**WEB DESIGN**

**PROJECT REPORT**

**V6.01**

|  |  |
| --- | --- |
| **Team K** | |
| **Student No.** | **Student Names** |
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| **X20153155** | **Rob Gardner** |
|  |  |

**\*\* Bean & Gone \*\***

**\*\* Insert deployed website URL Here \*\***

# Overview

\*\* This section should introduce your website, i.e. what is your idea for the project, why did you choose this idea, etc. You should also outline any early ideas or plans you have for your project and the scope of what you wish to achieve at this stage in development. \*\*

# Design

## Research / Investigation

### Competitors & Market

Initially we researched 3 competitors:

* 3fe [www.3fe.com](http://www.3fe.com)
* Coffeewerk + Press [www.coffeewerkandpress.com](http://www.coffeewerkandpress.com)
* Upside Coffee [www.upsidecoffee.com](http://www.upsidecoffee.com)

The business model was similar across all three companies. Each company sells coffee beans and various pre-ground options. Several sell coffee equipment and merchanise (t-shirts, mugs, books). Content was minimalist however additional learning options are provided with brew guides and onsite training (including Barista training courses). Each also provide a subscription service so that you can have freshly ground coffee delivered straight to your door.

What distinguishes these sites? The products that they sell are high quality, branded and select. This is reflected in the polish and beauty of these 3 websites. The lines are crisp – square not rounded. The colour schemes include black, white and colour in citrus orange and lemon/mustard. A beige/off-white is used to pull the items from the background. This is a sophisticated, classy look – no fuss. Lovely use of white space. All items have a crisp picture of each product

The content addressed the relevant areas:

* + Terms and Conditions
  + About/Our Company
  + Contact us
  + Newsletter/blog
  + Subscribe
  + Privacy Policy

We really liked the beauty of these sites – crisp, & clean. This is the high end of the market – which is reflected in the beautiful images of the products on sale. The detailed brew guides and newletter/blog was an added benefit for true coffee lovers. The additional merchanising provided an added branding opportunity and distingushes their products and the owners of their products!

Perhaps the 3 sites purposely did not push their message in their landing sites – it is subtle. However, it was not always apparent what is on offer with the first look at the home page. They did not use a sidebar on the left to indicate what was on offer. Product space is used to show a single line of product on the home page (on large screens). This makes for a beautiful screen, but, perhaps by using the sidebar you can push more product into the home page. Down the line this could be changed if marketing feedback indicates that a more minimalise design resonates with our target audience/customer base.

We liked:

* + Use of blog/newletter to keep their users informed
  + Use of merchandising for additional branding
  + Sale of high end coffee products and equipement
  + Clean lines
  + No brash animation/video
  + Site content had a meaning – minimalist and informative
  + Very clear target audience
  + They are purposely only showing 1 line of product on the initial home screen (for bigger screens). This adds to the asthetics.

Biggest challenges:

* + To be able to gather high quality image content that reflects the high standards of the target audience.

What was missing:

* + FAQ
  + Site map

General market research shows a concerted market push towards subscription services - quality coffee to the door for a monthly fee. *Pret a Manger* has recently launched a coffee subscription service in the UK. (See reference below). 2020 has brought lock downs and remote working and this in turn has brought an upturn in traditional “barista experience” being moved to the home office. A drive to replace the office coffee pot or water cooler social moment with an online social exchange provides an opportunity to push relevant content to our customers and to provide them with an opportunity to take part. Providing a twitter and facebook presence would be optimal as well as a blog.

Statista figure for the UK reports the home at 76% for the location where they usually drip drip coffee and 24% at work, at the office. (See reference below).

#### Top keywords used by the 3 competitors:

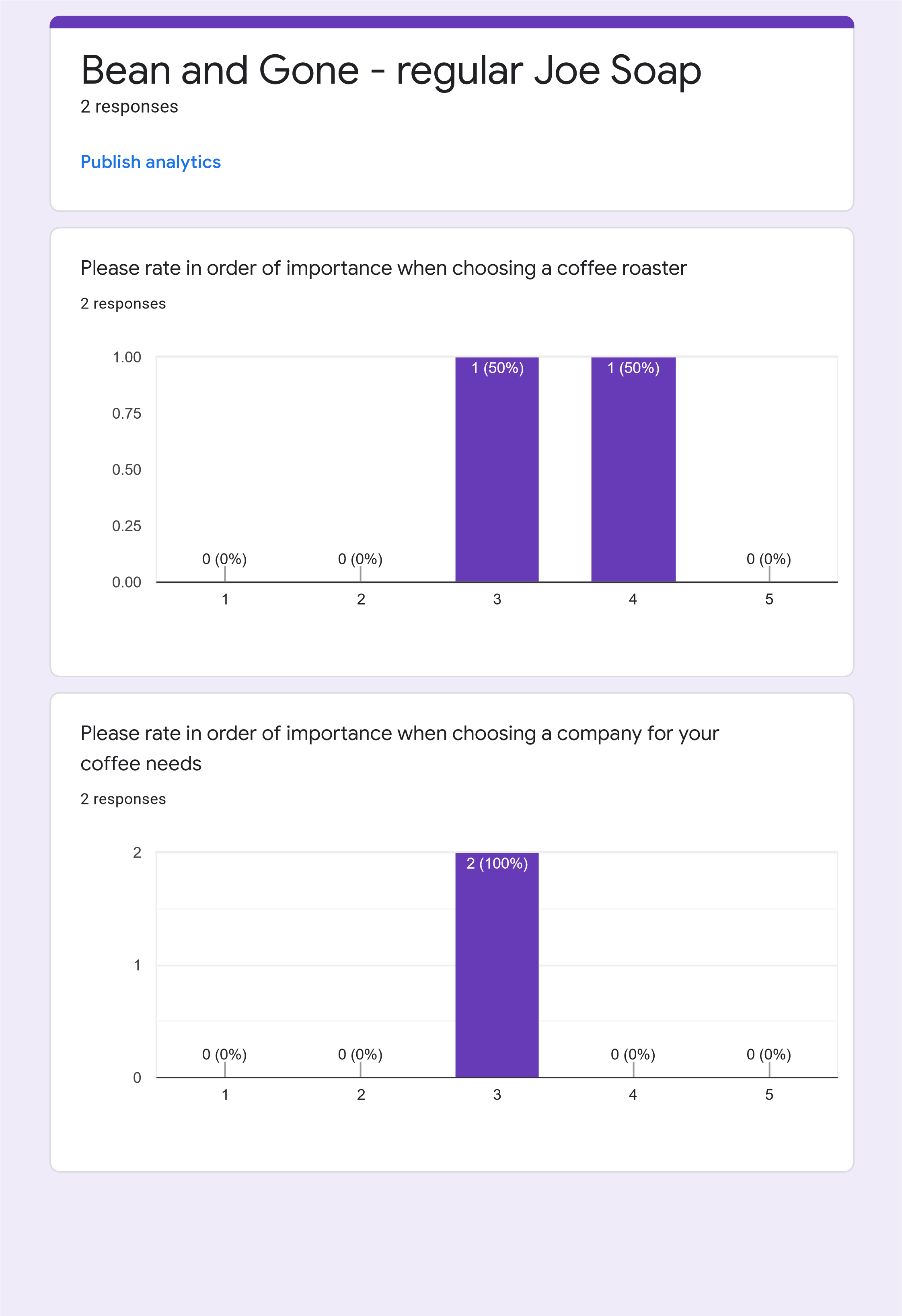
* + Coffee

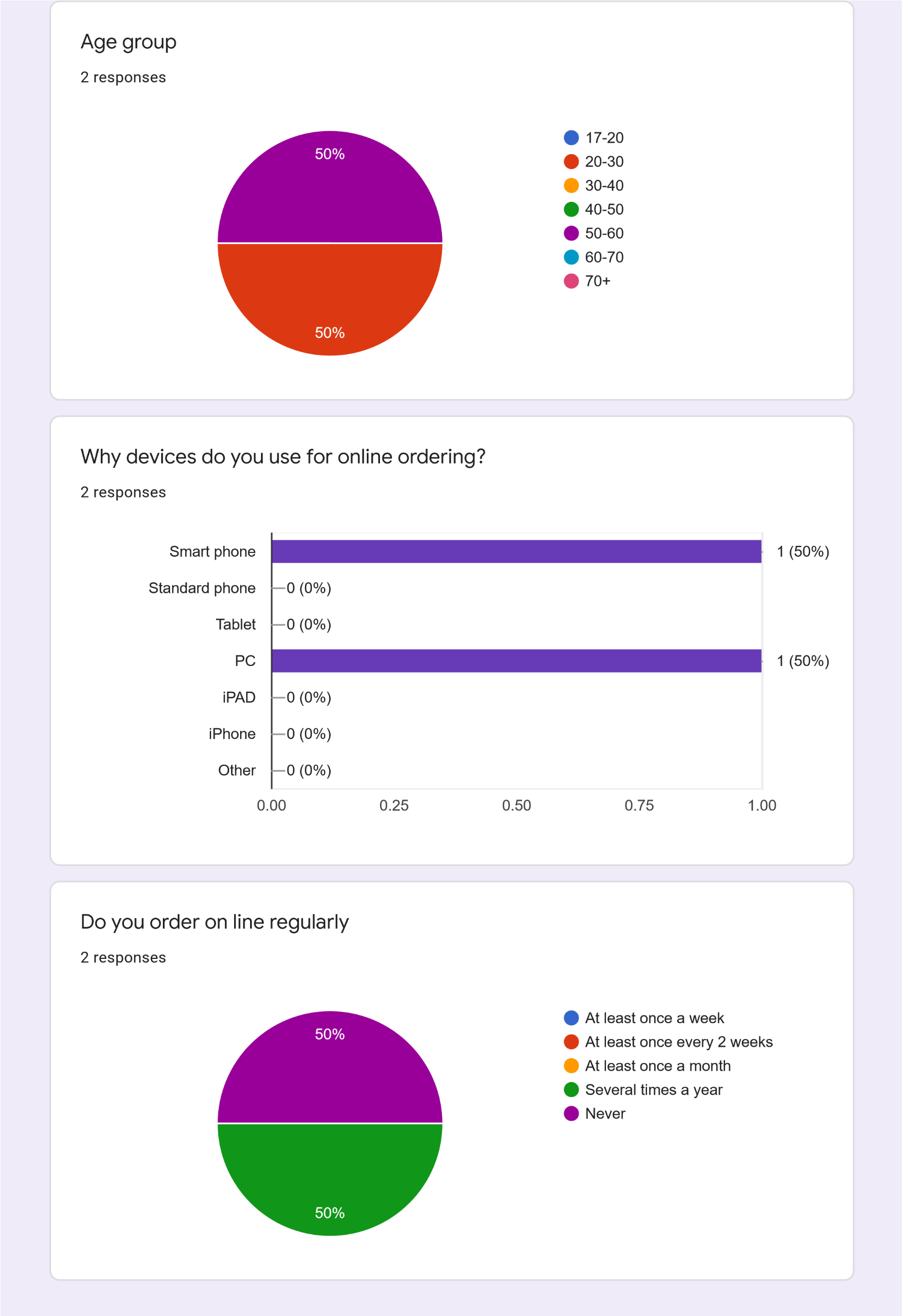
### Markey research – Survey & Interview

