

KnowledgeVision Template Builder

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Project Goals

- Problem: Average user of KnowledgeVision...
 - Doesn't know front-end development
 - Doesn't have the funds to get a customized template made
- Solution: Create an application to facilitate the easy creation of customized templates for the average user
- Added benefit of allowing non-technical members of company support teams to be able to create custom player templates for demonstrations



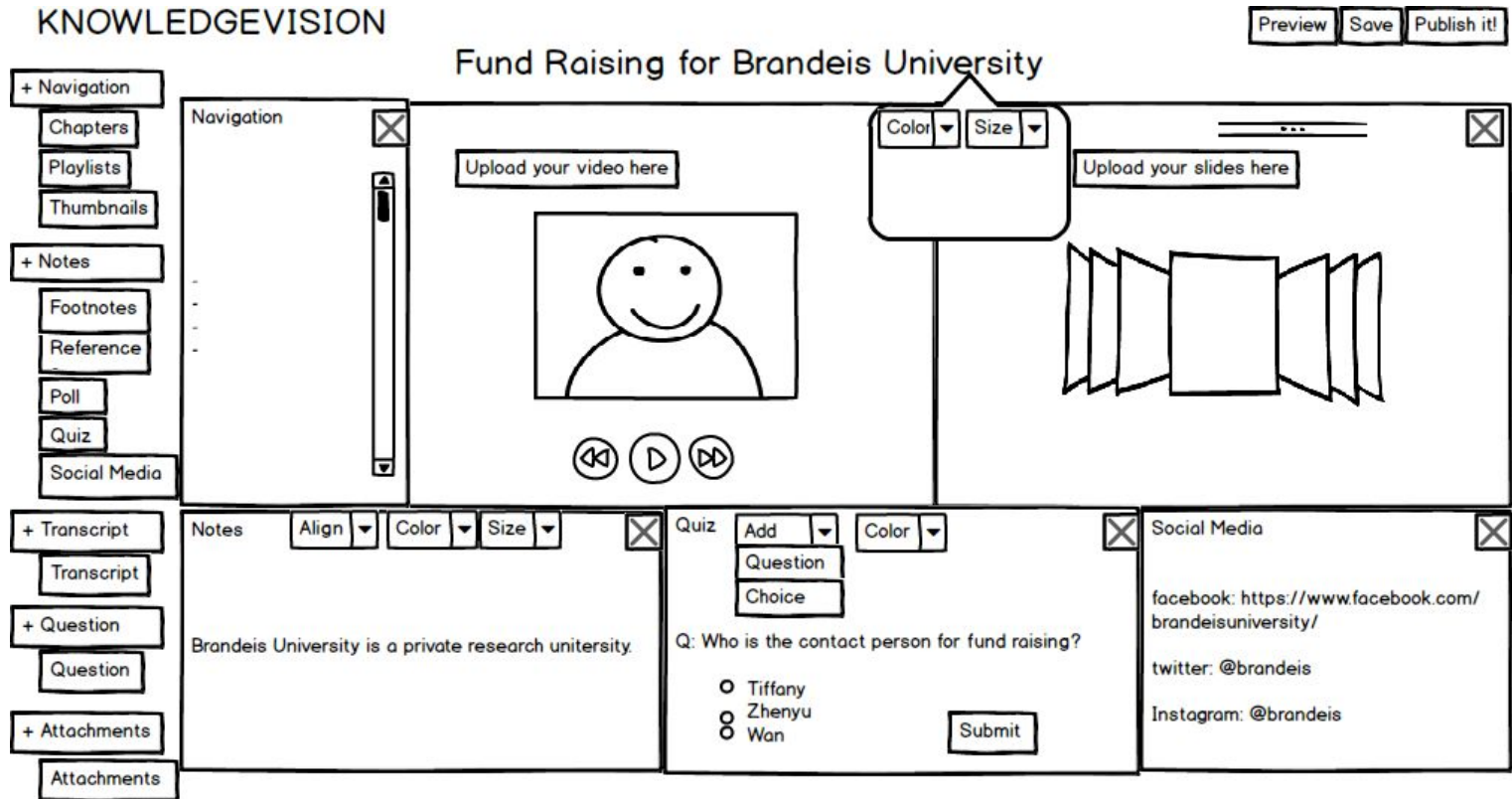
What We Wanted To Accomplish

- Make the template design process as easy as possible
- Easy to use application that would allow users to create custom templates through ability to:
 - Include/exclude desired presentation components
