_Beahviours_Project3.zip

Schedule

See separate file

Project Learning Outcomes

To achieve the critical performance, students will have demonstrated the ability to:

1. Analyze interactive objects to identify elements and relationships to user behaviour.
2. Apply the terminology and principles of information architecture in interactive problem solving.
3. Produce process documents such as diagrams, briefs and storyboards.
4. Integrate project concepts into functioning user behaviour interactions.
5. Apply design principles such as sequence and priority to solving interactive user problems.
6. Integrate technical parameters and platforms into the development of design solutions.
7. Communicate functional and technical requirements for a variety of stakeholders clearly and concisely in visual, verbal and written documentation.
8. Apply logic and code to develop the technical underpinning of the interaction.
9. Explain the importance of integrating diverse perspectives to generate innovative solutions.
10. Define importance of project deadlines, milestones, resources and individual responsibilities in achieving project goals.

Evaluation Criteria

This project is worth 30% of the course grade.

- **Development of the concept (15%)**
  Quality of the original concept, developed into a final App. The idea should have changed according to user testing needs (iteration from paper to sophisticated digital prototypes, these will be submitted in project 4) and in turn become a better digital resource. *Hint – prove that it did!* (LO 1, 2, 3, 4, 6, 7, 8, 9, 10)
- **2. Elegance of product (20%)**
  Your final product should contain no unnecessary steps for the user, it should achieve the users goals as simply as possible hiding away sophistication behind the scenes. The user should feel in control and that there is a clear benefit to the product (LO 1, 2, 3, 4, 6, 8, 9)
- **3. Quality of the UI (20%)**
  The visual look of the UI and the ability to perform the tasks required by the user, including the responsive qualities of the interface to interaction. You should have started in software designing the look and feel before building to a contemporary UI (LO 1, 2, 4, 5, 8)
- **4. Technical problem solving (20%)**
  Working with HTML, CSS, Javascript to build a functioning solution that provides gives a clear benefit to the user (LO 1, 2, 3, 6, 8, 9)
- **5. Professional approach (15%)**
  Ability to problem solve both technically and aesthetically. Displaying a professional work ethic, meeting deadlines, mapping out your work, scheduling user testing etc. (LO 4, 6, 8, 9, 10)
- **6. Grammar (10%)**
  All submitted must be free of grammatical errors and communicate effectively to the user (LO 7, 9, 10)

L.O. refers to Learning Outcomes

100%	**Perfect Work:** Mastery of project learning outcomes. Requirements of assignment are satisfied through artful use of theory/skills to produce an innovative submission at a level that exceeds industry standards.
95%	**Rare Work:** Rare comprehension of project learning outcomes. Requirements of assignment are satisfied through expert use of theory/skills to produce a nuanced and original submission that meets industry standards.
90%	**Outstanding Work:** Outstanding comprehension of project learning outcomes. Requirements of assignment are satisfied through the use of theory/skills to produce a highly original submission that meets industry standards
85%	**Exceptional Work:** Exceptional comprehension of learning outcomes. Requirements of assignment are satisfied through the use of theory/skills to produce an original submission that meets industry standards.
80%	**Excellent Work:** Excellent comprehension of project learning outcomes. Requirements of assignment are satisfied through the use of theory/skills to produce a submission with elements of originality that meets industry standards.
75%	**Very Good Work:** Thorough comprehension of project learning outcomes. Requirements of assignment are satisfied through the skilled use of theory/ techniques to produce high quality student work.
70%	**Good Work:** Good comprehension of project learning outcomes. Requirements of assignment are satisfied through the skilled use of theory/techniques to produce quality student work.
65%	**Competent Work:** Acceptable comprehension of project learning outcomes. Requirements of the assignment are satisfied with ample skill. Student demonstrates competence at a sufficient level to continue in the program.
60%	**Fairly Competent Work:** Moderate comprehension of project learning outcomes. Requirements of the assignment are satisfied with some skill.
55%	**Passing Work:** Passable comprehension of project learning outcomes. Requirements of the assignment are satisfied with limited skill.
50%	**Borderline Work:** Minimal comprehension of project learning outcomes. Requirements of the assignment are satisfied with marginal skill.
40%	**Poor Work:** Insufficient effort and/or minimal comprehension of project learning outcomes. Requirements of the assignment are not satisfied despite the completion all components.
30%	**Very Poor Work:** Submission is partial and/or of poor quality. An incomplete comprehension of project learning outcomes is demonstrated.
0%	**No Submission:** No work was submitted for review.