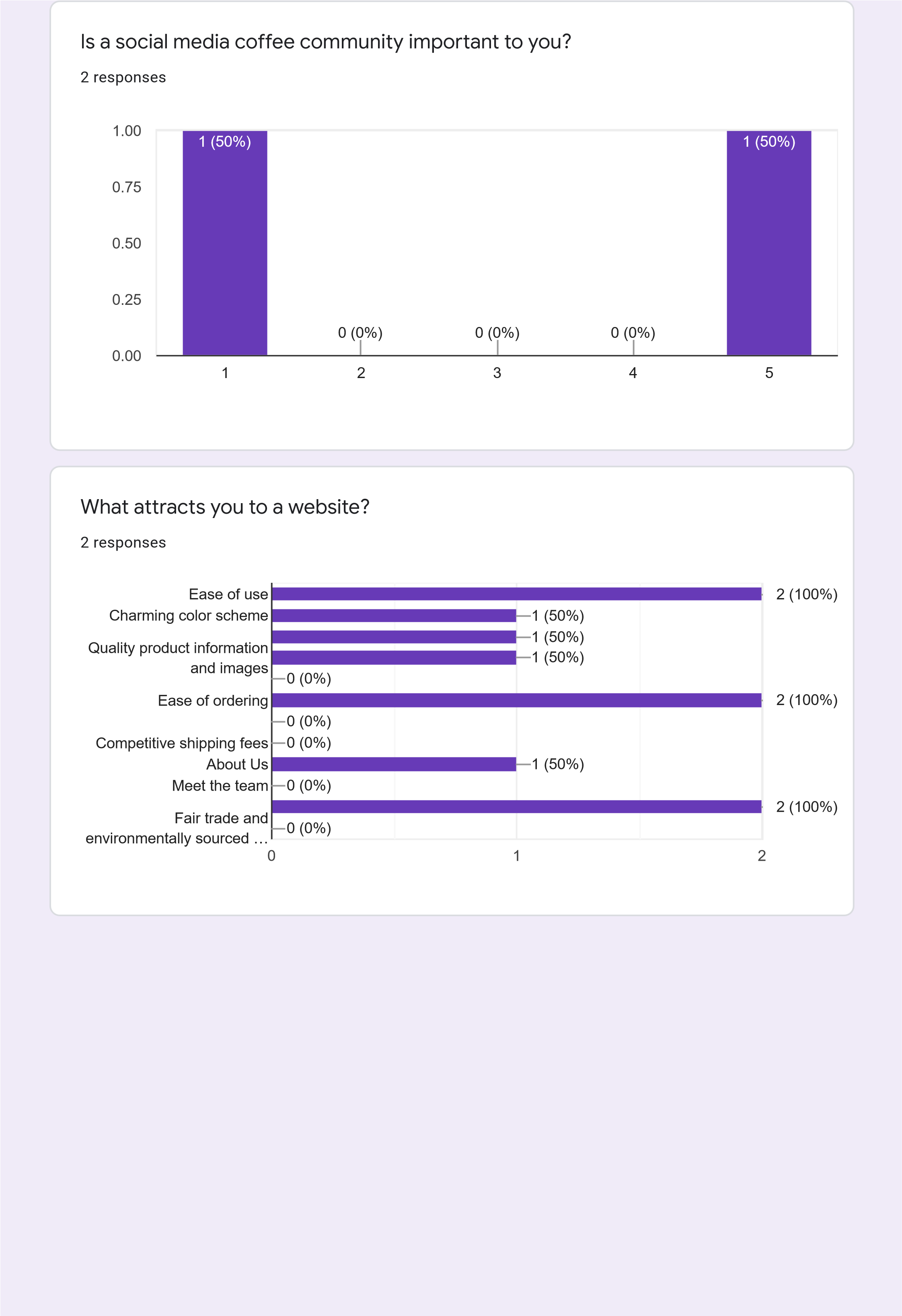
We performed a survey based on 3 initial personas:

* + Regular Joe Soap
  + Coffee Snob
  + Wholesale customer

The following is a summary of the survey results:







Which colour would your prefer to see in a webpage?

responses

2

Do you prefer dark mode of light mode?

2

responses

If you subscribe, how often would you like a delivery?

responses

2

1

2

3

4

5

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0.25

0.50

0.75

1.00

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(0%

0

1

(50%

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(0%

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0

0

(0%

)

1

(50%

)

Dark mode (gray/black)

Light mode (white/light gray)