 - Position those components as desired
 - Change the colors and customize font of either each individual component or the presentation as a whole (called a theme)
 - Import/Export by theme or template
 - Export by template results in a zip file ready to be uploaded to KnowledgeVision



UI Designs

Design Version 1.a



Design Version 1.b

Knowledge Vision Design Wizard

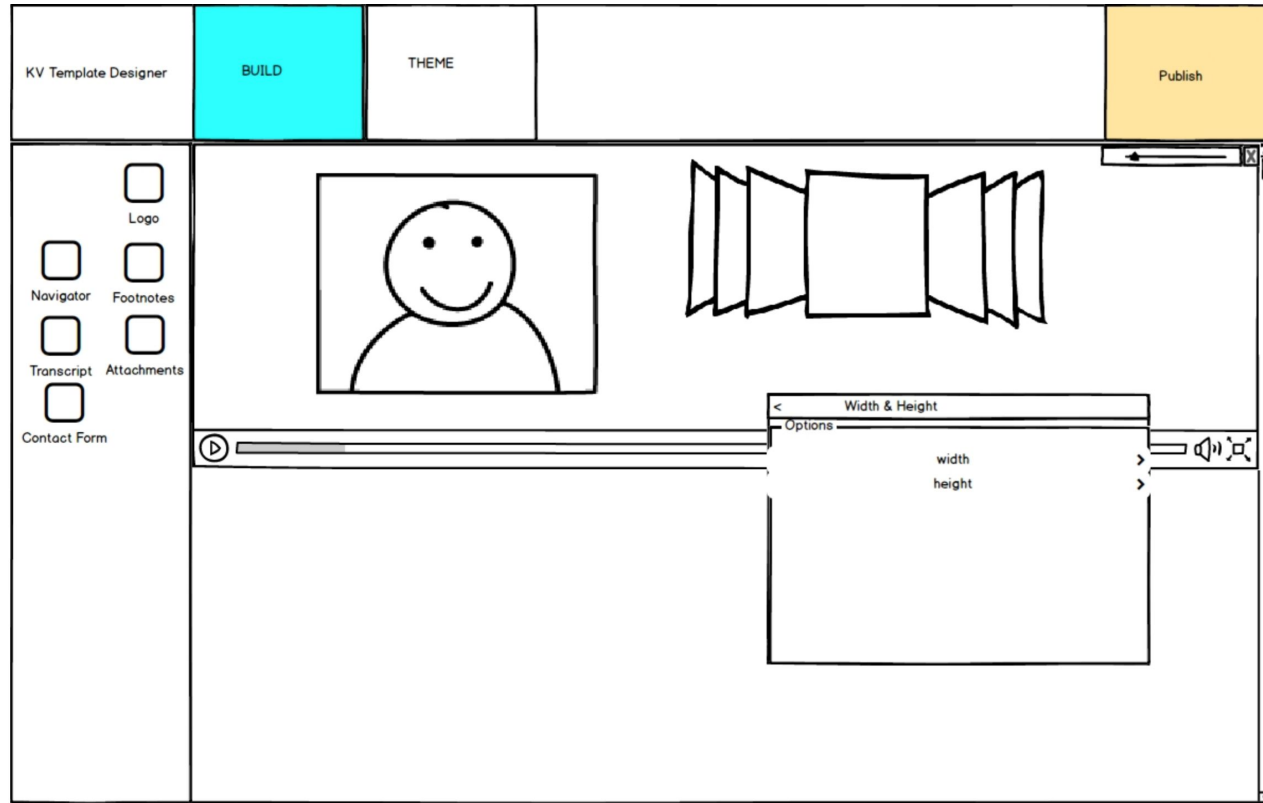
Branding	ComboPlayer	Navigator	Footnotes	Attachments	Question	Transcript	Social Media	Presentation Info
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Logo	Upload	Orientation	Left ▼
Background Color	<input type="text"/>	Font	Calibri ▼
Primary Color	<input type="text"/>		
Secondary Color	<input type="text"/>		

