Internship Report

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INTRODUCTION

The Internship report aims to summarize the 9th semester internship placement of the student in Melon (Sofia, Bulgaria) by means of describing in detail the involvement of the student in one of the major design projects that took place during that period.

Introduction to Melon

Melon is a software development outsourcing company based in Bulgaria. The company was formed in 2003 by the merger of a software company and a new media company, and later WebGate - a mobile applications vendor. It currently consists of more than 150 young professionals spread throughout the offices in Sofia, Veliko Tarnovo (Bulgaria) and Skopje (Macedonia). The company boasts a variety of skills, including web (.NET, PHP, Python, Ruby, SharePoint, HTML/JS), mobile development (iOS, Android, Windows Phone, PhoneGap, Xamarin, Adobe AIR), design, interactive media specialists, and quality assurance engineers. The design team at Melon is small, compared to the dozens of developers, consisting of 1-2 UX designers & 1-2 visual designers.

Throughout the years the company has gained a reputation of a reliable partner after numerous collaborations with both domestic and international clients, as well as partnerships with Nokia, RIM, Samsung, Motorola, Sony Ericsson and Intel. The company slogan is “Be smart, make things happen, be nice”, the working philosophy is agile and design takes place during a “Discovery” phase, which kickstarts projects which include in-house design, although the scope may vary.

Melon’s portfolio is rich and varied – parts of it can be checked on their website. Projects in Melon can be very different in scope and duration. During my introductory meeting, I was explained that there are 3 types of project going on in the company:

- **Dedicated** – in these projects, the clients more or less hire the people they need from Melon to work on a specific project and they pay for 100% of the employees work hours for the duration of the project;
- **Time & Materials** – this type of project is similar to the previous one, but the client only hires people to work for a certain amount of hours, which can be distributed differently;
- **Fixed price** – this type of project involves clients who have a fixed budget and want something done for the money they have. These projects are considered the riskiest among the management, because in their experience delays always tend to happen for one reason or another and the company often ends up in a disadvantage.

During my time as a UX intern, the first project I was assigned to was exactly **fixed price** - the design & development of a new website for the National Gallery of Bulgaria – an institution I was not familiar with beforehand. My task as part of the design team was to be involved in the Discovery phase right away with UX designer Alexandra Bakalova, visual designer Ali Abdala and supervised by senior UX lead Valentin Velikov.

WWW.MELONTECH.COM
METHODOLOGY

5 PLANES OF USER EXPERIENCE

As mentioned earlier, the Discovery phase at Melon, where design takes place, is an iterative process that is appropriated to every different project with regards to many factors including client needs & wishes, budget constraints, overall project scope, etc. For the National Gallery project, the Discovery phase was to be not too extensive, but still encompassing a number of items featured in a UX driven project. Therefore as preparations for commencement were outlined and the work needed to be done was being elucidated internally, it felt as if a familiar, established UX framework was going to be incorporated, even though project members were not specifically quoting it as such, but instead had reached it naturally based on experience. For the methodological considerations of the academic side of the internship, it has been decided that the Discovery phase conducted for the National Gallery would be compared and integrated into that framework – Jesse James Garrett’s “5 Planes of User Experience”, in order to demonstrate the processual reflections of a practice-oriented design of a web site in regards to a universally supported core end-to-end UX framework meant to bridge the gap between theory and practice.

Written primarily with websites in mind, but also applicable to all sorts of digital systems and products, in “The Elements of User Experience – User-Centered Design for the Web and Beyond” the author states that every website is basically a self-service product that the user enters equipped only with his prior experience (Garrett, 2011, p.10). The more features that are incorporated, the higher the complexity of using the website gets. In the case of an unwieldy and/or unappealing website, the first impression that is imprinted on users is likely to be negative – something which proves to be difficult to change from then on. This can be, and often is, a huge issue when dealing with commercial platforms where trust is a necessity. However, even in cases where the website is not a commercial one and there is nothing to be bought or sold online, like an information platform, there is a need for high level user experience in mind, since impression itself then becomes the commodity that the website provides to its users. And even if competition works differently in such cases and a bad impression would not necessarily result in leading potential customers away to competing websites, it will still damage the brand and/or the message the website is trying to convey (Garrett, 2011, p.12).

The author then moves on to explain that a consistent and satisfying user experience is always the result of a coherent set of key decisions that build on top of each other, influencing the user experience in its entirety. In other words, UX is not something that can be achieved with a single decision, but is a consequential process of causality spread across the entire design process. In order to provide a primer on understanding how these decisions are made and spread out, the layers of user experience must be isolated and analyzed separately on an atomic level. Visualizing this as a series of five interconnected planes forming a structure, Garrett provides a streamlined, generic
process to inform designing artifacts in an UX context, starting from the bottom, on an abstract level and gradually moving up to a more concrete level of design (Garrett, 2011, p. 20).

The Strategy Plane

The Strategy plane, the first of the two conceptual planes in the model, deals with one thing – understanding. Regardless of whether a functionality-oriented product or information-oriented product is being designed, the Strategy plane requires designers to gain a thorough understanding of what the needs and objectives of the upcoming products are - both internally among the organization and externally among the targeted audience (Garrett, 2011, p. 42-44). Such understanding must be gained by research – segmenting target audience, defining stakeholders, researching users and other context-specific methods for reaching a saturation point of understanding of the user needs and product objectives for the project at hand.