100

%

Every week

Every 2 weeks

Once a month

Once a quarter

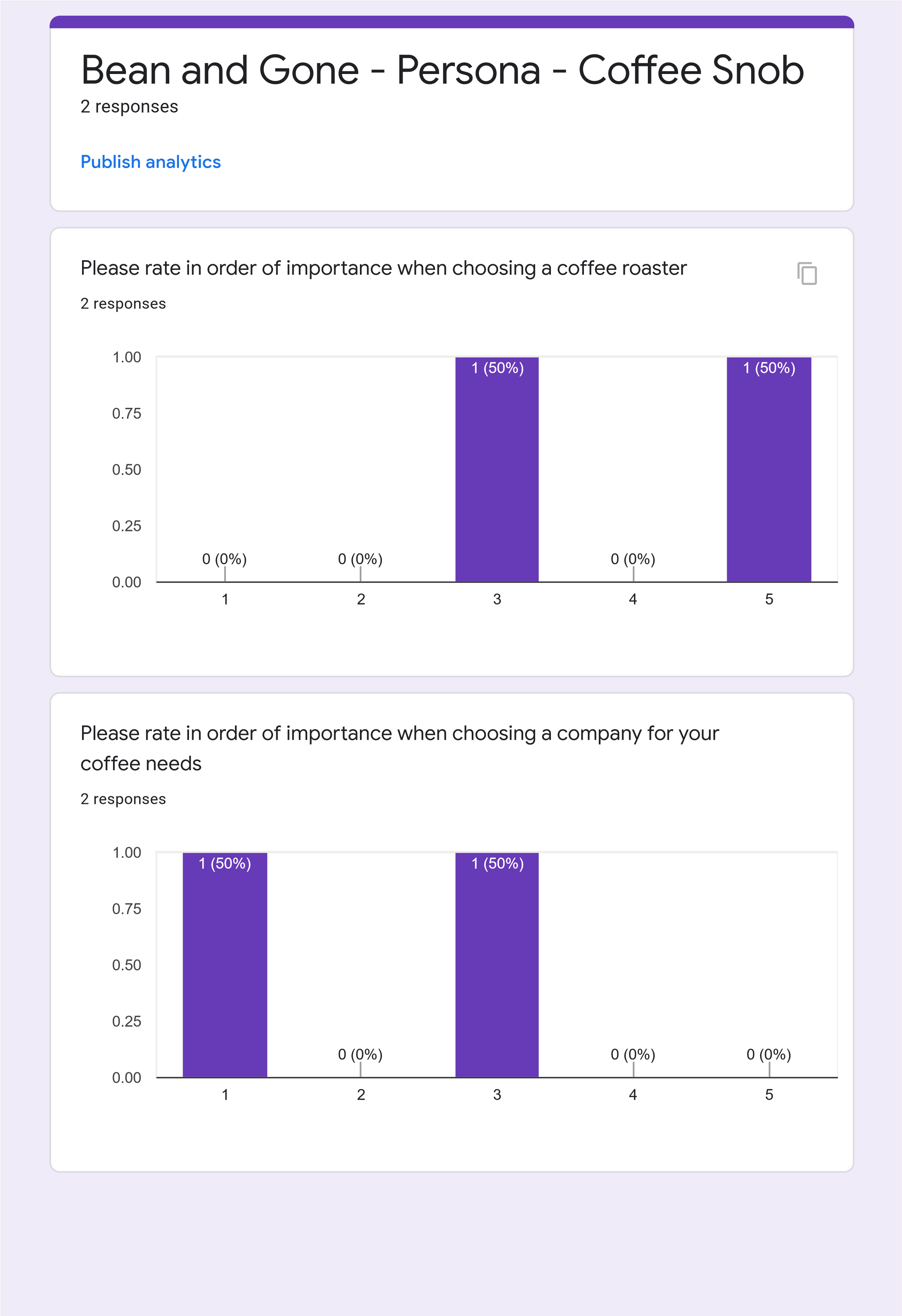
50

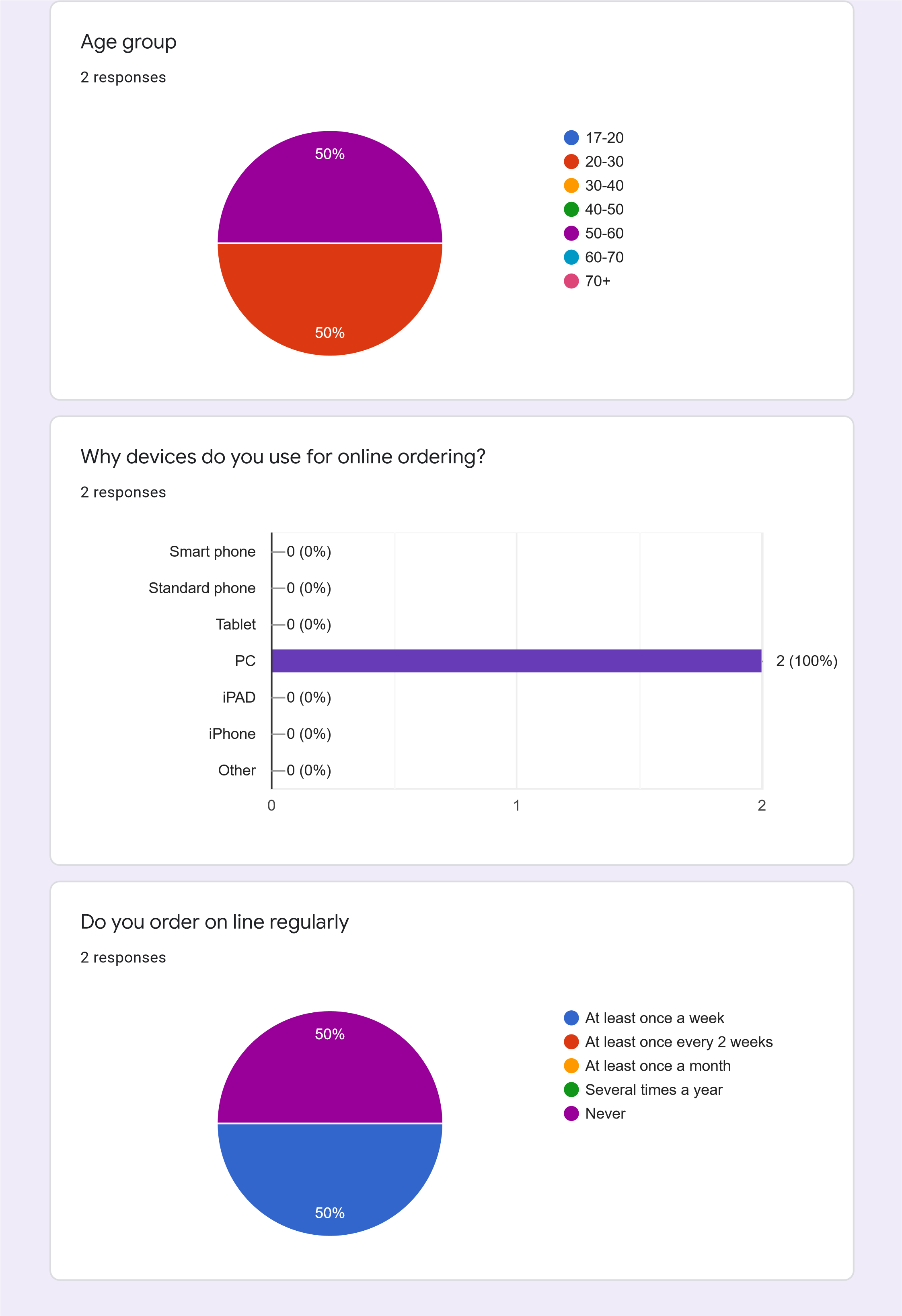
%

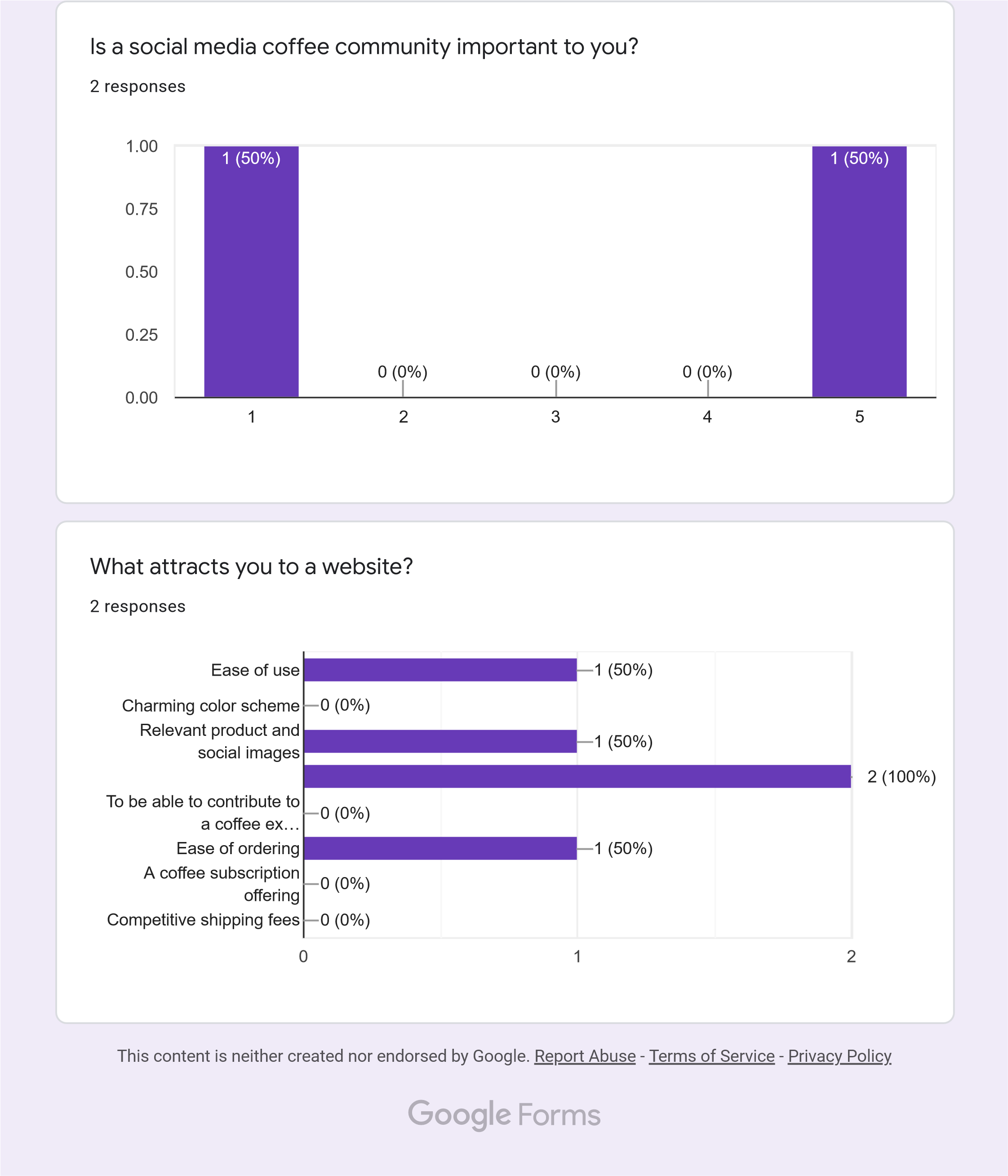
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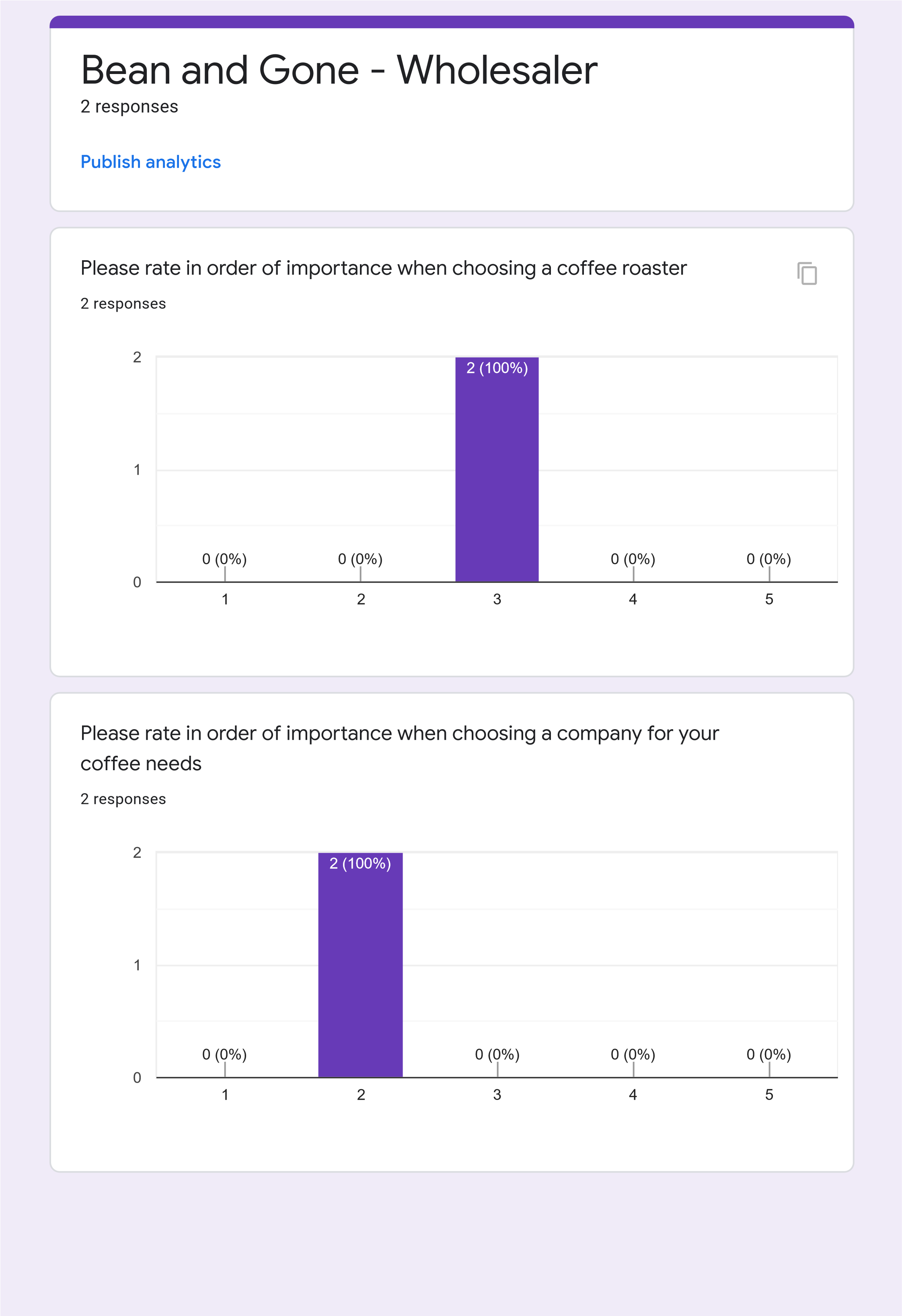
%

