

Project Plan

Slide Linker

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Introduction

The application makes it possible to create “presentations” where an individual slide can be linked to any other slide. The traversal between slides will happen through selecting an option from a variety of options. Each option has a predefined endpoint, a link to another slide, where the user will be directed to after choosing the option.

This allows a non-linear traversal of the presentation, where the path traversed by the user is defined by the decisions the user makes.

For this reason, the application could be used to create flexible inquiries, decision-based role-playing “games”, teaching material, or any other type of content where flexible decision-focused approach is required.

Functionality

The application will have the following main functionality:

- Operations to do to the manipulated data:
 - o Updating textual and numerical information, for example, changing the heading of the slide, or updating the number of slides (indirectly)
 - o Modify the position, size and rotation angle of the slide image
 - o Create, modify and save projects
 - o Create, modify, delete and save individual slides in the project
 - o Sort and filter the project’s slides in the main editing view
- Undo and redo:
 - o Available in the slide editing view
- Settings, where the interface parameters can be adjusted:
 - o Light/dark mode
 - o Changing the language (Finnish/English)
 - o Changing the font size used in the application (small/medium/large)
- Keyboard shortcuts, keyboard navigation:
 - o TAB-key to switch active element in the interface
 - o ENTER-key to activate the active element (if possible)
 - o In the slide editing view:
 - Ctrl+Z to undo, Ctrl+Y to redo, Ctrl+S to save, Ctrl+D to delete, Ctrl+C to cancel

- A structural component:
 - o A table in the main editing view, showcasing the project slides

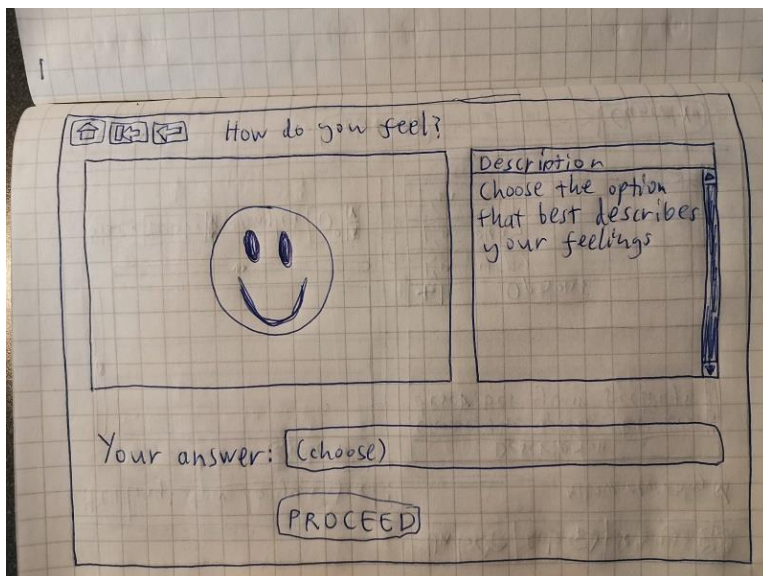
In addition, it will have the following features:

- Loading a file:
 - o The user can load project files and image files
- Saving a file:
 - o The user can save project files and image files
- Internationalization:
 - o Two languages (Finnish/English) to choose for the interface
- Drag and drop:
 - o The user can drag-n-drop an image to the image field in the slide editing view
- A custom component with custom painting:
 - o What this will be is to be seen, but I am quite certain, that I will be creating a custom component for some element in the interface

User Interface

The user interface consists of three views:

- The presentation view
- The main editing view
- The slide editing view



The presentation view offers the presentation of the project. This view is where the actual project can be used and tested.

“Home”-button lets the user to return to the main editing view.

“Bar and arrow”-button can be used to get back to the start of the presentation. Only accessible if “Allow reverting”-option is checked in the slide settings.

“Arrow”-button lets the user to return to the previous slide. Only accessible if “Allow reverting”-option is checked in the slide settings.

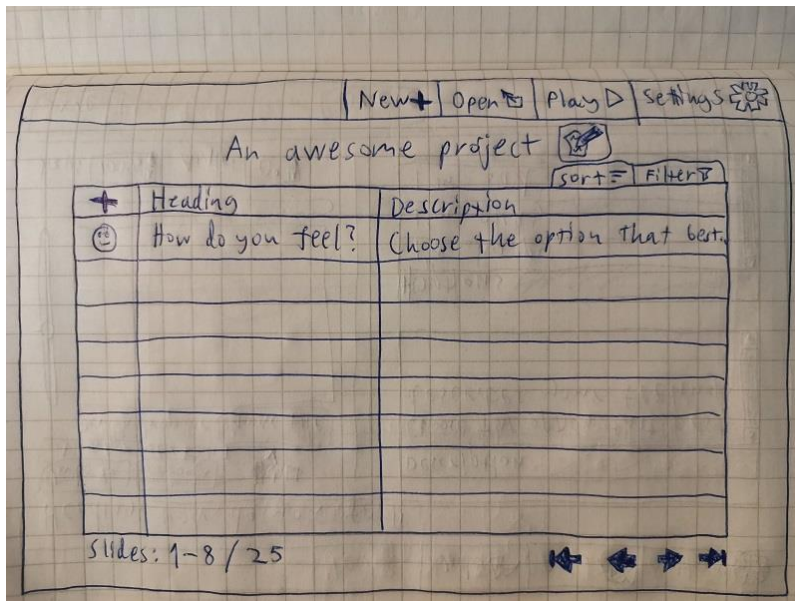
Next to the top buttons there is an area for displaying the header of the slide.