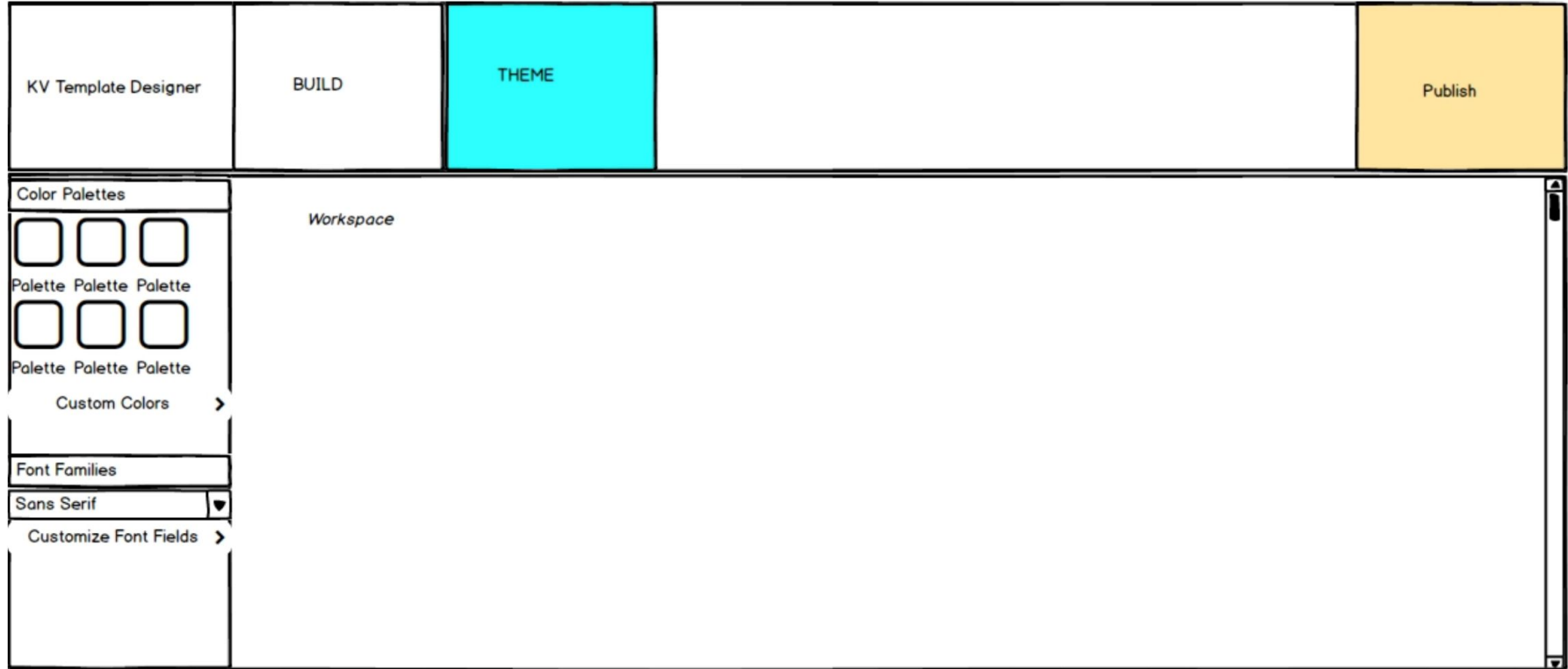
Design 2.0 (final)