User needs come from sources external to the organization, while there are also internal needs, wishes and objectives of the organization itself that need to be balanced out. These can include business goals, growth expectations etc. as a new website is launched, or they can be less tangible, such as raising awareness. Surveys, interviews, focus groups and/or ethnographic approach are some commonly used research methods that are applicable for clarifying the concept (Garrett, 2011, p. 45-46).
The Scope Plane
The Scope plane is the second of the two conceptual planes on the model and it deals with establishing what product is going to be built, by translating the strategic goals & needs established in the previous plane into more specific requirements, although not final. On this plane the dual nature of the model is first made evident – if a feature-rich product is going to be developed, emphasis should be put on functional & non-functional requirements; if the product is expected to have the purpose of communicating information, focus must be placed on content requirements (Garrett, 2011, p. 68-74). While it is quite possible there will be some overlapping between the two types of requirements, they don’t need to be balanced – the important thing is to agree on what type of platform is going to be built and to define the requirements that fit. For example, Garrett mentions that it is common for pure content websites to be built using Content Management Systems (CMS).

Defining the requirements can also be achieved using similar research methods as in the Strategy plane, although stakeholder disagreements might arise, calling for negotiation techniques to be required (Garrett, 2011, p. 77).

The Structure Plane
The Structure plane is where conceptualization & design first intersect, as it involves planning out how the product will support & perform the specifications from the previous plane. The dualistic nature of the model is again present here - If the product to be designed has a functionality focus, the design methods must lean towards the interaction design spectrum - it must be determined how the system should respond to inputs and how the user can interact with the system; If the purpose of the system is to handle information, then information architecture is the domain to begin with, as it deals with the way information is managed, organized & stored in order to make it effortless for the user to access it.

Overlaps are again quite possible and both disciplines can be utilized to inform further design (Garrett, 2011, p. 81-91).

The Skeleton Plane
The Skeleton plane sees the abstractions from the previous planes dissolve and brings practical design of individual components & their relationships to the table. This plane deals with compiling interface design elements in the case of feature-rich systems; navigation design in the case of information-oriented systems; and information design to glue it all together and give shape to the visual representation of elements – no matter if the focus is on interactions or navigation, the resulting interface needs to be informed from previous planes and to result in an intuitive, logical set of interactions/navigational components. If interface design is the focus, then designers need to consider which UI elements such as checkboxes, labels, radio buttons, drop-down menus etc. to use and how to place them for maximum visibility and contextual signification (Garrett, 2011, p. 110-118), while in navigation design emphasis needs to be put on selecting global, local etc. navigation systems and how to incorporate them to ensure a clean & problem-free website navigation for users (Garrett, 2011, p. 120-124).
This is also where initial low-fidelity digital representation of the imagined product can be produced. These can serve a number of purposes, but in general they are useful to everybody involved in the project – to test if the system answers requirements & purpose established in previous planes, as well to serve as a starting point of understanding for visual designers & developers as their involvement in the project is about begin (Garrett, 2011, p. 128-131).

The Surface Plane
In final fifth plane – the Surface plane, there is no more dualism present as at this point, every desired concept has been established, designed and incorporated and all that remains is for the visual designers to top the entire package with a wrap that appeals to the user’s senses in order to complete the user experience. The sense that is mostly involved when experiencing digital products is sight and it is no surprise that is the most dominant medium visual designers exploit, alongside maybe audio elements, if applicable. Choosing typography, colours, page layout, using gestalt principles, placing affordances, all while maintaining consistency, are examples of graphically-oriented tasks that need to be combined in one aesthetically pleasing surface for one’s eyes and ears (Garrett, 2011, p. 134-147).

In this plane low-fidelity wireframes are transformed into high fidelity visual prototypes that are ready to be tested with stakeholders and/or be provided to developers to begin coding the final product. These prototypes don’t need to match the wireframes completely, but only to relay the components and their relational positioning to the final product (Garrett, 2011, p. 149).

5 Planes of UX in Melon’s Discovery Phase

Under careful observation, the similarities between Melon’s Discovery phase and the 5 Planes of UX framework by J. J. Garrett are clear – both are comprised of a set of modules aiming at gradually clarifying a product from its strategic core to the aesthetic finalization, workflow is iterative & based on agile methodologies, and it allows for going back and forth between each module. Here is the ideal process Melon designers are accustomed to following, although as I was made aware early in my stay with the company – it is a process that is rarely followed by the book and it usually requires a varying degree of appropriation and selection of relevant components for each specific project’s needs (Image & citations kindly allowed to be used for the purpose of this report by Melon):
“With UX and UI in mind, Melon designers craft for a user in a context, not for separate specifications from a list. Their job is to create amazing software experiences. UX design aims at boosting user satisfaction by improving the usability, ease of use, and pleasure in the interaction with a product. UX design is the more analytical and technical field and UI complements it with look and feel and interactivity of the solutions.”

Melon’s own description of the UX & UI philosophy already bears striking resemblance to J. J. Garrett’s model. The items on the top row represent the process of working from abstract to concrete by means of research & producing various artifacts, while the iteration cycle below represents the flexible working methodology of the company that permeates the items above.

The sequence of the whole process in its ideal state feels exactly like the 5 planes of UX, simplified into a few words:

1. “The work begins with data gathering. The aim is to understand the audience and the objectives, to identify the most valuable features, make design decisions and prioritize. This includes research and interviews with the stakeholders.”

This mirrors the Strategy plane in the 5 Planes of UX and involves research until a sufficient understanding of the problem is established, albeit a bit more action-oriented and;

2. “What follows is a requirements workshop meant to reach a group decision. Next is creating a number of user stories – short narrations describing interactions between the users and the product.”

Similarly to J. J. Garrett’s Scope plane, Melon’s second phase is to gather requirements and to store them as artifacts that can be worked on. User stories in this case encompass the desired interactions between the users and the system in encapsulated form, serving as the backbone of the requirements/specifications list;

3. “Then the designers build a map and information architecture – a high-level diagram representing information hierarchy and organization of screens and their flow.”