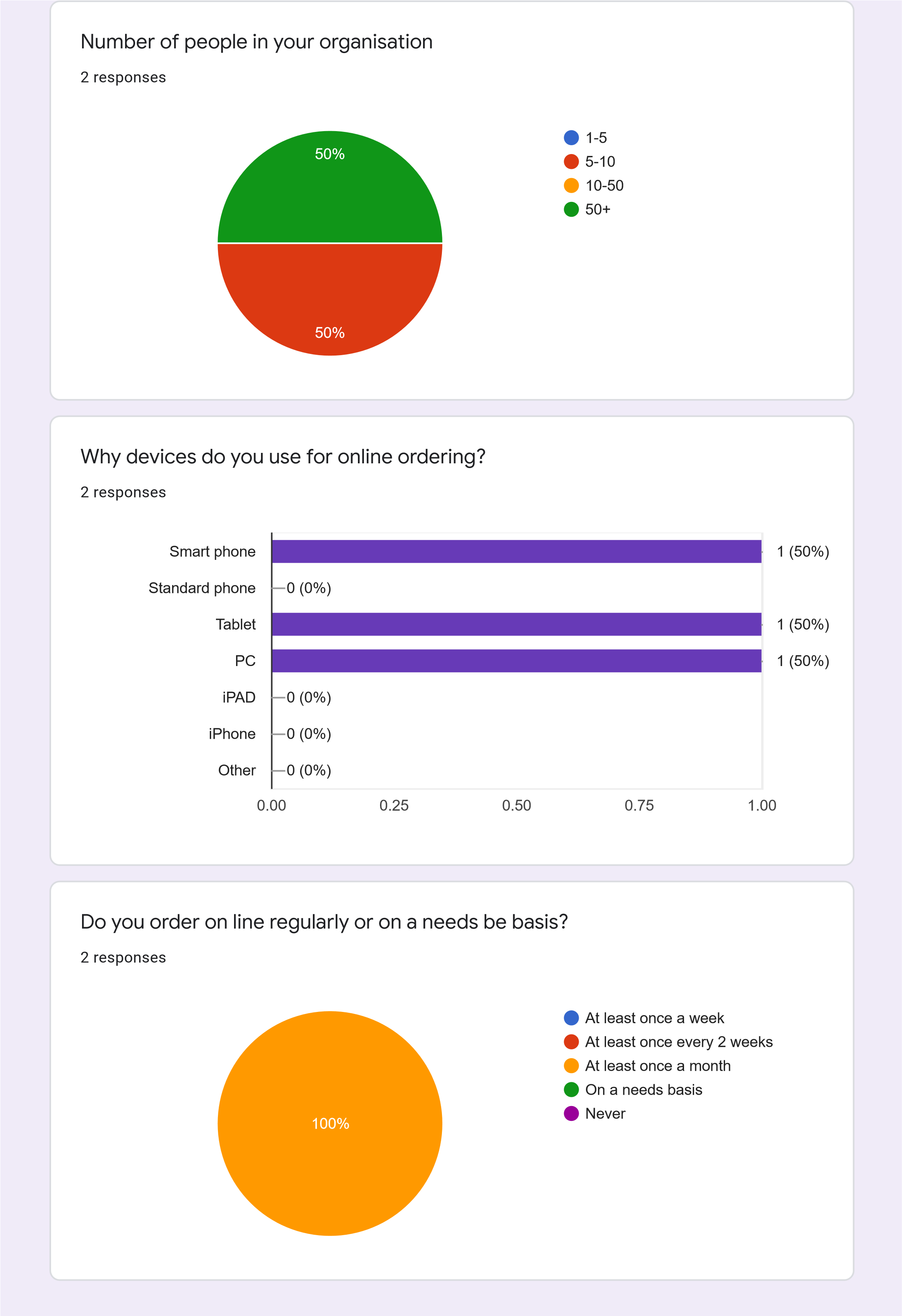
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| This content is neither created nor endorsed by Google. [Report Abuse](https://docs.google.com/forms/d/1AVBIFKs7RzEq80WR76L-K4-vKEKKqCXVh9pusoK2mwo/reportabuse) - [Terms of Service](https://policies.google.com/terms) - [Privacy Policy](https://policies.google.com/privacy)  [Forms](https://www.google.com/forms/about/?utm_source=product&utm_medium=forms_logo&utm_campaign=forms) |

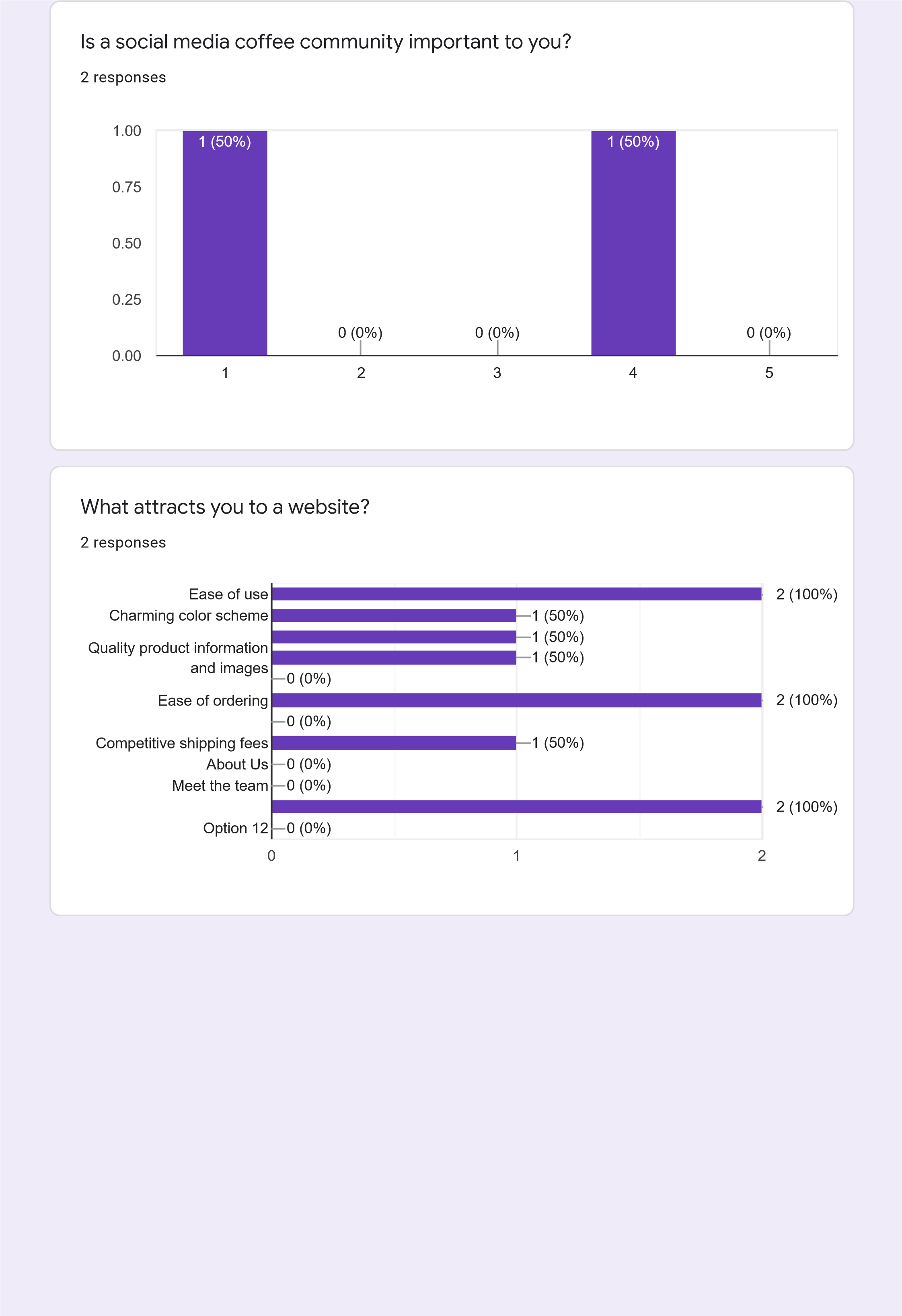












Which colour would your prefer to see in a webpage?

responses

2

Do you prefer dark mode of light mode?

responses

2

1

2

3

4

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0.00

0.25

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0.75

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(0%

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(50%

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)

(0%

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(0%

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)

(50%

1

Dark mode (gray/black)

Light mode (white/light gray)

100

%



### Interview with Team J members

We performed an extended interview with Team J memebers and covered 2 topics:

* + Feedback on the survey forms – we asked them to fill out the forms during the interview and to talk us through their answers and provide comments and ideas
  + Feedback on the wireframes – Rob walked them through the wireframes and a lot of feedback and ideas were illicited.

