worldskills

Test Project

*Design and Front-end
Web Technologies*

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Contents

Introduction

Our world has changed a lot over the past 10 years, the borders of country are blurred, it becomes easier to travel, people learn new worlds and become travellers. But this leads to an increase in the information processed and may be the reason for the loss of the most important and interesting aspects of the life of the studied worlds for travellers.

This problem is solved by various electronic helpers, simple and affordable Internet services that help to systematize the data, follow the notes of other travelers, create new resources and databases about interesting places and things.

Your task will be to develop a working prototype of one of these services – Interactive Presenter. And a one-page marketing site for this presentation on the Internet.

The main idea of that service is to create a huge database of everything. And to give everyone the opportunity to get acquainted with it in an interactive way, allowing you to concentrate only on this interesting information.

But the company understands that this is a voluminous task, so it suggested that you develop a prototype of a web application for one narrow area - tourist company of Kazan, whose goal is to acquaint visitors of the city with the history, culture and atmosphere of the thousand-year-old capital of Tatarstan in an interactive presentation format. The visitor can choose the route of acquaintance and receipt of information in accordance with his contextual choice on each slide.

In the future, it is planned to open for everyone to create their own interactive routes and publish them on the company's website. Therefore, special attention is paid to the route editor in terms of convenience and ease of use for the mass user.

Description of project and tasks

This task is to be completed in 6 hours. The result should work in modern browsers.

The first 3 hours you will create the worked prototype of application using JavaScript ensuring the app works correctly in different web browsers, following the requirements described below.

The second 3 hours must be used to create the design of the one-page marketing site for promoting of service and the application.

The main feature of the application is its work in two modes: "Route Editor" for those who want to create and share their impressions of Kazan tourist information and "View Mode" those who study new tourist material. This feature should be reflected in the design of the website.

Because the service will be used as presentation tools to promote tourism in Kazan the users of the route editor can be segmented as adult aged 25 - 40 years old. But, for the presentation format it will be targeted for all ages, so that both children and adults can understand about history of Kazan easily.

Glossary

- Route Editor - a mode in the service that can be used to link different element using links visually and can be controlled using mouse and keyboard

- View Mode - a mode in the service that can be used to see the end result of all linked elements and their transition (like a presentation of slides)

- Element - a node in the route editor that is used to store the content and link it with other element (like a slide)
- Link - a line in the route editor that is used to store information about the next element to transition and the transition property itself
- Transition - an animation that runs in view mode between moving from one element into other element
- Content – it is user input data to be demonstrated.

First 3 hours – front-end programming module

Route editor

The editor should work on desktop. In this scope of work, we don't consider supporting touch devices for editor mode.

You need to make the route editor that can be used by the user to link several created elements into a sequence. The functionality of the route editor that you need to make is listed below:

1. When creating a new presentation or clearing the editor, one root element initially appears in the center of the screen. An element can be look like anything (circle, square, star, blob, etc.).
2. The element has 4 interaction areas, (1, 2, 3, 4), which are hidden by default and are displayed only after **hovering** on the element.

Original State   hover   Interactive Areas are displayed
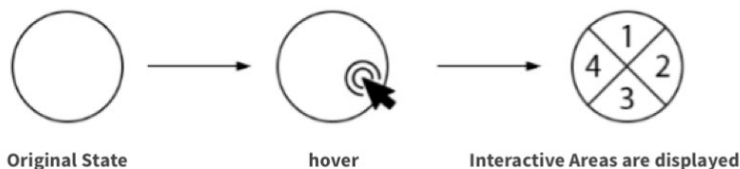
3. When you click on one of the areas, a related element should appear on the side of the areas node on which the click was made. Link between the elements should be created as well.

4. Alongside the 4 4 interactive areas, there should be "edit" button and "delete" button for the element which are shown only when element is on hover.
5. The following features should be implemented for the elements:
    a. Editing the content of the element (slide). To edit you need to use one of the wysiwyg editors, which will be given to you.
    b. Editing captions for each of the sections (1,2,3,4), which will be shown in view mode.
    c. Deleting an element by clicking the delete button.
6. When deleting an element, all links of this element must also be deleted.
7. The user can delete a link by clicking on the link and pressing the **Delete/Back Space** key.
8. Elements can be moved around the editor by mouse drag. Links should also follow the element.
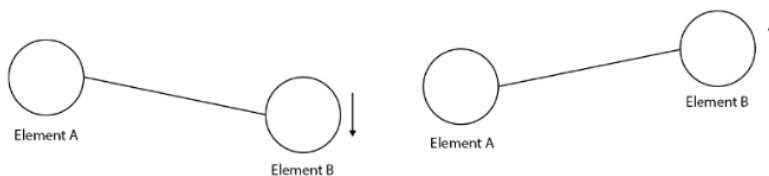
9. To link two unrelated elements (for example, after removing a connection), with the **Shift** key held down, move a section of one element to a section of another element.
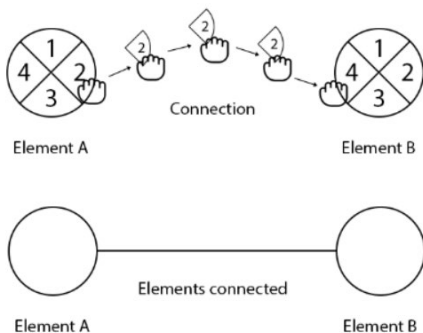
10. The possibility of looping routes is allowed.
11. Any changes done inside slide editor is saved automatically and will be restored upon refresh.