Based on the established and agreed upon list of requirements with the stakeholders, Melon designers proceed to the Structure plane, where object dependencies are established, building an abstract map to serve as a building block for the site to be built upon;

4. “Then come the wireframes – schematic blueprints representing the skeletal framework of every individual screen. Wireframes flow chart is what the designers call the interactive prototype showing all product’s screens and navigation interactions. They show structures, or dummy content and imagery, calls to action, other elements and ad placements. They lack fonts, color, and final images which allows the designers to explore content, navigation and interactions separately from visual content.”

Even the wording used in the company description feels inspired by Garrett’s model – after the abstract architecture map has been established, systematic building of wireframes, following every level of the map horizontally begins, exactly like in the Skeleton plane;
5. “Once the designers have ensured the product makes sense to the target user group, the second big phase begins – visual design... The look and feel of the product is demonstrated in 3-5 high fidelity mock-ups. The visual design concept captured in a few selected key screens will later be applied to all other screens of the product. Prototyping comes next – creating interactive hi- or low-fidelity visual mock-ups.”

Lastly, the visual design takes place on the Surface plane, first establishing a visual design guide, and then applying it on the rest of the product screens, transforming low-fidelity wireframes into high-fidelity prototypes;

In between wireframing and visual design, Melon employees have adopted Usability Testing as a separate step, belonging in parts to both, as dictated by the project at hand.

- “Usability testing is the designers’ sanity check. It’s the observation of users’ behavior when engaging with a product in development. It’s an integral part of the UX process. The designers use it to explore concepts, navigation, content, page layout and functionality. This is a quick and easy way to test and validate a product before fully developing it.”

While it doesn’t have its own layer in Garrett’s model, the author has stated it as a well-known research approach in various stages of development, citing its many uses and adaptations, while also stressing that it cannot be considered an alternative to informed design (Garrett, 2011, p. 47-48)

DATA COLLECTION METHODS

QUALITATIVE INTERVIEW

Interviews are a vital part of Melon’s Discovery phase and approaching them correctly is essential for revealing relevant information needed to kickstart the project and build upon it. Thus, a suitable theoretical approach to interviewing is necessary to ensure problems are clarified early in the process. One such rich theoretical framework can be found in Steiner Kvale’s book “Interviews” (1996), where the author describes the interview as a way of understanding people through conversation:

“The qualitative research interview attempts to understand the world from the subjects’ points of view, to unfold the meaning of peoples’ experiences, to uncover their lived world prior to scientific explanations.” (Kvale, 1996, p.1)

Kvale explains that conversation, as an everyday interaction we all participate in, is the basic mode of human interaction (Kvale, 1996, p.5). It is through conversation that we engage in social interaction and as such, conversation is the medium that carries emotions, ideas, affections and everything that makes us human. Kvale distinguishes between three types of conversations - in everyday situations; in literature; & professionally. Interviews are then described as an everyday conversation taking
place in a professional context, because, as a research method, they have a structure and a purpose, unlike normal everyday social interaction. Furthermore, the interviewer and the interviewee are not equals within the context, since it is the interviewer who defines the questions and leads the conversation (Kvale, 1996, p.6).

Kvale’s definition is backed by Rogers, Sharp and Preece, who similarly define interviews as “conversations with a purpose” in their book “Interaction Design – Beyond Human-Computer Interaction” (2015). They outline four main types of interviews - **structured, semi-structured, unstructured** and **focus groups**. Since the first three types focus on a single respondent, the focus group interview was naturally chosen as the most appropriate way of interacting with the large number of stakeholder representatives.

Cited by the authors as an approach more suitable for investigating community issues rather individual experiences, focus groups are also described as being commonly used in requirements activities when designers need leverage against multiple points of view from people within a department or organization (Rogers et. al., 2015, p. 200). Focus groups are also useful during different phases of the project, as they can be enriched by using artifacts, such as wireframes and prototypes during the interview and can prove to be efficient in bringing out consensuses or conflicts – that is why the interviewer has to prepare to be a facilitator between the participants and not let things get out of hand (Rogers et. al., 2015, p. 205).

The framework for conducting an interview in the most useful way provided by Kvale encompasses not only the interview itself, but a number of steps before and after (Kvale, 1996, p. 88). All seven steps will be listed here and appropriated to fit through the prism of the National Gallery project:

1. **Thematizing**: The very first step is to define the purpose of the interview and how it would contribute to the project. In Melon’s case, the purpose is to generate insight from the stakeholder and understand their motivations, aspirations, as well to uncover as much as possible about their target audience for the purpose of informing conceptualization.

2. **Design**: The second step is designing the questions themselves, as well as planning all the following steps described below. Bearing in mind the original intention of the interview, the designers prepared the following questions for the initial stakeholder meeting:

   1. From your point of view, what do you hope redesigning the website will bring to the table? What are your motives for this change and what does it aim to achieve?
   2. How would you describe the target audience the changes are aimed at? What is the average end user who would notice and appreciate the improvements?
   3. Would you say you have any competition for the attention of the users? How do you think redesigning the website would affect that aspect?
   4. What are the technical, financial, etc. limitations & constraints of the project that you expect to impact the contents and functionalities of the website?
3. **Interviewing**: The third step is conducting and recording the interview (with permission from the stakeholders). Depending on the type of interview employed, there are different roles the designers can assume. In the case of a focus group interview, the designer takes the role of mediator and tries to facilitate the interaction between all participants.

4. **Transcribing**: The fourth step is transcribing the conversation that took place, preparing the raw data for analysis. The most common way of transcribing is from speech to writing. It should be noted that only the initial interview will be subject of transcription – follow up interviews further down the design process and daily meetings will not be transcribed, as focus groups in particular are the most difficult and time-consuming type of interview to be transcribed, especially when translating and editing is also involved (Bryman, 2012, p. 505).