We will briefly cover survey form feedback here from the interview here, wireframe feedback is covered below.

A lot of feedback was provided on the survey questions themselves – this was very useful as it meant that we needed to address a few things in our website:

* + Provide a definition of roast and roaster? Don’t assume knowledge.
  + Age profiling is not always a good idea.
  + Ordering online was split between PC/Smart Phone/Tablet
  + Some customers have never ordered online – decide to go after or just ignore this market section?
  + Light mode was 100% preference. Which left us in a bit of a quandry as we both had arrived at a darker left hand side nav bar. But we decided to use light/white for the main body of each page.
  + Orange/Green color – 50/50 split. We had initially looked at a 3rd major color block.
  + Ease of use, speed of process and quality of experience was a must for all surveyed individuals.
  + A preference for local roasters was expressed – instead of a large range of international products.
  + All personas interviewed/surveyed expressed as a mimimum information on the sourcing of all products – FairTrade and environmentally sourced product was extremely important. All our customers were very aware and tuned into this requirement. We must provide this type of product and importantly share this information with the customers. If this was not a student website we would ideally provide FairTrade branding.
  + The ideal time frames for subscription coffee service were once a month and every quarter.
  + Our coffee snob personas expressed a preference for compostible cups and keep cups – these must be added to our coffee merchandise offering.
  + All personas were conservative in choice of coffee grade/strength. We feel that there is a market opportunity for a subscription service that offers the customer an opportunity to try out different coffees that they would normally not go for.
  + The wholesaler was most interested in a long term business relationship – which is good news.

### Audience Analysis & Persona

#### How old are they

#### Where they work

#### What they earn

#### Where they live

What is the skill level with the Internet

How can I communicate effectively with this audience?

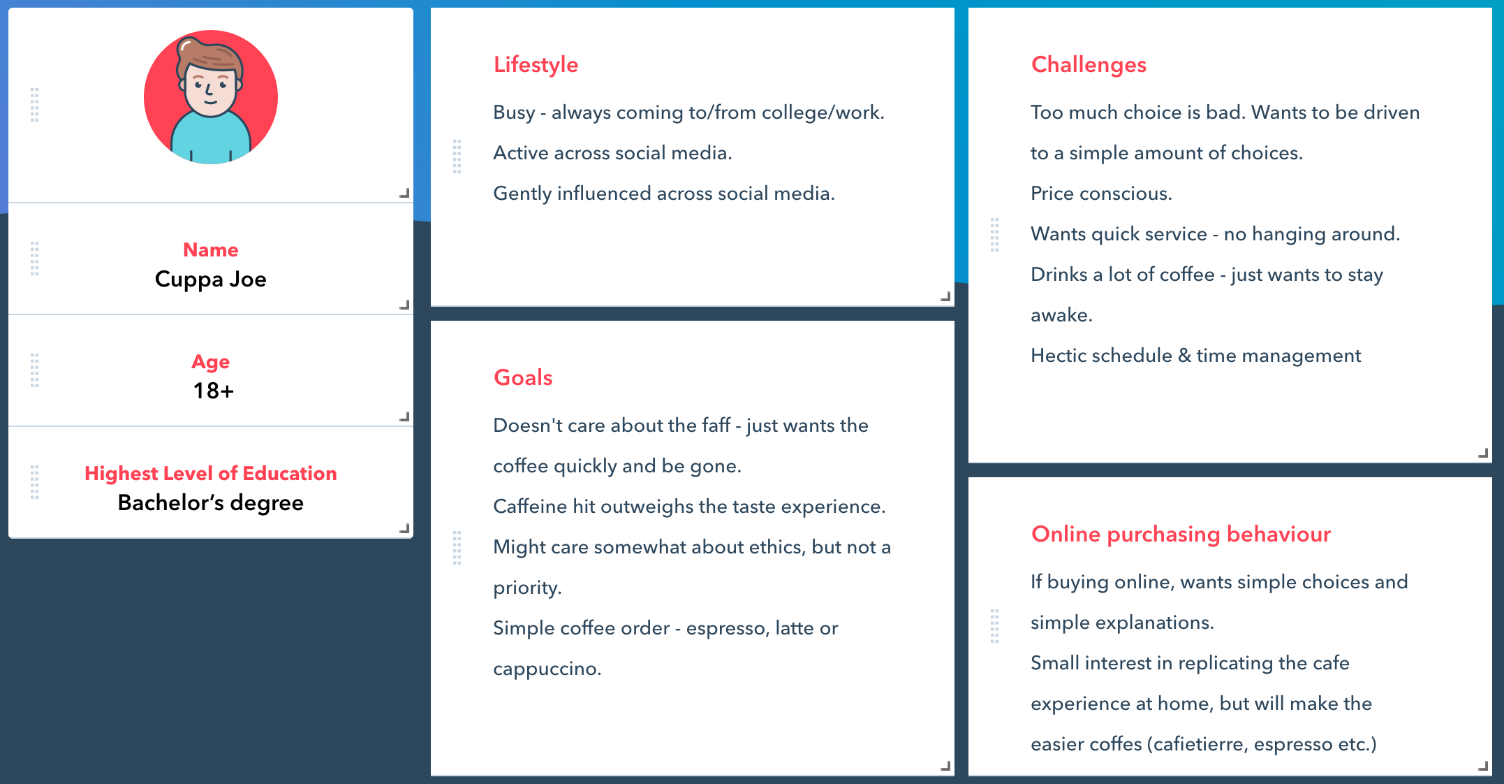
Customers have high end devices and use PC, mobile and tablet devices.

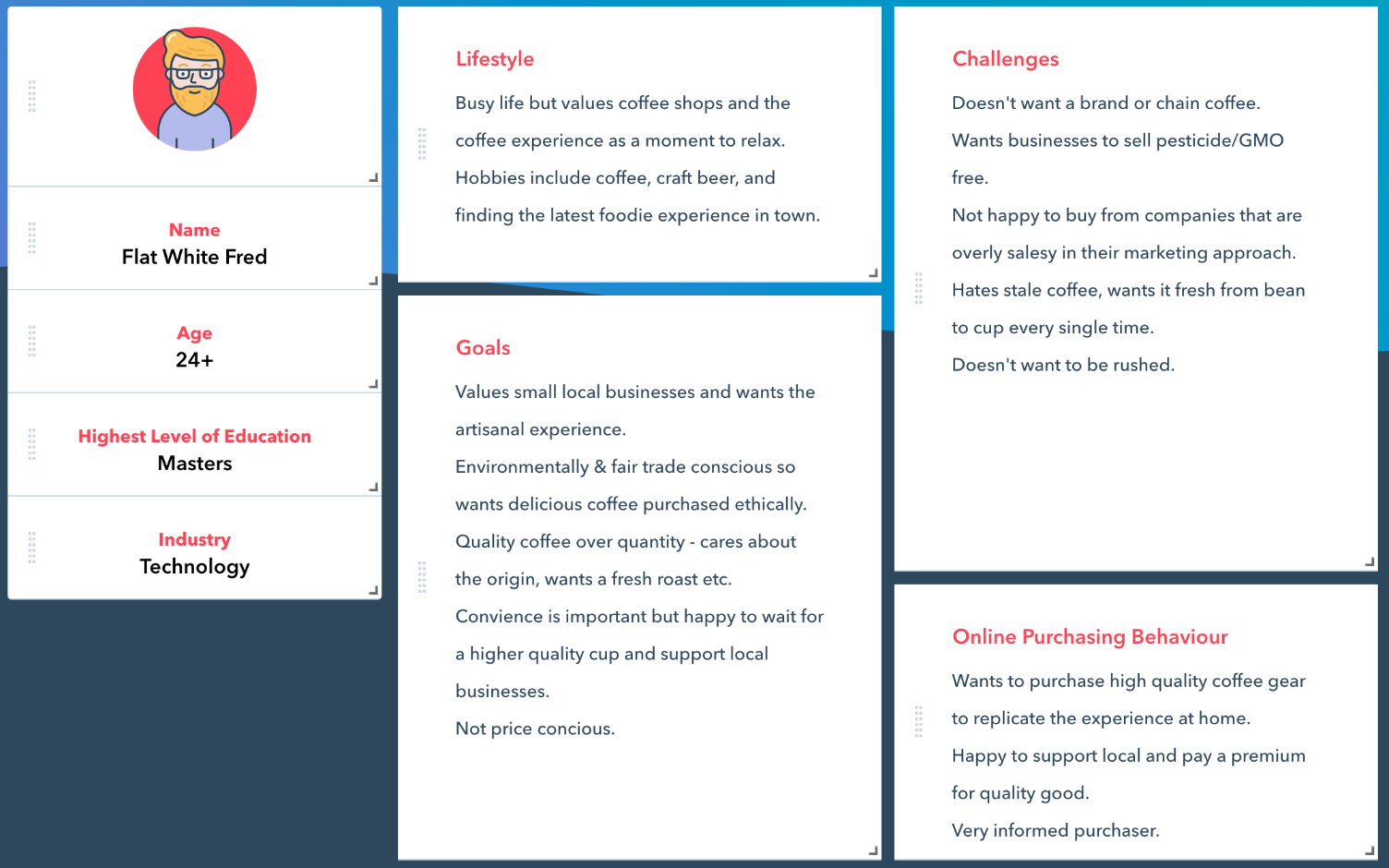
The user experience must match the brand.

