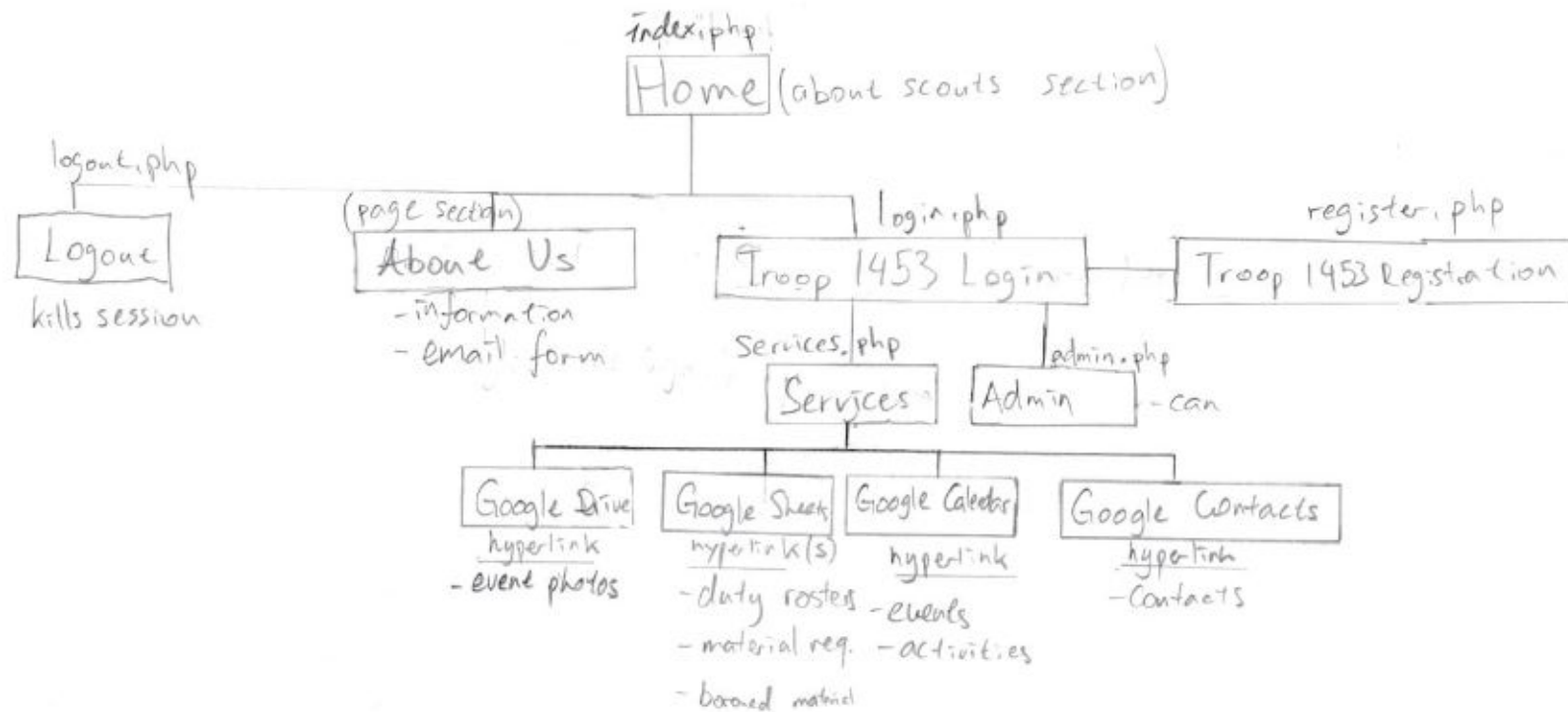


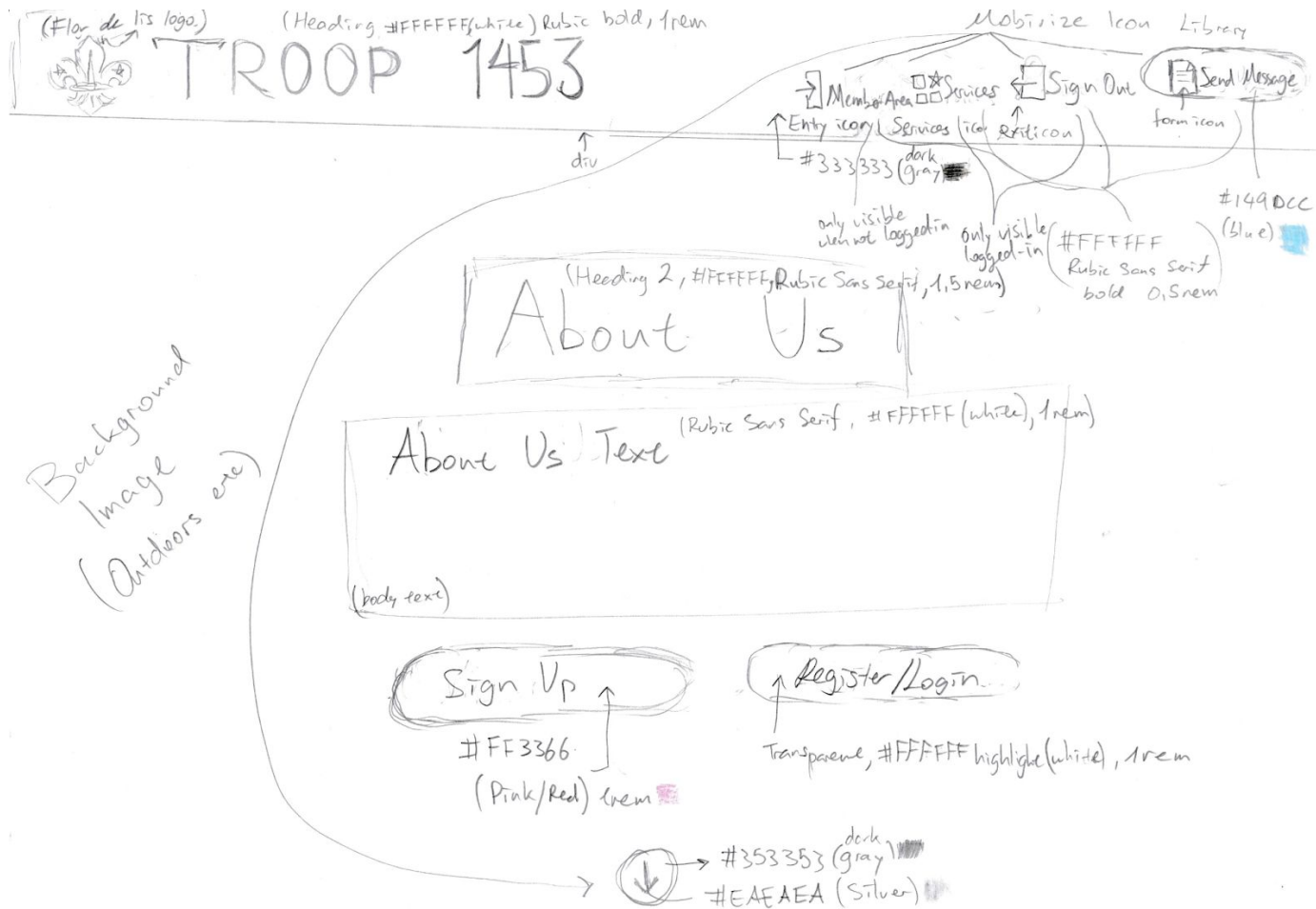
## Criterion D: Product design—Overall structure

### Tree diagram of Troop 1453 Website



Above is the overall structure of the Troop 1453 website, illustrated as a tree diagram.

## Internal structure of BSA Troop 1453 Website



Above is the internal structure of the BSA Troop 1453 Website, specifically the first section of the index page.



