Week 2 - UI Design and Prototyping

UI Design and Prototyping Report Template

Project Title

Engaging Science Education for Teens

> Report by Wandile Ndaba (8 Mar 21)

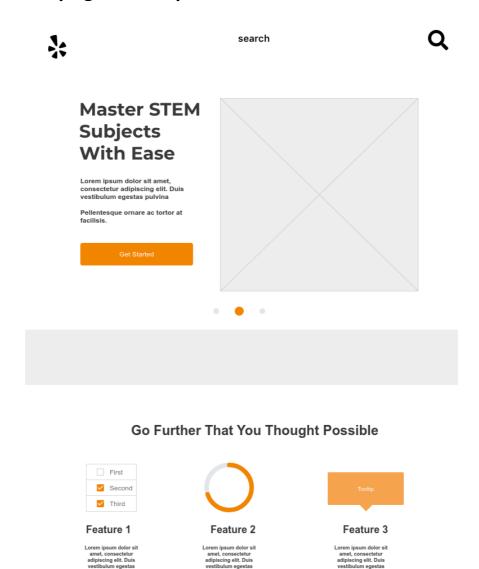## UI Design and Prototyping Report

1. Introduction

- Give a brief introduction to your project and the list of features. Summarize in a few sentences what you proposed in the ideation report.

- **add summary from last assignment

- The goal of this project is to create a **website** that teaches **STEM** (*Science, Technology, Engineering, Mathematics)* material to teenage students.

- It will be narrative-driven, highly visual and applying best practices and science-informed teaching strategies. It will implement an audio voice-over that students can activate whenever they get stuck on a topic.

- It will include many features to aid student's learning, including: 1. an audio player on the page at all time; 2. a progress bar; 3. a responsive design; 4. a flashcard app.

2. User Interface Design and Prototype

- Give some sample user interface layouts for your application. You can use either wireframe diagrams or prototyping tools to construct the mock representations of your UI design

- use site from Yakov course. or LucidChart

- design homepage. single lesson page

2.1.1. Homepage Mockup

2.1.2. Single Lesson Page Mockup

Subject 1 ▷

0:00 / 0:00

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis vestibulum egestas pulvinar. Curabitur tortor enim, egestas eu lectus nec, scelerisque dapibus sapien. Nunc vel libero blandit, ullamcorper quam eu, iaculis nisi. Suspendisse potenti. Nullam mollis erat eu sapien placerat cursus. Pellentesque placerat odio tortor, aliquam tempor dolor dapibus cursus. Donec ac

Pellentesque ornare ac tortor at facilisis.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis vestibulum egestas pulvinar. Curabitur tortor enim, egestas eu lectus nec, scelerisque dapibus sapien. Nunc vel libero blandit, ullamcorper quam eu, iaculis nisi. Suspendisse potenti. Nullam mollis erat eu sapien placerat cursus. Pellentesque placerat odio tortor, aliquam tempor dolor dapibus cursus. Donec ac magna velit.
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis vestibulum egestas pulvinar. Curabitur tortor enim, egestas eu lectus nec, scelerisque dapibus sapien. Nunc vel libero blandit, ullaac magna velit.
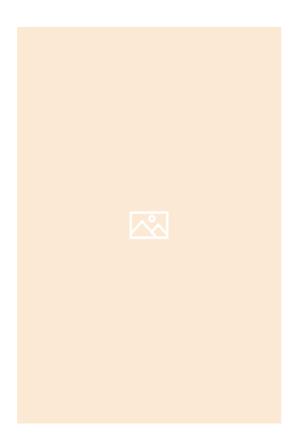
Section Heading

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis vestibulum egestas pulvinar. Curabitur tortor enim, egestas eu lectus nec, scelerisque dapibus sapien. Nunc vel libero blandit, ullamcorper quam eu, iaculis nisi. Suspendisse potenti. Nullam mollis erat eu sapien placerat cursus. Pellentesque placerat odio tortor, aliquam tempor dolor dapibus cursus. Donec ac magna velit.

Pellentesque ornare ac tortor at facilisis.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis vestibulum egestas pulvinar. Curabitur tortor enim, egestas eu lectus nec,

2.1.3. Mobile Login/Signup Page Mockup

Learn.
Succeed.

Lorem ipsum dolor sit amet, consetetur
sadipscing elitr, sed diam nonumy
eirmod tempor invidunt ut labore et
dolore magna aliquyam erat, sed diam
voluptua.

[Login] [Sign Up]

- Briefly explain the rationale behind designing your UI and how it is geared towards supporting the list of features for your application.

- The goal is to achieve an **inviting, light-hearted** and **fun** learning environment.

  My website is not meant to feel too much like an online classroom, more like a series
  of in-depth articles about complex ideas, tackled with the help of an expert guide voice-over through the audio player.

- This being the case, all website elements must be designed and implemented with this philosophy in mind.

- 1. an audio player on the page at all time;
  2. a progress bar;
  3. a responsive design;
  4. a flashcard app.

- One potential issue is that I might face difficulty in implementing some of the features. But with proper planning, it will be possible to complete.

▼ **what:** Parts of a website (navigation structure)

+ ⋮⋮ ▼ **Theory:** Why, Information Architecture

Why Website Navigation?
- Websites are rarely single pages
- Need to provide visitors an intuitive means of getting around your website
- Several commonly used navigation patterns used on websites

https://www.coursera.org/learn/bootstrap-4/lecture/9NyaX/navigation-and-navigation-bar

This intuitive means could be provided by many different approaches, the navigation bar being one of the most common methods of indicating this information.

Information Architecture
- Structure of a system with respect to the way the information is:
  - Organized,
  - Labeled, and
  - Navigation methods provided to access the information
- Need to consider when designing websites
- Dictates the provisioning of navigation on websites

And this **organization of information** within your website also **dictates what kind of navigational aids** you provide on your website, and based on how that information is organized.