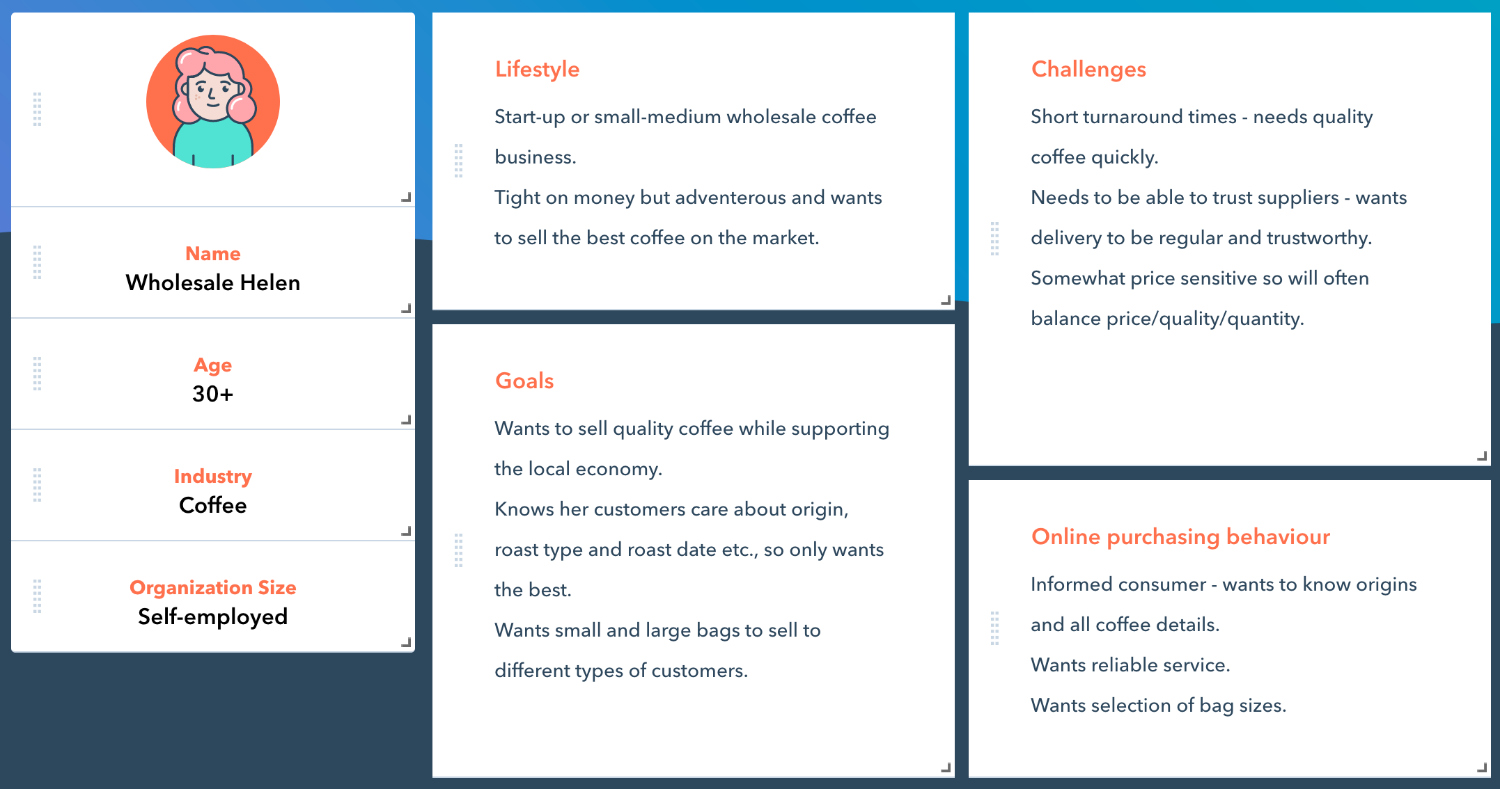
#### Niche & opportunity:

### Personas

The following are the 3 relevant personas:







## Requirements & Technical Approach

\*\* This section should outline what requirements that project might have and how you initially plan to approach project development, taking these requirements into consideration. You should also address other design aspects such as looking at suitable design hueristics/standards that you feel will contribute to your project. \*\*

#### Basic website requirement:

We agreed on a company title and purpose. As this is an academic project, we had 2 choices for hosting and domain – and we choose github/gitpages for it’s ease of use. The website hostname was xxx.xxx.com. As gitpages hosts this page the domain name is: xxx.com.

The brief calls for the use of HTM5, CSS, JQuery and JavaScript as the underlying technologies.

The purpose/objective of our website:

* Promote our coffee products, equipment, and merchandise.
* To sell the product online (as PHP or server -side implementation is not part of this brief, empty tags left for future development.
* Provide a social platform for our customers to have that “coffee-maker moment” in these Covid-19 work at home times.
* Email marketing.
* Subscribe to newsletter – marketing opportunity.

#### Other website requirements

* Provide a clear site map and flow chart.
* Use colour & layout to reinforce branding
  + Colour schemes that we feel will appeal to our audience:
* Minimise content
* Tone of our site
* Content keywords to include:
  + Coffee
  + Coffee blends
* Audience profile:
* No pop up messages or extra advertising – our customers do not like this.
* Simple, understated design
* Easy navigation especially on a mobile device
* Work on optimisation so that our website is easy to find.
* Use of citrus colours to bring attention to actions buttons? Investigate whether it takes from the understanded tone. Nice crisp, square edges and look.
* Unique offering: social coffee moments
* Responsive across all devices especially mobile and multiple browsers
* Font choice: legible and crisp
* Registration required to buy online – give them a discount for doing this?
* Footer design – provide value for the mobile experience especially.
* Safety: provide privacy policy information. As there is no PHP involved in this brief – there are no security concerns. However, validate all information – and be careful with the use of .innerHTML etc.

#### Must have pages:

* + About
  + Contact us
  + Products
  + FAQ

#### Project approach:

Once the initial planning, interviewing and wireframes, it was apparent that we should initially focus on the product page. A big aspect of the project was the images and how we can successfully showcase our products. An early choice was to get a prototype for the home/product page up and running as fast as possible. Then we needed to figure out to get the image or product information onto the site.

We basically have 2 types of product items: ones with an image and ones without an image. We decided to prototype some initial product items to get a feel for the image size that we would need to develop across the devices and screen sizes. We wanted to optimise image size for mobile devices. It took several iterations to get a feel for what worked and did not work for the landing page. We also need to judge whether the sidebar was a positive aspect and whether we should show 1 line of product in the initial page on screen or more. The initial prototype threw up a lot of questions and helped to refine the site message/tone. Once the landing page was tuned, we revised the wireframes and web page designs for all other pages.

Initially the prototype involved a mock-up wireframe and that was quickly followed by a template HTML web page. The low-fidelity prototype involved use of both a brand icon and brand name/icon PNG that was minimal but gave a good feel for how the image could add to the tone. As how the product/item was to be displayed a good deal of time looking at several alternatives was spent on low-fidelity product/item options for the home page.

Card sorting was used to order the navigation flow and information content.

Once there was agreement on the main aspects of the product/home page, navigation and flow we moved onto the high fidelity choices.

#### Design aspects:

#### Design Heuristics

Use web safe colours. Colour scheme to work with the coffee image – what works for our competitors is the inclusion of a single citrus colour with black/shite/tan/beige. Ensure good colour contrast by using black/white where appropriate.

It was decided to keep important information above the fold – header, logo, navigation and ½ lines of the main content area. We tested the layout of this design in the low-fidelity prototype.

Present the **best selling** products on the 1st line in the FOLD. Obviously down the line with data analytics customer products would be presented on this FOLD product line.

The product LOGO and icon should be used to return to the home page.

Same theme and navigation through the site.

Design should work for both mobile and large screens.

We used the AIDA approach to measure the effectiveness of advertising – Attention, Interest, Desire and Action.

Artistic impact – this site must shout simple, stylish and high end.

Use images to sell the product. Minimise text, maximise white space.

We demonstrated navigation using multiple techniques:

* + Javascript button on mobile device for sidebar options
  + Navigation Sidebar menu using hyperlinks to move to pages
  + Hyperlinks in footer to go to lesser used pages like FAQ.
  + Clickable Icons like the brand to go to Home.

#### Structure:

Form of web site and it’s navigation.

Site map HERE

#### Design Standards

* Mandel’s 3 Golden Rules for usability
* Accessibility
* Google & Apple web design standards

## Sitemap & Wireframe

\*\* Include sitemap and wireframe for your website here, including brief explanations of each as needed, etc. \*\*

#### Content:

#### Layout:

#### Interview feedback on Wireframes:

# Development

\*\* This section should outline how you went about developing your webpage, i.e. HTML, CSS, JavaScript. This should include information on requirements and standards implementation, code development and technical details, such as errors or development issues and how you fixed these.

**Please note:** Make sure to include an explanation in this report (**as well as** comments in the HTML files) of any & all code that was taken from the web, or you will **not** receive marks for this third-party code. \*\*

## Design Standards used :

#### Bootstrap framework:

A decision was made to use Bootstrap as a framework. We decided on v4.5 . It was important to use examples from the documentation that were relevant to the v4.5 implementation of bootstrap. Ideas for the layout and implementation of our site came from the excellent examples on getbootstrap.com. We used the **code ideas form the Carousel, Navbar, Dashboard, Fixed Top Navbar, Grid system, Checkout and Boostrap pages themselves.** We also used the excellent online videos by Sam Cogan on getting started with Bootstrap.

#### HTML5 & CSS3

We used the HTML5shiv to assist with unrecognised HTML5 elements.

Validation as performed using the following tools: <https://validator.w3org> and http:/jigsaw.w3org/css-validator/

#### Copyright & Creative Commons

Was adhered to. Sources of images include:

* Pixabay?