# TROOP 1453

[Member Area](#)[Services](#)[Sign out](#)[Send Message](#)

Another  
(different)  
Background  
Image

## Why Join Scouting

Text (Rubik Sans serif, #FFFFFF (white), 1rem)

(body text)

Rubik sans serif, 1rem  
# 818990 (gray)

Name

Email

Phone

Message

#FFFFFF White

(Transparent)

SEND FORM

(Footer)

#2E2E2E  
dark gray



Do a Good Turn Daily

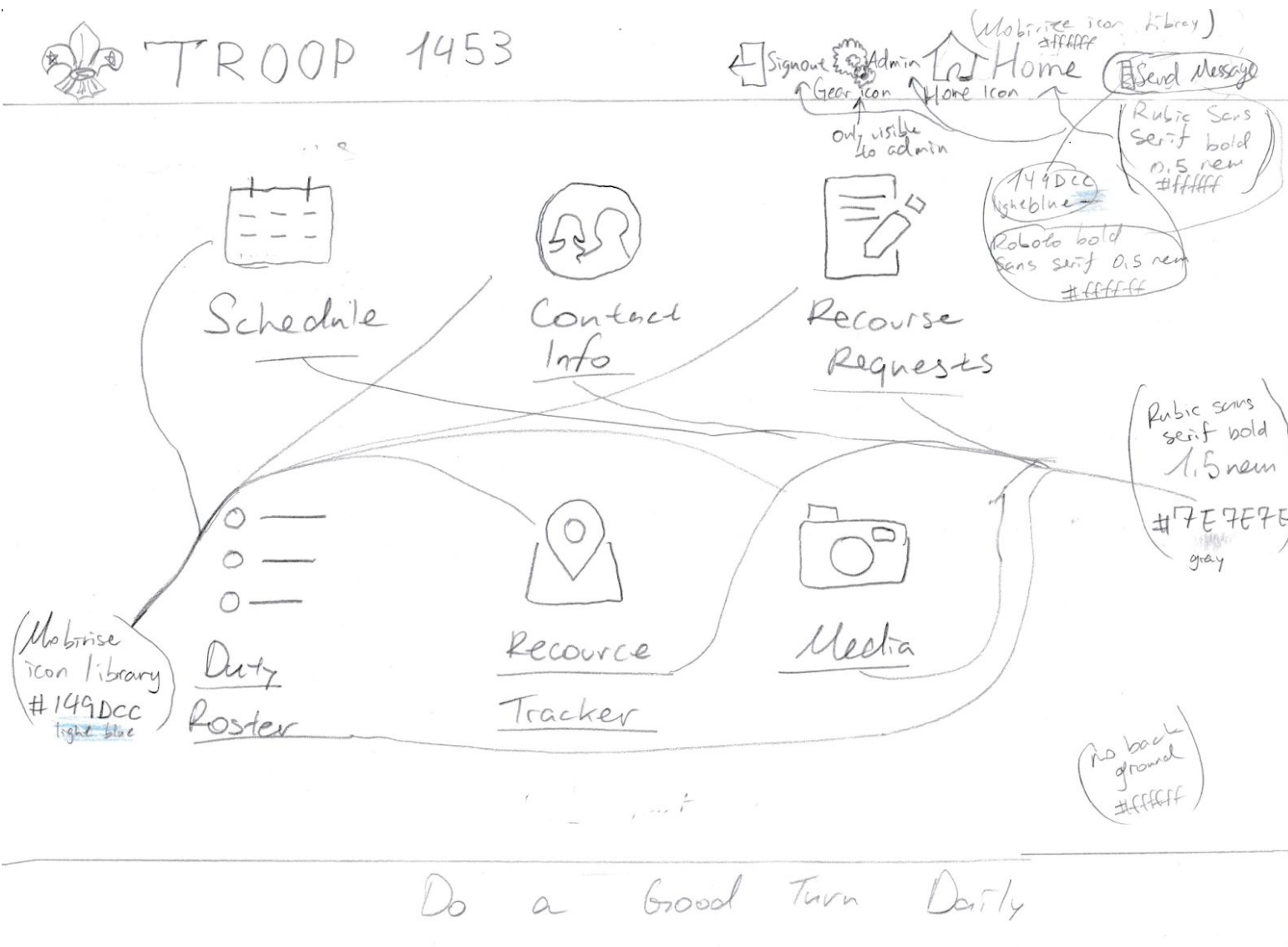
1 rem, #FFFFFF (white) bold  
(motto)