KV Template Designer	BUILD	THEME		Publish
<div data-bbox="148 463 204 517"><input type="checkbox"/></div> <div data-bbox="115 528 233 550">Comboplayer</div> <div data-bbox="260 463 316 517"><input type="checkbox"/></div> <div data-bbox="266 528 311 550">Logo</div> <div data-bbox="148 572 204 626"><input type="checkbox"/></div> <div data-bbox="125 637 214 659">Navigator</div> <div data-bbox="260 572 316 626"><input type="checkbox"/></div> <div data-bbox="241 637 330 659">Footnotes</div> <div data-bbox="148 670 204 725"><input type="checkbox"/></div> <div data-bbox="125 736 214 757">Transcript</div> <div data-bbox="260 670 316 725"><input type="checkbox"/></div> <div data-bbox="233 736 341 757">Attachments</div> <div data-bbox="148 768 204 823"><input type="checkbox"/></div> <div data-bbox="115 834 233 856">Contact Form</div>	<div data-bbox="440 473 539 495">Workspace</div>			

Design 2.0 (final)



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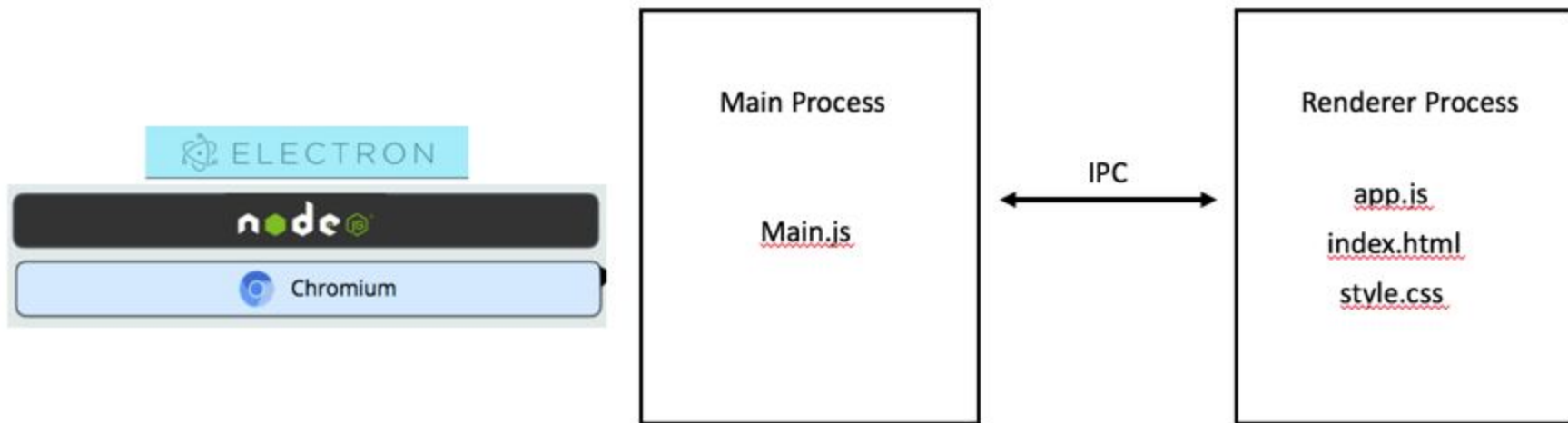


Development Platform

- Decided to create an Electron application
 - Electron:
 - new framework to create cross-platform applications (formerly know as Atom Shell)
 - Uses HTML/CSS/Javascript on top of Chromium and Node.js
 - Example of Electron Applications:
 - Atom
 - Slack



The Basic Architecture of an Electron Application



Obstacles and Challenges

- General:
 - Never developed anything using Electron before
 - Relatively new to Javascript/HTML/CSS Development
 - No to little knowledge of UI/UX design
 - Project design was up to us -- open-endedness was a challenge!
 - Semi-self-management was difficult
- Specific
 - Generating a valid template (html and css file) based on variable input is hard
 - Hard to test functionalities and hard to debug, especially testing the generated zip files



What We Accomplished

- Things we wanted to accomplish:
 - Easy to use application
 - include/exclude desired presentation components
 - position those components
 - Change the colors and customize font of either each individual component or the presentation as a whole (called a theme)
 - Import/Export by theme or template
 - Export by template results in a zip file ready to be uploaded to KnowledgeVision