## Validation & Errors

\*\* This section should look at validation of the website (HTML & CSS), were you able to validate the website, were there any errors and if so, how did you go about fixing them.

**Please make sure to include a screenshot(s) of your validation reports here \*\***

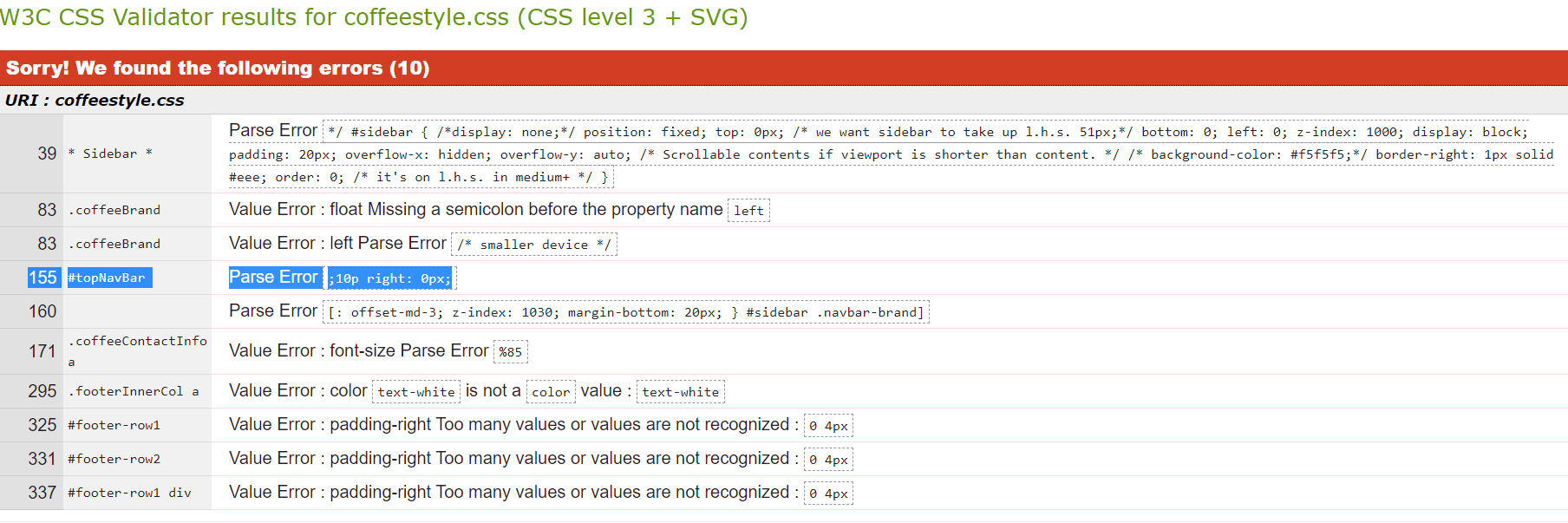
#### Some early validation efforts:

## 

Errors 1 &2 were straight forward, I needed to add an “alt” attribute to provide a description in case the image file was unavailable/not found.

Error 3: I had an extra </div> which was unmatched by a <div>, simple deletion required.

Error 4: Cannot use double dash in the middle of a comment! Substitute single dash.



Line 39: there were non-matching \*/ \*/ a few lines above. Fix: match up the /\* \*/

Line 83: needed to put in float: left; /\* smaller device \*/ instead of float: left: /\* smaller device \*/

Line 155: top: 0px;10p right: 0px; I replaced it by top 0px; right 0px;

Line 163: padding-left: x; X is not a valid value. I deleted the line.

Line 171: font-size: %85; I replaced this with font-size: 85%;

Line 295: replaced text-white with white.

325 and next 2 errors: When I replaced it with just padding: 0px 4px the spacing and borders were incorrect – I ended up deleting these rows – they were unnecessary.

After fixing the CSS errors I retested the page and found out that by fixing the errors I had broken the spacing/padding for the footer. So, fixed and retested.

#### Issues & Problems:

Bug: I came across an incompatibility problem. I originally used jquery-3.5.1.slim.min.js from code.jquery.com. However, it didn’t support the function slideToggle(); so, I tested the google hosted jquery-3.5.1.slim.js and it worked perfectly!

Extract from shop-coffee.html file: *note google lib supported slideToggle();*

*<!--script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj" crossorigin="anonymous"></script-->*

*<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>*

This was the console error message in Chrome developer:

shop-coffee.js:24 Uncaught TypeError: $(...).slideToggle is not a function at HTMLButtonElement.<anonymous> (shop-coffee.js:24) at HTMLButtonElement.dispatch (jquery-3.5.1.slim.min.js:2) at HTMLButtonElement.v.handle (jquery-3.5.1.slim.min.js:2)

|  |  |  |  |
| --- | --- | --- | --- |
|  | (anonymous) | @ | shop-coffee.js:24 |
|  | dispatch | @ | jquery-3.5.1.slim.min.js:2 |
|  | v.handle | @ | jquery-3.5.1.slim.min.js:2 |

## Interface quality

## Design patterns – 2 s

The index.html is the ***About page*** gives a brief introduction to Bean & Gone. It has a nice backdrop image which should draw the user to Bean & Gone. This page uses a side bar navigation design for level 1 navigation. In smaller screen sizes, the side bar navigation disappears and is replaced by a hamburger icon which toggles the display of level 1 navigation with items expanding to fill the width of the screen.

Perhaps a carousel design pattern if enough time!

The Subscription.html page uses an accordian design pattern to provide the user with a high level view of the options and tasks involved. It also uses a form design pattern with input design patters for input options.

The coffee-merchandise.html page uses a sidebar navigation design pattern. It also uses a shopping product page – “related products” design to showcase the list of coffee merchandise. Once the user clicks on the individual product it uses an e-commerce product information design.

## Professional in appearance and layout.

## Complexity

## Scripting and advanced technical skills

# Deployment

*\*\* This section should include information on your choice of deployment, as well as your websites URL and a screenshot of the live site* \*\*

## JQuery Usage

## Website optimisation

## Section – SEO search engine optimisation

Images have alt field for SEO <img> src= and alt=

## Excellent use of optimisation etc?

# TOOLS used throughout

### Cloud based hosting service –

### Github/GitPages

No need for ftp tools like WinSCP for secure file transfer (SFTP) to cloud/hosting site, but downloaded and uploaded for practice.

### Version control system – Git

* Git bash and Git for Window for local commits/staging
* GitGUI (for push to cloud), SFTP