The presented examples are only a sketch, you have to choose the appearance, size, animation, reaction time to user actions and other characteristics to improve the usability of the application.
It is expected that you will create additional interface elements and or user interaction mechanism to improve the convenience of the specified functionality.

View mode

The view mode should work in both desktop and tablet.

1. You need to create a view mode that open the preview of the slides starting from the root element with an option for moving between content based on linked section that is already modified in the route editor.

2. You also need to implement a transition when there is a movement between element.

3. The animation of transition must correspond to the direction of movement and movement along the main path or an additional one (For example, left, right, down, up, in a circle).

4. The view mode needs to be seen in full screen mode.

5. The user should be able to understand where he is at the moment and go to the desired element.

6. For navigation, this mode should provide movement controls that should be easy to use, including on touchscreen devices. And show the title of that control, which helps the user with the choice of the next step to move.

7. For navigation in desktop, the viewer allows using number keys (1,2,3,4) on keyboard to navigate to corresponding linked element.

You need to consider the user experience and design the apps accordingly to be as easy as possible when used and as clear as possible when viewed. Even if you cannot implement a full ~~editor~~application, you may implement a view mode as a proof-of-concept to show the client how it works.

Your viewer should follow the design that you created at design module and correspond to Web Content Accessibility Guidelines (WCAG) 2.0.

Second 3 hours – Marketing One-Pager for the Editor/Viewer

Your task is to deliver a graphic design of one-page marketing website for desktop devices in graphical format in 3 hours, following these requirements defined by the client.

Use suitable color schemes to improve readability and aesthetics.

For one-page website:

Resolutions for mock-up ~~Computer~~ desktop version~~is 1440 x 900 pixels~~; All mock-ups must be in full size in pixels and must include a red border ~~– less than or equal to~~maximum 3 pixels wide, showing the border of the 1440 x 900 pixels screen resolution ~~of the computer~~.

1.

2. Elements of web page must be presented:
   a. The logo;
   b. Social icons for sharing;
   c. Link to the page with ~~"suggestions~~ Suggestions and ~~feedback~~Feedback" ~~on the application~~;
   d. Screenshot(s) of the viewer.
   e. Screenshot(s) of the editor.
   f. Interactive "How it works" with a screenshot(s) of user interface for editor and view modes
   g. Call to action to test the product;
3. The following information should be presented on the web page in creative view to attract attention (text will be prepared for you in media folder):
   i. About service and features;
   ii. About editor and view mode;
4. ~~1. All mock-ups must be in full size in pixels and must include a red border – less than or equal to 3 pixels wide, showing the border of the screen resolution of the computer.~~

Use your ~~high~~ knowledge in Web Design principles and best practices to ~~present~~ create a website design that captivate the client with a professional work and permit for the end users to reach the main goal of the website - Presentation of the work of the new ~~service~~ application in several modes of operation and new features that it provides.

Some media files are available for you in the "media" folder. You must use your creativity to create content or additional media. You can also make changes to all images provided.

Instructions to the Competitor

Please follow the following instructions to deliver your work.

1. The media files are available in the ZIP file. You can modify the supplied files and create new media files to ensure the correct functionality and improve the application. You can use any supplied JavaScript framework if you find it necessary.

2. Save your design files in a folder called "XX_ Design_Module/YY_content" ~~where XX is your country code~~.

3. File name of the design will be in a format like "YY_content_NN.png" or "XX_content_NN.jpg" with ~~XX is your country code, YY is workstation number, NN is the number sequence of image if you have more than 1.~~

4. Save any image source files to a folder named "source" inside the "XX_design_module/YY_content" folder. The source files are the files that contain the layers, development files, ie .psd, .ai, .svg~~, .jpg~~.

5. Save the working apps in a directory on the server named "XX_ front_end_module". Be sure that your main file is called index.html.

* XX is your country code, YY is workstation number, NN is the number sequence of image if you have more than 1.

~~5.~~

Marking Scheme

SECTION	CRITERION	JUDG. MARKS	MEAS. MARKS	TOTAL
E1	Editor functionality for Element	0	3.75	3.75
E2	Editor functionality for Connections	1	2	3
E3	Viewer requirements	0	4	4
E4	Animation	1.5	0.75	2.75
E5	Code Quality	3.5	0	3.5

F1	Work Organization and Management	1.50.75	0.5	2.01.25
F2	Page Content	2.75	3.75	6.5
F3	Website Design Page Generic	4.5	0	4.5
F4	Page Design	2.251.5	0	1.52.25
F5	Target Audience	2.25	0	2.25