FF3366 (Pink/bright red)  
1rem  
Rubik sans serif

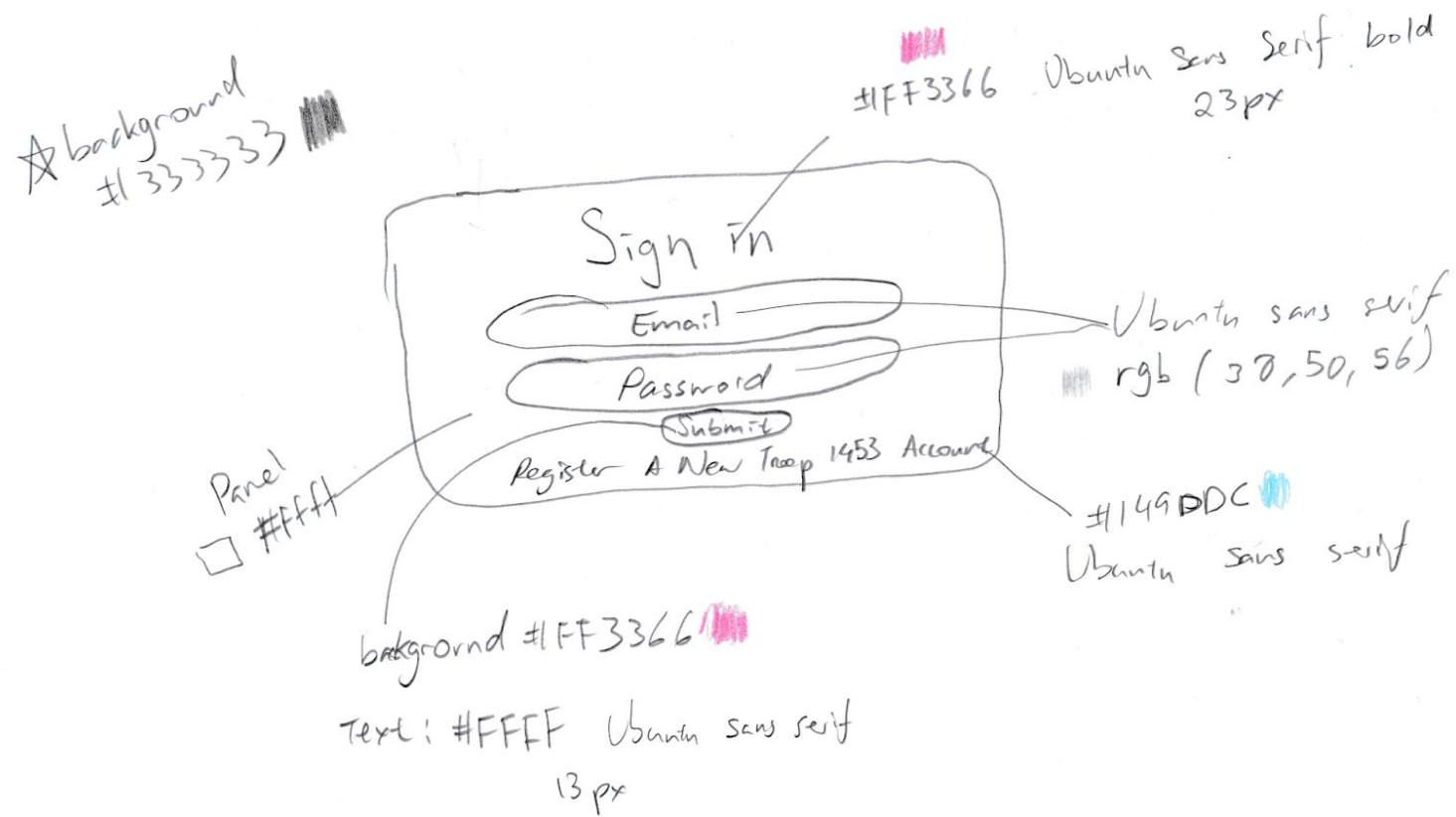
Above is the internal structure of the BSA Troop 1453 Website, specifically the second section of the index page.