### Wireframes - Balsamiq wireframes

### Microsoft Project

Planning

### Validation Tools

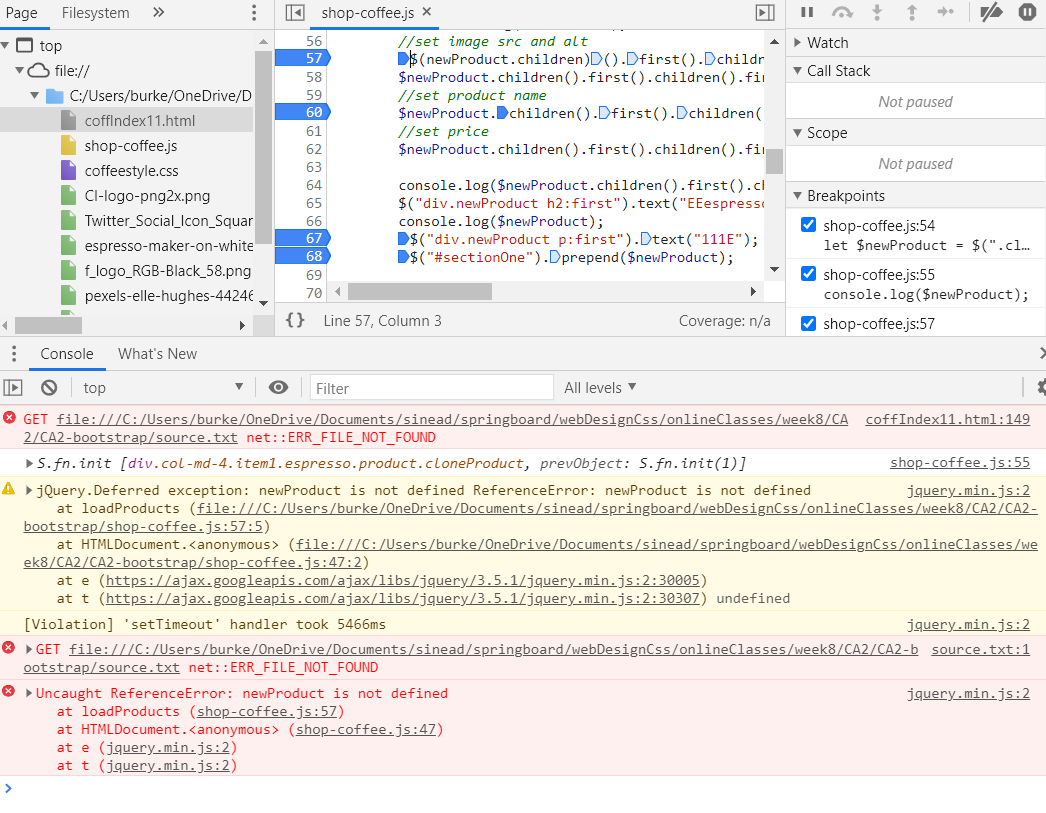
W3C CSS Validator

W3.org HTML validator

### Testing tools

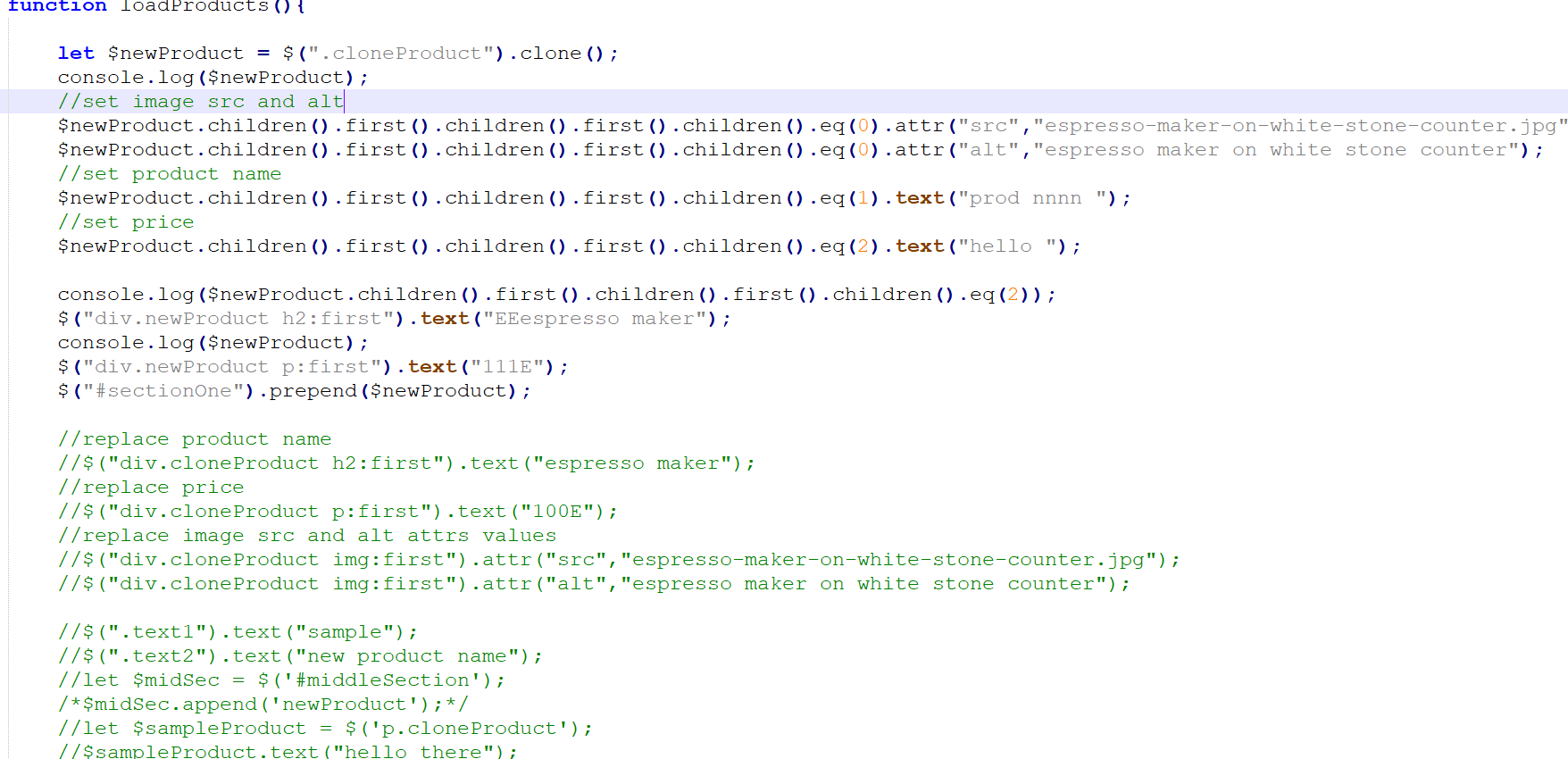
Use of the various browser’s developer debugging tool. It was helpful to set breakpoints and inspect the values of variables. The console log threw up various errors – mostly typo’s and syntax errors and file not found issues.

Use of console.log to help debugging jQuery/JS. It allowed me to inspect the vars and find out what they were – especially useful when had to figure out the children relationship for the cloned product <div>.



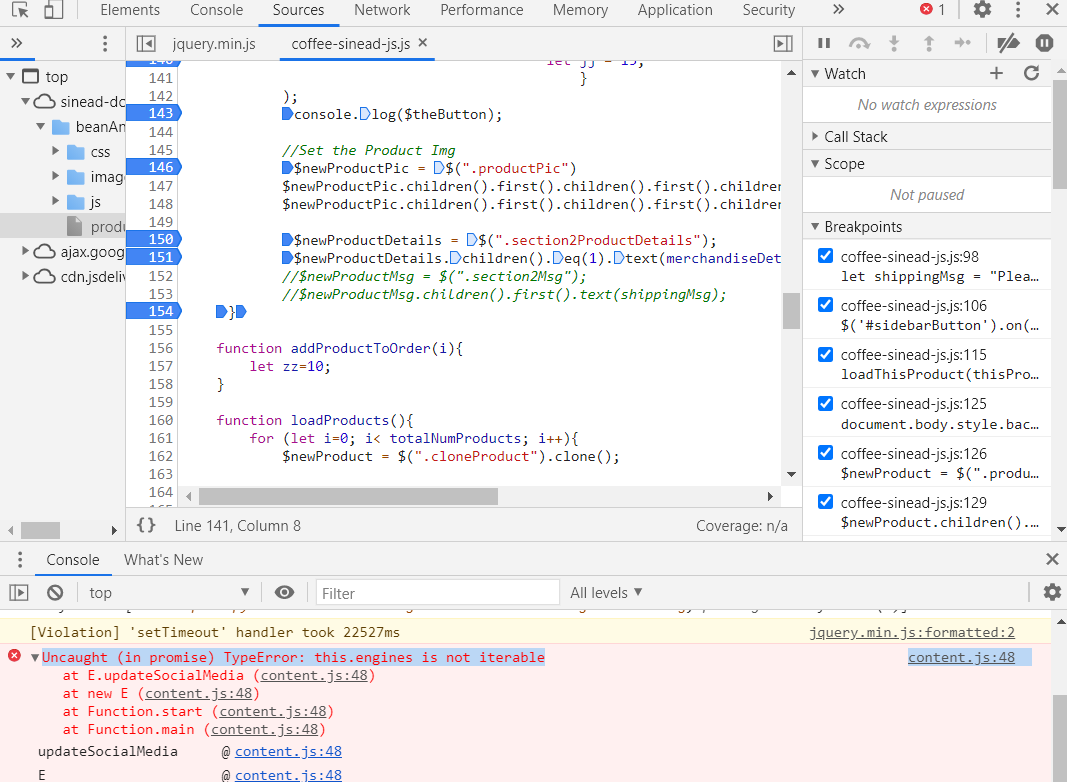
I had a lot of problems with syntax in jQuery/JS because I was only learning it. The debugger was invaluable, along with w3schools.

Above, I had changed the <img src> attribute so that it failed to load and I could verify that the <img alt> was set correctly.



I also had a syntax error on $newProduct variable. The code above worked a lot better.

I came across an obscure problem that only showed up on Chrome.



It seems that the McAfee Chrome extension is causing a problem. Naturally, I did not delete this extension. This wasn’t a problem with other browsers. This is worth further research.

### SEO tools

### Performance tools

### Cookies tools?

# Testing

\*\* This section should include information on any user testing carried out on your website, i.e. how many people you tested it on, what tasks you asked them to preform, the results of testing, if you implemented any user suggestions, etc. \*\*

## User testing

#### Devices

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device type** | **Model Name** | **Software Version** | **Landscape** | **Portrait** |
| **Phone** | iPhone7 | 14.2 |  |  |
|  | iPhone 8 |  |  |  |
|  | iPhone 5s |  |  |  |
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| **iPAD** |  |  |  |  |
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| **PC** |  |  |  |  |
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### Zoom testing

### Landscape/Portrait testing

### Accessibility testing

Form role=”form” allows someone with a screen reader to jump directly to the form by using the keyboard. It’s important for accessibility purposes.

Used labels for inputs – making it easier for someone with a disability to navigate through the form. Labeled and linked up with ID.

### Change of Font/Colour/Dark-Light mode testing

### Test Plan

### Test Results

### Feedback from Test Results

## Functional testing

## Automated Testing

## HTML/CSS/Java testing

## Cross platform testing

## Validation testing

## Responsive design testing

## Advanced testing tools

# Project Team

\*\* How did the project team break up the tasks required?

Who did what tasks? Did everyone evenly participate?

Were there any team issues? How were these issues resolved? Etc. \*\*

**Please note:** You will each be asked to individually peer review your team mates also

**We started with a project plan using Microsoft Project tool. Rob came up with a great idea for a little coffee shop/roastery; with a coffee menu, bean delivery as well as accessories (coffee grinders etc.). Rob suggested 3 great sites as starting points: Coffeewerk and Press, Upside Coffee Roasters and 3fe.com. 3 names for the coffee shop/site included: “Rob’s House of Coffee”, “Bear Brew” and “Bean and Gone”.**

**We got to work getting a project research structure in place:**

* **Template Project Plan**
* **Template Project Report**
* **Template Persona**
* **Template site design/analysis document**
* **Template Research Questionnaire**
* **Template Balsamiq wireframe for wireframing**

**Simultaneously we got to work setting up an infrastructure for the project development itself:**

* **Git for version control**
* **Teams group for easy and quick communication**
* **GitHub for hosting**
* **Test Hardware list for DevOps**

**Key decisions:**

* **Wireframing – initially on paper – then using Balsamq if have time**
* **Framework: Bootstrap**
* **Version control: git**
* **Hosting: GitHub**

**Then we started the design/analysis phase for Coffee shop website project.**

# Conclusion

\*\* Having finished the project, looking back, how did the project go?

Did you achieve what you set out to do?

Are you happy with the results?

Is there anything you might change if you had more time? Etc. **\*\***

# References / Appendix

https://www.citethisforme.com/guides/harvard/how-to-cite-a-book

Duckett, J., 2014. *Javascript & Jquery*. 1st ed. www.wiley.com: John Wiley & Sons, nc, pp.2-50.

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