5 **Analyzing**: The next step is the extraction of meaning from the written conversation. A number of methods exist for analyzing the data, but the one chosen by the design team is by meaning condensation, supported by consulting the stakeholders iteratively for confirmation. The meaning condensation of the focus group can be found later on in this document.

6. **Verifying**: The sixth step is responsible for ensuring generalizability, reliability and validity of the interview findings holds true. In the case of the National Gallery project, since research is not a project in itself, but rather the first phase in a commercial agreement, confirmation from the stakeholders that the extracted information is aligned with their expectations and wishes is the most practically useful criterion.

7. **Reporting**: The final seventh step involves reporting the data in a chosen medium, while taking ethical consideration in mind in regard to who is going to read the findings. In the current situation, the findings are going to be used for two purposes – internally among Melon designers in order to progress with the design process, as well as externally for the purpose of this report. Because of the second purpose, and the fact that stakeholders were not explicitly told that their case is going to serve as basis of this report by the management, it was decided that sensitive information, such as personal respondent information and detailed budget constraints are going to be omitted.

**QUANTITATIVE QUESTIONNAIRE**

For the purpose of getting to know the target audience of the National Gallery, it was decided together with the stakeholders that a self-completion questionnaire is going to be designed and deployed for Gallery visitors. According to Rogers, Preece & Sharp, surveys are most commonly used for collecting demographic data as well as opinions and are good for getting answers to specific questions from a large group of people. They are similar in nature to structured interviews, with notable difference that the interviewer gets access to a large number of answers at the cost of not being present to guide the respondent (Bryman, 2012, p. 233). That is why questions need to be formulated a lot differently as well – they need to be concise, unambiguous, mostly closed-ended and offering a range of possible answers.

Rogers, Preece & Sharp offer a checklist of recommendation when designing questionnaires, in order to avoid any potential pitfalls, like high non-response rate (Rogers et. al., 2015, p. 206):
1. **Think about the ordering of questions. The impact of a question can be influenced by question order.**

2. **Consider whether you need different versions of the questionnaire for different populations.**

3. **Provide clear instructions on how to complete the questionnaire. For example, if only one of the boxes needs to be checked, then say so. Questionnaires can make their message clear with careful wording and good typography.**

4. **A balance must be struck between using white space and the need to keep the questionnaire as compact as possible.**

With those guidelines in mind, the design team devised a survey, containing 12 questions, with the purpose of assessing the current opinion and level of satisfaction of the National Gallery’s visitors, and its digital presence in particular. The questions were developed together with a representative from the stakeholders and designed in such a way, that they would be useful from both a marketing point of view, as well as a user experience (UX) point of view. They were divided into three distinct groups by their intention – those related to understanding visitor **habits/satisfaction during visit**; those related to visitor **information acquisition habits** (including questions about the national Gallery current website); as well as those related to **digital device usage** for said information acquisition. Condensed instructions were provided after most questions in order to reduce confusion. The margins of a standard A4 page were reduced a bit to make space for all question and the introductory message. The surveys were translated from Bulgarian to English, in order to have a version suitable for foreign respondents. Out of the 12 questions, there are:

- 4 Likert scales (**2 of them being conditional**);
- 2 Yes/No checkboxes;
- 3 “Choose all that apply” ;
- 1 standard checkbox question;
- 2 open questions (**incl. demographics & feedback**);

Due to the limited physical volume of the survey and the inability to allocate enough time for development, testing, finding candidates and analyzing a multilayered online survey, the questions do not explore the chosen topics in depth – rather they are explored in width, which fits the project scope, needs & budget (**Full survey can be found in Appendix A**).

150 copies (**75 in each language**) were printed out and distributed as handouts across the 5 locations of the National Gallery for a period of 1 week, after which they were collected, with 108 filled, 2 of which were invalidated due to scrambled information. That leaves a total of **106 respondents**, or **71% response rate**, which, according to Mangione (1995) & cited by Bryman (2012, p. 235) can be considered a **very good response rate**.

**Method of analyzing quantitative data**

The data gathered from the surveys was analyzed and visualized with the help of Tableau. The most problematic aspect of working the data was to digitize it from all the 106 paper into a spreadsheet and then figuring out a way to connect it to Tableau. Normally, a spreadsheet would have one row
per respondent – beginning with the respondent ID and then moving on to assign codes for every answer provided by that person to one column per answer. In that fashion the initial data was manually entered in an Excel spreadsheet with a total of 107 rows (1 for labels + 106 respondents) x 15 columns (1 for ID + 3 demographics + 11 questions).

However, another approach that would unlock more possibilities for data visualization also exists. In “Visualizing Survey Data” Steve Wexler (2016) describes a process of reshaping the raw data so instead of one row per respondent and many columns per answer, the spreadsheet contains many rows for the same respondent with pivoted demographics so that every possible answer creates a new row with only two columns for the actual answer value. What that means is that, demographics become embedded to the respondent ID and every row serves the purpose of containing only one answer. Every possible answer in the “check all that apply” type of question also creates a row of its own. Although that results in a huge amount of rows for the raw data, it actually works a lot better with Tableau, because it can visualize the answers to every question filtered by the demographics (gender, age, background) or even by a combination of the demographics (Wexler, 2016, p. 16-21).
The process of reshaping the data fortunately does not require manual input, but a free Excel plug-in for Tableau can do it instantly. By using this approach, the spreadsheet grew from 107 to 2015 row of data.

Adding a small metadata snippet into the spreadsheet is another helpful trick by Wexler for mapping question ID to a readable form and grouping related questions together, making it a lot easier to visualize them in Tableau (Wexler, 2016, p. 19).