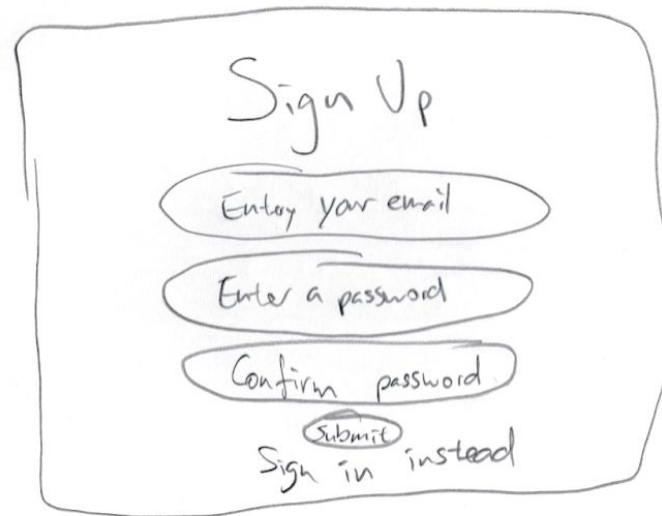
# TROOP 1453



Above is the internal structure of the BSA Troop 1453 Website, specifically the services page.



Above is the internal structure of the BSA Troop 1453 Website, specifically the sign in page.



Above is the internal structure of the BSA Troop 1453 Website, specifically the sign up page.



# TROOP 1453

Sign Out Services Home Send Message

email address list



← checkboxes next to emails

Verify

FF3366 (Pink/bright red)  
1rem  
Rub.c sans serif.

white background  
#FFFFFF

\* Note: If there are no users to verify,  
it shows the below div

There are no users to verify

green

#008000

Rub.c sans serif  
1rem

Above is the internal structure of the BSA Troop 1453 Website, specifically the admin page.

## Internal structure

### List of resources and techniques

Resources	Details
BSA Troop 270 Website <a href="http://www.troop270.com/">http://www.troop270.com/</a>	Inspiration for my website's header format
Mobirise Library <a href="https://mobiriseicons.com/">https://mobiriseicons.com/</a>	Used for their icon library, stock images, and animations
BSA Logo (Flor De Lis) <a href="https://www.scouting.org/programs/scouts-bsa/resources/scouts-bsa-marketing-tools/">https://www.scouting.org/programs/scouts-bsa/resources/scouts-bsa-marketing-tools/</a>	Will be used in the header, positioning inspired from the BSA Troop 270 Website
Photographs/Background Images <a href="https://www.scouting.org/">https://www.scouting.org/</a>	The Client will supply me with the images
User-login system using PHP and SQL Tutorial <a href="https://www.youtube.com/watch?v=8K4Wt37ltc4">https://www.youtube.com/watch?v=8K4Wt37ltc4</a>	I will be referencing this tutorial to implement the user-login system to protect the website hyperlinks.



W3Schools HTML, CSS, PHP Tutorials <a href="https://www.w3schools.com/">https://www.w3schools.com/</a>	I will be referencing this tutorial to guide me in making the website.
Visual Studio Code Tutorial <a href="https://www.youtube.com/watch?v=VqCgcpAypFQ&amp;feature=youtu.be">https://www.youtube.com/watch?v=VqCgcpAypFQ&amp;feature=youtu.be</a>	I will be using this tutorial to help me learn how to use the IDE to code, and debug my website.