What We Accomplished

- Things we wanted to accomplish:
 - Easy to use application - wound up looking pretty similar to design 1.a
 - include/exclude desired presentation components
 - position those components
 - Change the colors and customize font of either each individual component or the presentation as a whole (called a theme)
 - Import/Export by theme or template - can only do as a json file currently
 - Export by template results in a zip file ready to be uploaded to KnowledgeVision - can generate the zip file, but not working 100%

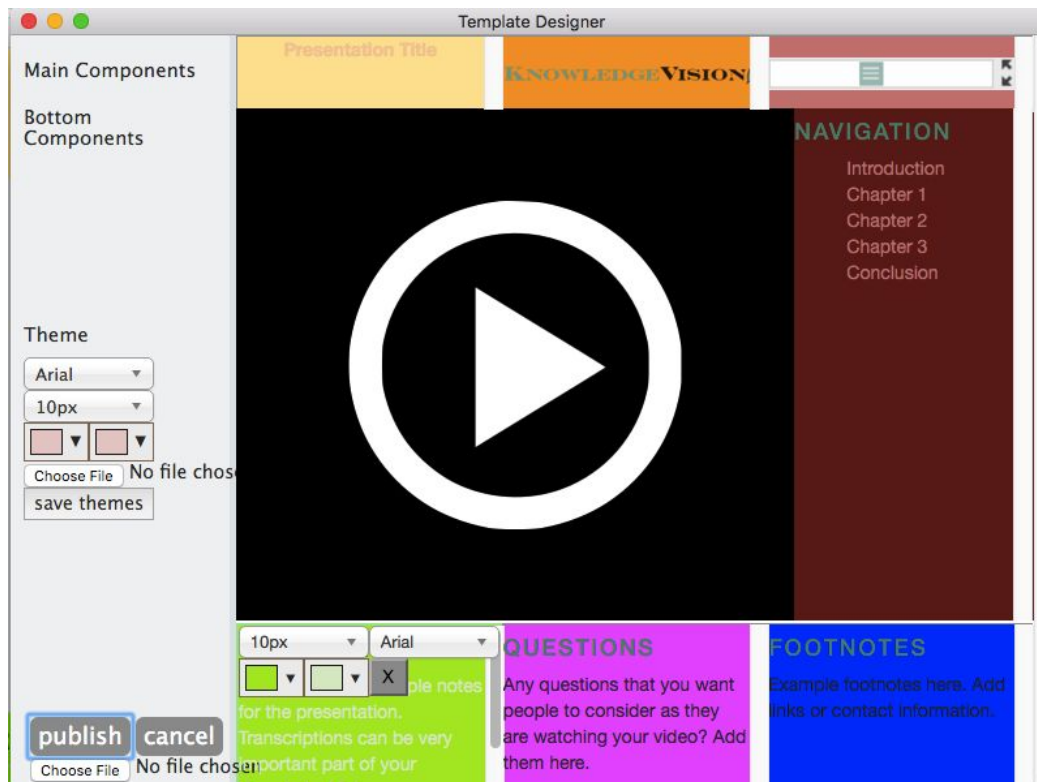


More Detailed Look at Application

- Initial
 - Run on electron
 - Drag manu and video section
- Drag and Drop
 - Navigation can be drag to video and can be sorted with video
 - Question, footnote, transcript can be dragged to the bottom and resize according to the number, sortable as well
 - Logo, title and zoom-control can be dragged to the top and also sortable
- Theme
 - Change all the individual box css attributes
- GenerateHTML
 - Generate json file according to the user's preference
 - Generate validate html according to the json file



Time for our demo!



Things We Would Have Wanted to Implement/ Future Plans

- Transcript search box doesn't work well
- Uploading and downloading theme is only for json file
- Responsive template
 - Works locally, but have problems online when uploaded
 - Works for Chrome, but have problems for Safari
- Improve UI design
- Scroll bar shows sometimes (overflow:hidden;)



Thank you

- Michael Kolowich and Alex Kieft for your mentorship
- Pito Salas for his guidance and patience



Any Questions?