<table>
<thead>
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<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Visit</td>
<td>Select One</td>
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<td>Visit</td>
<td>Likert</td>
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<td>Motivation for visiting again</td>
<td>Visit</td>
<td>Check All</td>
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<td>Information - How</td>
<td>Check All</td>
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<td>Visited the website before</td>
<td>Information - How</td>
<td>Yes / No</td>
<td></td>
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<tr>
<td>If yes - information easy to find</td>
<td>Information - How</td>
<td>If yes - select one</td>
<td></td>
</tr>
<tr>
<td>If yes - satisfaction</td>
<td>Information - How</td>
<td>If yes - Likert</td>
<td></td>
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<tr>
<td>Visited websites of other galleries</td>
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<td>Yes / No</td>
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<td>Open-ended</td>
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</table>

The analysis & visualization of the data from the survey can be found later on in this document.

**Sampling**

In Social Research Methods, Bryman (2012, p. 190-203) outlines a number of sampling types in quantitative research – both probability and non-probability ones. Due to lack of a predetermined target group by the National Gallery and thus inability to determine a valid statistical segment to be targeted, the sampling method used for the questionnaire needed to fall within Quota sampling – a type of non-probability sampling method that the author explains is rarely used in academic setting, but much more often in commercial & marketing research. It aims at filling up a quota of desired individuals based on certain demographic or socio-economic traits. The way the process works is first establishing categories of desirable traits and number of people needed to fill the quota, the researcher then tries to find the correct respondents, usually over a set period of time (Bryman, 2012, p. 204).
The criteria for the desired respondents of the National Gallery were simple – given the small amount of information provided about the target audience, one of the few known facts about it is that both Bulgarian and foreign tourists visit the museums. Therefore the nationality of the visitors became a distinct criterion to sample the population. As mentioned above, a total of 150 copies were printed out and distributed the 5 locations of the National Gallery for a period of 1 week – 75 in Bulgarian & 75 in English – leaving 15 in each language at every location. That’s how the quota of 15 people per museum per language was formed.

Although providing the printouts to be filled in by willing visitors themselves without the designer being present at the museum at any time tried to eliminate bias, the risk that certain people are under-represented remains (for example, full-time working class citizens might not have the chance to visit museums in the weekdays), therefore it has to be noted that the survey results should be considered directional, rather than strictly determinative, since the population that responded may or may not be representative of the total population of visitors.

Additionally, due to lack of provided existing statistical data of previous survey results, the results cannot be considered comparative, but can serve as a basis for a comparison in the future.
DISCOVERY PHASE - THROUGH THE PLANES

This chapter will focus on presenting the participation of the student in regard to the creation & development of artifacts for the “National Gallery” project. It will follow the sequential structure discussed above, plane by plane, showcasing each artifact in chronological order of the time of creation, discussing its meaning and significance, while also tracing the project maturation in its entirety. This approach aims to demonstrate that the practical actions of the student have helped further develop the project work, while also conforming to academically accepted frameworks and standards in terms of system design & processual reporting.

STRATEGY

After being assigned to the National Gallery project alongside fellow designer Alexandra Bakalova, daily meetings at the clients’ office were scheduled for a period of 2 weeks. In order to kick off the Discovery phase, first mutual understanding of the project goals & user needs needed to be established.

Project goals
Since the stakeholder team was being represented by 5 highly involved Gallery officials taking various positions the National Gallery administration & departments, it was decided that a focus group style of interviewing would be the most appropriate approach to reveal insight knowledge of the problem. Since the interview started bleeding towards the Scope plane in the end, it was separated in two parts for the purpose of this project. The following is a meaning condensation of part 1 (Interview transcript available in Appendix B1).

Meaning condensation of initial focus group interview – part 1
One of the first key pieces of information revealed was that the Gallery officials wanted a new website as a way of curing a problem rather than the underlying symptom – although all respondents complained about how outdated, unintuitive and unappealing the current website was, it was actually the brand identity, or lack thereof, that had suffered in the long term because of it. All respondents were feeling like they had a duty to represent the Gallery in a professional, contemporary manner – something greatly hindered by the current website. The many comparisons to well-known European museums served a purpose to reaffirm that the National Gallery could rival many of them in terms of unique exhibits, but that fact was unknowable to the general audience,
buried underneath the current website’s outdated façade. A directly related concern of the officials was the little known fact that the National Gallery manages five distinct museums/galleries, placed in different locations that comprise the entirety of the institution (The Palace, Museum of socialist art, “St. Alexander Nevski” temple-monument crypt, KVADRAT 500 & Sofia Arsenal – Museum of contemporary art). The current website had failed to convey that message convincingly and had left most people completely unaware (including the Melon design team prior to the interview), which also hurt the brand identity in the long run. Another related issue was that, as can be expected, the marketing efforts had produced little result – one of the main sources of income for the Gallery comes from contracts with tour providers, but the only museum they had ever expressed interest in showing to tourists has been “St. Alexander Nevski” temple-monument crypt. A supporting business goal then emerged, as the Gallery officials are hoping that a new, modern website would reinvigorate public interest and boost their marketing efforts to expand their contracts. Those pressing concerns gave shape to the stakeholders’ desire of having a completely new, intuitive, attractive, bilingual website, containing easily accessible information, presenting a concise vision of what the National Gallery is and what it has to offer.

However, a potential threat for the project was also isolated – the lack of a defined target audience. The stakeholders could not provide any sort of statistical or referential data about their visitors & users. Visitors could be younger, older, local or foreigner, of different social backgrounds. It was the stakeholders’ desire for the website to target as wide an audience as possible, meaning everybody with a habit of using internet and an interest in museums. This resulted in the decision to design & deploy a survey in order to get to know the target group & their needs better.