Techniques	Details
Manipulation of HyperText Markup Language (HTML)	The website will be primarily done in HTML, as it is going to be serving as a hub for the BSA Troop.
Cascading style sheets (CSS)	CSS will be used to make the user interfaces and website user-friendly, easy to the eye as well as to improve the overall layout, colors, and styles of the website.
Proficient use of techniques to enable easy navigation (such as menus or buttons, internal and external links)	To quicken the shifting within the website, and also as the main purpose of the website is to act as a hub for the troop members for Google Services, it is the main necessity.
PHP (front end) to develop a login system	Due to the nature of the client's privacy concerns, a login system can be created using SQL with a database

## Test plan

Test item	Test data	Part of the system tested	Expected outcome	Actual outcome	Comments	Ref in product
<b>Cover page testing – REQUIRED ELEMENT FOR CRITERION G</b>						
<b>Web pages load from the cover page in three different locations</b>	<b>File naming to ensure home page is called Index.htm</b>	<b>Links on the cover page are relative</b>	<b>Loads as required from 3 different locations</b>	Loads correctly from 3 different locations		
<b>Product testing</b>						
There will be a page titled “TROOP 1453 SERVICES” that has hyperlinks to Google Services such as Google Drive, Google Docs, Google Sheets, Google Forms	Links between pages via buttons and hyperlinked text	Website	Everything functions correctly	Links work fine and redirects to the correct designated area in a new tab		

There will be a page titled "TROOP 1453 HOME" that has a messaging form and brief information about the troop	Form and information displays correctly	Website	Everything functions correctly	Form and information display in various devices and browsers		
Forms are able to detect invalid input	Valid or invalid data where appropriate - Sign UP form	Input data	Prompt invalid data entry if the input is invalid	Invalid entries are detected		
Forms can send inputted data to the client	Form input and output	Form Output	Once a form with appropriate input has been completed and submit pressed, the client would receive an email.	Forms are sent to email without any issues, and all submissions are visible from the Formoid website		

The solution can be used long-term, without much maintenance	Website can function without much direct interaction with database (phpMyadmin)	Website Administration	Admin panel added with ability to add approved users	Admin panel can grant permissions (approve) registered users		
The website is structurally consistent, across pages and multiple browsers.	Website template/layout present on every page. I will open the website on different computer sizes to verify that the website borders open according to the computer size screen.	Website structure	The structure is constantly represented on every page of the website, eg. the header and the footers. I expect the borders width and length to be suitable according to the device screen size.	The structure is consistent, through CSS and the same coloring scheme, and font. Styling shows up correctly on different screen sizes, so does the navbar		
Google Services hyperlinks cannot be accessed without being a member	People without permission cannot access hyperlink destinations to Google Services. Also, a backup security measure incases of SQL injection.	Hyperlink Security	Prompted to change account or request permission, for users who have not been given permission	Hyperlinks are only accessible by people whose access was granted to		

<p>The database must be secure against unauthorized access, as there are privacy concerns over the hyperlinks that would have access to images/data. (Having a user-login system)</p>	<p>People without a registered account cannot access hyperlinks to Google Services</p>	<p>Website Security</p>	<p>Unable to log in writing random account credentials</p>	<p>Can create an account, sign in ONLY if authorized and access services page, only admin accounts can access the admin page.</p>		
<p>When a new user is created, they cannot log in without being verified by the user, and a new field is added to the admin page with the user and a checkbox to be verified</p>	<p>User can create account, but not access services page until verified, which can be done by admin via the admin page by checking verify box on each user</p>	<p>Website Security</p>	<p>Only verified users can access services page, admin can verify users</p>	<p>Only verified users can access services page, admin can verify users</p>		

Admin can successfully verify a user and the user can successfully access the webpage after.	After being approved, users can access the services page	Website Security	Admin can verify newly registered users and after verification users can access services page	Admin can verify newly registered users and after verification users can access services page		
The webpage can be used cross-platform, on pc, laptop, mobile devices.	Test if the website can be displayed on a computer as well as a mobile device	Compatibility	The website displays correctly without overlaps on mobile devices	Scrolls correctly in mobile and desktop devices, scrolling buttons on index page functions as intended		
The website adapts to different screen/window sizes.	Website can adapt to different window sizes as a window on a desktop changes sizes	Compatibility	When a window with the website open changes sizes, website displays correctly without overlaps	When a window with the website open changes sizes, website displays correctly without overlaps		

### Agreement of client

**(Client): Jeff Braithwaite**

I confirm that the requirement specification meets my needs and the designs above are appropriate for the creation of the product.

A square box containing a handwritten signature in blue ink. The signature is stylized, appearing to be 'JB' followed by a flourish.