- Because this website is a learning environment, it will be important to provide an Intuitive way of finding their way around the website.

  - The main driving force for the organisation of information on the website will be the specific lesson that that student is currently doing.
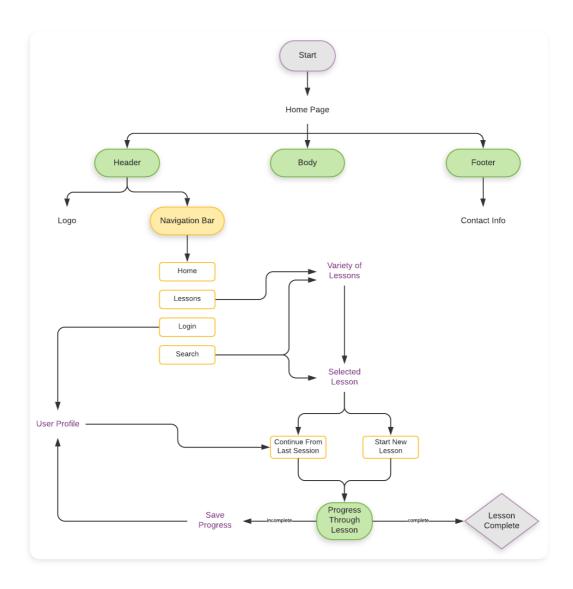
3. Navigation Structure

- Give a brief overview of the navigation structure for your application.

3.1. Navigation Structure Overview

- ref: information architecture lecture. navigation bar and breadcrumbs

- Briefly indicate a typical flow of your application in terms of user experience. You can use any way of representing the flow. You can also construct a prototype using one of the prototyping tools to illustrate this.

▼ ref: information architecture lecture. navigation bar and breadcrumbs

3.2. User Flow

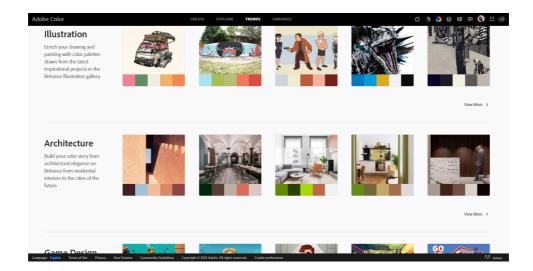User experience journey for completing a lesson
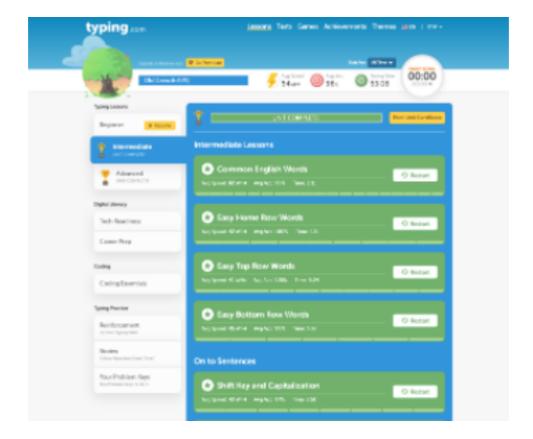
- User journey (marketing research tool)

  Alerting Users: Objectives and Outcomes - In this lesson we examine various ways of delivering alert information to users. We examine labels, badges, alerts and progress bars. At the end of this lesson, you will be able to:
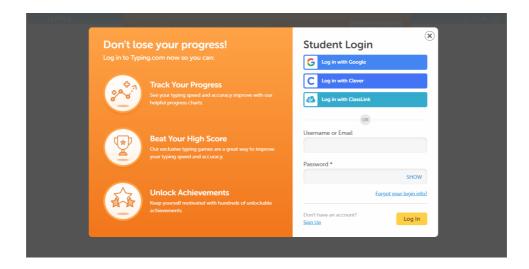
4. References

- Provide any references relevant to the report.

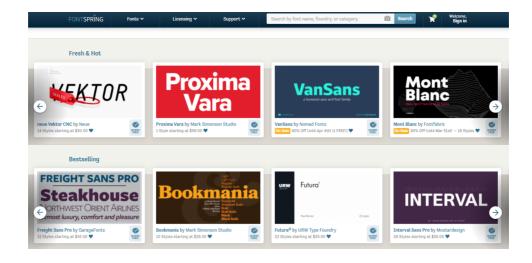- Colour scheme. https://color.adobe.com/trends

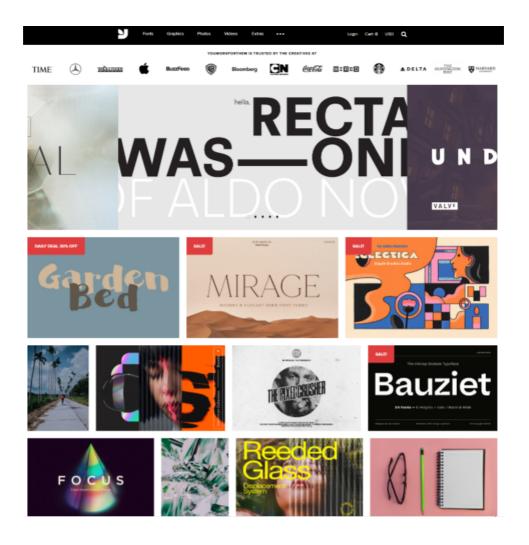▼ Visual layout inspiration: https://www.typing.com/student/lessons

▼ font. https://www.fontspring.com/

▼ font. https://www.youworkforthem.com/

- https://www.w3schools.com/: For information on how to implement difficult components (e.g. parallax, audio player, progress bar)