**Survey Results**

**Part 1 - Demographics**

In order to get an understanding of who filled out the survey, we first begin by getting an overview and analyzing the demographics section, placed in the bottom of the survey.

As is visible from the above chart, the distribution by gender is almost 1:1 – 54 women compared to 52 men have responded. The number of foreign visitors who have participated is roughly 1/3 higher than Bulgarian visitors – 63 versus 43. Distributed by age group, the visitors above the age of 50 are predominant with more than twice the number of those of aged 29-39 and more than three times as many as those aged 40-49. The first age group – 18-28 takes second place in this regard.
Further division by gender shows that, with Bulgarian audiences, women are more actively interested in museums, with 7 representatives more than men, while with foreign visitors the tendency is opposite – women are 5 less than men.

Looking at the most detailed segmentation of demographics by nationality, age & gender reveals that the most likely to visit segment falls to foreigners above the age of 50, of which 13 women & 20 men have participated in the survey. This can most likely be explained with the popularity of National Gallery installations among international holiday agencies, which are responsible for organizing visits of groups of foreign tourists. On the other hand, the least represented segments are ages 40-49 – with 2 women & 5 men and ages 29-39 – with 5 women & 4 men. The largest differentiation in favour of women falls in the foreign visitors’ age group 18-28 – 9 women vs. 5 men, which shows almost twice the activity rate. As this sector is the most likely to include more solo travelers/couples
rather than members of organized groups, it appears young women are more interested in museums than young men.

As the Bulgarian audience is concerned, the results are opposite – age group 18-28 is the most active with 16 equally distributed respondents – 8 women & 8 men, and the above 50 age group falls second with 12 respondents – 7 women & 5 men, which contrasts the observed distribution in foreigners, where the youngest audience has significantly less representatives. Age segment 29-39 sees a sudden drop in male interest, with a ratio of 8 women to only 1 man, while age segment 40-49 is the least represented, with only 6 respondents – 4 women & 2 men.

Demographics - detailed

Merging the two least represented age groups in a combined age group of 29-49 makes up for a more even gender distribution among foreign visitors – with a total number of 16 respondents, the merged segment is almost as active as the 18-28 segment, represented by 9 women & 5 men. This can be attributed to a lesser interest towards visiting museums by members of the merged segment, or higher employment rate & less time available for holidays abroad at this period of their lives.

The Bulgarian audience in the merged segment shows a significant misbalance in gender distribution – with 12 women compared to only 3 men. This can mean that men in this age group are a lot less interested in visiting museums in general, have very high employment rate which prevents them from visiting, or a combination of factors.
Part Two - Visits
The first set of questions in the survey are related to visits in the National Gallery and had the particular aim of figuring out how many times respondents have visited the different installations of the Gallery, how likely they are to recommend a visit to friends/relatives, as well as what would encourage them to come back for a subsequent visit. These introductory questions are of marketing context and help build a general notion of visitors’ perception of the Gallery.

Out of all 106 respondents, 71% (78) are visiting the National Gallery for the first time. The number of people who have visited more than once then diminishes gradually as the number of visits gets higher. Segmented by nationality, it is revealed that 3/4 of the total number of first time visitors are foreigners, while they also represent only 1/6, or 4 people, of returning visitors.

A clearer representation of visit frequency can be achieved by reducing the number of values to two – “first time visit” & “more than one visit”, and exposing them to the detailed demographics (again using a merged 29-49 age segment). This results in the following chart:
It can be used to tell the “conversion ratio” of visitors from a first time visitor into regular or semi-regular. As far the Bulgarian audience is concerned, the ratio is positive – in the age groups of 18-28 and 29-49 the number of people who have visited an installation of the National Gallery more than once is higher than those who are visiting for the first time with the conversion ratios being respectively 1.7 and 1.1, while in age group 50+, the number is the same – 6 to 6, which gives a ratio of 1.

These proportions are completely different with international visitors – in age groups 18-28, 29-49 and 50+ the first time visitors dominate, which results in respective ratios of 0.2, 0 and 0.02. This shows that foreigners have an extremely low chance of making a subsequent visit and confirms the hypothesis that the majority of foreign visitors come as part of an organized group and mostly does not return.
On the other hand, the survey results show that the majority of people also find the National Gallery attractive enough in order to warrant a recommendation for a visit to friends or relatives:

Combining together the positive values leads to 93% of all visitors being likely to recommend a visit to the Gallery, with only 7% being neutral. With no respondents having chosen the negative options, it shows that visitors almost have had almost unanimously a positive experience with visiting the Gallery.

As eventual motivations for subsequent visits are involved, most demographic groups lean more towards a new exhibition, while sharing the experience with someone is equally important only in age group 29-39 – with 67%. In the rest of the segments “a new exhibition” has the upper hand, while least interested in sharing the experience are respondents from age group 40-49 – with 38%.
Part Three – Information Acquisition

The questions related to visitors’ digital practices represent the most important information of the survey. They aim at elucidating users’ habits and preferences regarding information acquisition.

The first question in this category deals with visitors’ preferred sources of information. According to expectations, social media are most commonly used - by 48% of visitors, followed by institutions’ official websites with 43%, physical media-based information sources with 38%, and last – information based on personal recommendations from friends or relatives with 26%. While the difference between the 1st & 2nd and 2nd & 3rd categories is only 5%, it jumps higher between the 3rd & 4th categories with 12%. Having in mind earlier results about readiness for recommending a visit to the Gallery, this particular result presents a curious situation. With 93% of visitors being ready to recommend the Gallery, only 26% of the same people are willing to consider such a recommendation. This shows that almost 3/4 of visitors willing to give an advice are not willing to take one, meaning that recommendations are likely to result in an actual visit with only around 1/4 of people based on word of mouth.