“Description”-text field displays the description defined for the slide.

The image area displays the image defined for the slide (defined image manipulation settings are also implemented to the image).

The field next to “Your answer”-text can be used to open an options menu, where the user can select one option.

“PROCEED”-button is used to confirm the chosen option, and from there, the user gets directed to the slide that was linked to the chosen option.



The main editing view is where an overview of the open project can be examined. Here the user can also create new projects, open existing projects, and change to presentation view to test the project in action.

“New”-button lets the user to create a new project.

“Open”-button lets the user to open an existing project.

“Play”-button opens the project in the presentation view.

“Settings”-button opens a drop-down menu, where the user can switch

between light and dark mode, change the language, and change the font size.

At the top, the project header is displayed.

Next to the project header is a “Write”-button that opens a dialog, where the header can be updated.

Under the header there is a table showing the project slides. Only a fixed number of slides are shown at a time. To see other slides, use the arrow buttons located in the bottom right corner to traverse between the sets of slides.

In the table header, in the left corner there is the “+”-button which can be used to create a new slide. The “Heading”-column displays the heading of the slide, and the “Description”-column shows the (beginning of the) slide’s description.

Under the table header, each row represents an individual slide, where the slide image, the slide header, and the (beginning of the) slide description are shown.

At the left bottom corner, the numbers of showed slides are shown, and how many slides there are in total.

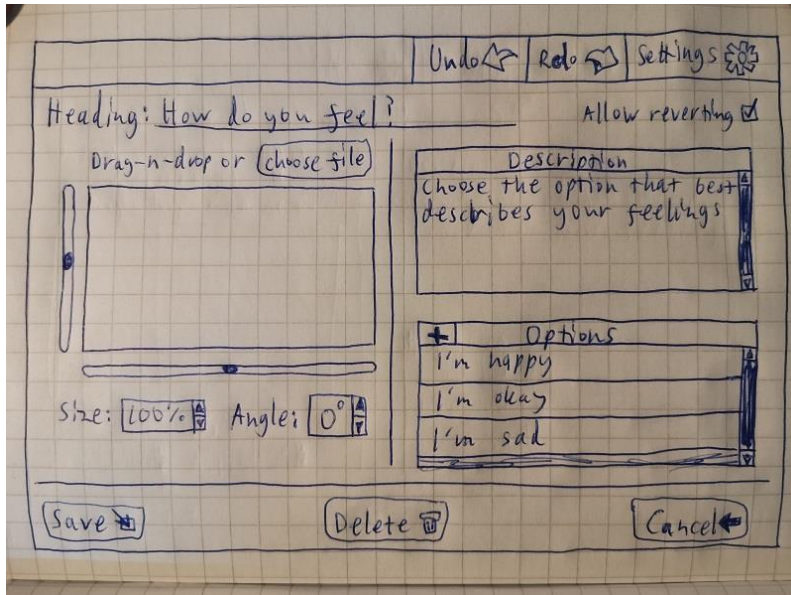
At the top right of the table there are “Sort”- and “Filter”-buttons.

The “Sort”-button can be used to sort the slides from newest to oldest, from oldest to newest, according to header alphabetical order, or header reverse alphabetical order.

The “Filter”-button allows the user to show only the slides that fit the filtering options.

Choosing an individual slide from the table opens the slide editing view, where the user can edit the chosen slide.

The user can also change the starting slide for the project by checking the radio button, that is displayed when hovering over the slide row.



The slide editing view consists of all the settings available for an individual slide. To get here, a slide has to be chosen in the main editing view.

In the top bar there are buttons for “Undo”- and “Redo”-operations. “Settings”-button opens a drop-down menu, where the user can switch between light and dark mode, change the language, and change the font size.

In the top left, the user can change the heading of the slide.

Next to it, there is the “Allow reverting”-checkbox, which determines if the user is allowed to return to the

first slide or to the previous slide.

On the left side, there are the settings for the slide image. In the image area, the slide image is shown. To add or change the image, the user can either drag-n-drop an image to the area or click the “Choose file”-button to manually choose the image file from their computer.

The vertical slider determines the vertical position of the image. The horizontal slide determines the horizontal position of the image.

The “Size”-input field is used to change the image size.

The “Angle”-input field is used to set the rotation angle of the image.

On the right side, there are settings for the description, and for the options that will be available to the user.

The “Description”-field is a simple text field, where the user can change the slide’s description.

The “Options”-field lists all the options, showing each option’s label. The user can add a new option by clicking the “+”-button at the top left corner of the field. The user can change the settings of an individual option by clicking on the option’s area. In the option’s settings the user can change the option’s title, and the endpoint slide.

At the bottom there are three buttons: The “Save”-button, which is used to save the changes, the “Delete”-button, which is used to delete the chosen slide, and the “Cancel”-button, which is used to discard any changes. Pressing any of the buttons will open a confirmation dialog, and after confirming, the user will be returned to the main editing view.

Used Tools

The application will be developed using React, Material-UI, and Redux.

Redux will be used so that the application can be extended more easily in the future, if the developer so wishes.

Project Timeline

The development work will start when the project plan has been approved.

Planning the project's implementation structure will be the first step to be taken. For this, 3 to 7 days are allocated depending on the complexity of designing the project's parts and their relations to each other.

After the planning, the actual development will start. Redux parts will be created first. The main editing view will be the first view to be created, after which the slide editing view will be added, and at the end, the presentation view will be implemented.

For each of these views, a one week development time will be allocated.

After the creation of the application, the final report will be created. For this, 2 to 4 days will be allocated.

The final deadline for the project is 30.06.2020, though if the project gets done faster, then so be it.