Taking a more abstract look at the results from this question, it is revealed that on average around half the visitors (46%) rely on online/digital information sources, while just about 1/3 (32%) prefer other sources.
The results from this question are however most revealing when compared by age groups:

(1) The first age group – 18-28, is characterized by a significant inclination towards using social media – double as much compared to the other 3 options;

(2) In age group 29-39 affinity towards using social media remains unchanged, but using official websites is equally popular with 61%.

(3) In age group 40-49 official websites remain leader in informing visitors single-handedly, as social media drops down and shares last place with physical media with 38%. Here is also the highest-rated value of “friends/relatives” among all age groups with 46%.

(4) In the last age group – 50+, almost half of the respondents choose physical media as primary information sources, which might mean that’s how tourist agencies target their clients. The second place is shared between the digital sources with 38%.

To sum up the results from this question – it is clear that among the four age segments, “social media” lead convincingly in one of them as preferred choice; “official websites” lead in another one; the two share leadership in the third one; and then they share second place in the final segment, where targeted services are not entirely related to museum visits. In conclusion, this confirms that social media and official websites are the primary sources of information for most visitors.
One of the most significant sets of questions is concerning the National Gallery’s own current website. The first of them shows that most respondents have not visited it beforehand – 62 compared to 44 who have experience with it.

Dividing the number of people who has visited the website before reveals some interesting details:

### Visited the website before

<table>
<thead>
<tr>
<th>Wording</th>
<th>Text Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited the website before</td>
<td>No</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>44</td>
</tr>
</tbody>
</table>

Out of the 44 people who have existing knowledge of the website, 24 are Bulgarian and 20 are foreign visitors. This shows that the website has been checked by around 56% of Bulgarian visitors and 32% of foreigners. The reason this data is so interesting is because it contradicts previous responses:

As can be seen from responses about information acquisition, 23% of Bulgarian visitors & 57% of internationals indicate themselves that they prefer to acquire information through institutions’ official websites. These results are clearly contradictory to the numbers above and show that self-assessment is often something that cannot be quantified correctly due to qualitative subjective obstacles. In other words, (1) more Bulgarian visitors have actually visited the website than the number of people who claim to normally visit museum websites; and (2) a significantly smaller number of international tourists, claiming they normally visit museum websites, have actually visited the website of the National Gallery.
A partial explanation of this phenomenon can be found in another question – “Do you ever check what events/exhibitions are taking place in a museum/gallery before visiting?”

Checking exhibitions before visit

In support of this hypothesis, it can be seen that around 2/3 of all respondents claim to check what is worth seeing in a museum in advance only “sometimes”, while 21 do it every time and 17 – never. This reveals a large body of situational undecidedness into the intentions, habits and temporal opinions of the users and calls for a more qualitative clarification on the issue.

The next pair of questions offers an overview in width about information accessibility, as well as user satisfaction, on the National Gallery website. At first glance it is noticeable that out of all 44 visitors, 89% (39 people) have managed to find the information they need, and among them 66% (29 people) have managed to do so with relative ease. This clearly shows that the Gallery website, as an information portal, has easy-to-access information and navigation is familiar and not an obstacle for 2/3 of the users, which essentially means that it fulfills its primary purpose – to inform, in 9 out 10 cases.

If yes - ease of use & satisfaction

The chart shows the distribution of responses to the question of whether the information was easy to find and the level of satisfaction with the information. The data indicates that the majority of users found the information easy to access and that satisfaction was generally positive, with a small number expressing negative feelings.
The user satisfaction level from using the website assesses another trait – not how well it serves its purpose, but how pleasurable and impressive the user experience has been. There is more variation in the scores here – although the majority of the users lean more towards “somewhat positive”, the distribution of scores among all values shows lack of consensus among users. This doesn’t change when compared by gender, age or nationality. Merging the scores from both ends of the spectrum however reveals a different point of view. This can be achieved in two ways – combining data based on ability to locate information on the website, or combining data based on labeling the information on the website as easy or difficult to find.

Information found vs. satisfaction

In the first case the above-mentioned 89% success rate of locating information can be observed, but it is immediately noticeable that out of 39 people who have managed to reach the information, only 25 have put their user experience in the positive end of the spectrum. This means that 36% of people have reached the information successfully, and yet they haven’t been happy with using the website. Analogically, although barely 11% (5 people) have failed to find the information they need, the number of strictly negative experiences rises to 16% (7 people), while almost 4 times as many – 43% (19 people) have not labeled their experience as good in total. These inconsistencies point to an unreliable and unengaging user experience despite the website functioning properly.

Ease of use vs. satisfaction

The second way of combining the data is more straightforward and proportional. The number of people who deem the information found on the website is easy to find almost matches the number of people who have had a pleasant user experience, with a deviation of only 14% (4 people). If we
look at the results this way, 34% of visitors believe information is difficult to locate, while the
dissatisfaction remains at 43%.

The observation documented above may be summarized in the following manner:

(1) **89%** of all users manage to locate information successfully;

(2) **43%** of all users are unhappy with the website;

(3) **36%** of users who managed to locate information are unhappy with the website;

(4) **34%** of all users believe information is difficult to locate;

Although an in depth probing is required in order to isolate specific reasons for these issues, the
numbers suggest that the navigation is working properly and needs the least tweaking, while
information architecture, information visualization & visual communication might need to be focused
on in order to improve the general user experience.

As a supplement to this line of questions, respondents were also asked to write in websites of other
museums of galleries that have made an impression on them for comparative purposes. Here is the
compiled list of answers:

www.louvre.fr/en
http://www.cbl.ie/
http://www.tate.org.uk/
https://www.nationalgallery.org.uk/
http://www.britishmuseum.org/
https://www.museodelprado.es/en
http://www.museoreinasofia.es/en
https://www.museothyssen.org/en
https://www.hermitagemuseum.org/wps/portal/hermitage/?lng=bg
http://www.galleriaborghese.it/en/home_en
https://historymuseum.org/
https://www.moma.org/
Part Four – Digital Devices

The last question aims to expose visitors’ digital device of choice when looking for information or visiting websites. Using smartphones for the purpose is preferred by 53% of visitors, followed by desktop computers with 42%, and only 8% have shown an affinity for using tablets.

A more detailed look provides interesting observations. Smartphone domination is present mostly in age group 18-28 with 90%; as device of choice for women with 67% - twice as much as men, who prefer desktop computers; as well as average device of choice of both Bulgarian and foreign visitors. Tablets are used twice as often by foreigners compared to Bulgarians, but merely 11% vs 5%. It should also be noted that it is completely absent in the choices of age segment 18-39. It is most highly used among people from age group 50+ with 18%, which is still twice as less their second choice – smartphones, and three times as less as their primary choice – desktop computers.

It is clear that usability on both desktops and smartphones is an imperative factor to consider when developing a website for the National Gallery. Due to the fixed budget and limited time frame preventing development of a dedicated website, using “responsive design” for automatic page realignment on different screen sizes is highly advisable.
And lastly, the final open-ended question, designed for voluntary feedback regarding the Gallery’s digital presence, produced the following entries (translated from Bulgarian):

1. “Does it even have a digital presence?”
2. “It would be nice to have more information panels on the website.”
3. “Have a Facebook page (a normal one); More online presence.”
4. “Market yourself more on social media; make information easier to access”;
5. “Make more information about exhibits on the website available in English”;
6. “Social media presence is the most important thing! 99% of young people (and lots of adults too) spend a lot of time there”;
7. “Spread more information about unique exhibits & exhibitions across different channels”;

These entries confirm and expand on some of the previously made points, such as the need to structure information properly and make it more visible, improve accessibility for English speakers, introduce intuitive visual guidelines. An additional piece of feedback, which has also been discussed with the client extensively, but falls out of the project scope, is the need to fix the National Gallery’s social media presence.
SCOPE

After elucidating the internal & external project goals, the design team had to establish the requirements of the system to be developed. Defining a scope is crucial in guiding further design as it informs how the system is going to envelop the strategic understanding of the problem.

Requirements Specifications
The second part of the initial focus group interview with the stakeholders’ representatives started touching upon the expected functionalities and capabilities of the desired system. A meaning condensation is offered to showcase the preliminary project scope and delimitations (Interview transcript available in Appendix B2).

Meaning condensation of initial focus group interview – part 2
After a number of demonstrations by the stakeholders of websites that had inspired them for aesthetics and features, it became clear that while they desired some sort of dynamic content to be present on the website, the platform that needed to be built had to lean heavily towards an information system, rich in text and images. Desired interactions were narrowed down to a number of rather simple actions, such as using dynamic filters for showing content, ability to integrate videos alongside pictures, utilizing moving elements like carousels & slideshows, as well as being able to zoom in & out of available exhibits – standard features that are low in complexity and involve no actual task to be performed by users, although some initial training in managing the content (uploading, editing, deleting) would be required by the stakeholders.

It also became clear what the system didn’t need to be – no commercial transactions of goods & tickets were being planned, there were no user accounts to be implemented at this point, and social media elements such as liking & commenting were entirely left out of the scope, as well as gamification concepts.

After consulting with the stakeholders, Melon management, having examined these initial findings, and also considering the predefined budget & type of project (fixed price), made the decision that it would be in everybody’s advantage to use a content management system (CMS) to develop the desired website and namely Wordpress, which is the CMS of choice in Melon.
Initial Requirements List

The preliminary requirements list was established based on ongoing focus groups with the stakeholders, as after discussing the survey results with the stakeholders. It provided the design team with a solid foundation to start working on wireframes, while the requirements sheet kept on being elucidated through the iterations. The first complete draft of the list is presented here. It includes a mix of functional and content requirements, with text in RED indicating additions to the preliminary requirements list and mostly depicts additional content requirements, which were neglected before a testing Wordpress environment was created. Some of the more major changes can be found as additions after the list.

HOME

Landing page shows a large carousel (1920x1080 pixels, responsive) depicting a slideshow of up to 8 high quality images (at least 800x600 pixels, scaled to fit) representing current exhibitions, which are clickable and lead to the respective exhibition page.

HEADER

- Logotype (168x87 pixels);
- Search bar;
- Language bar (BG/EN)
  - Upon changing the language, the system keeps displaying the same page;

FOOTER

- About us (mission & vision, organizational chart, departments, history of the gallery, documents, Identification committee (* component required by law for state institutions));
- For the media (press kits & pictures in archived zip files, pdf documents – max size 64 MB);
- News;
- Contacts;
- Buyer profile (* component required by law for state institutions);
- Terms of use;
- Confidentiality;
- Friends of the gallery;
- Support us;
- Social media links;
- Newsletter (active);
**Active functional buttons**

1. Visit;
2. Exhibitions;
3. Events;
4. Collection;
5. Educational programmes (renamed to *Learn*);
6. Shop;

1. **Visit**

A grid of 7 items (*up to 4 in a row*), representing each installation of the National Gallery:

   1.1 Kvadrat 500;
   1.2 The Palace;
   1.3 Museum of Christian art;
   1.4 Sofia Arsenal – museum of contemporary art;
   1.5 Museum of socialist art;
   1.6 Touch the gallery;
   1.7 House-museums;

Upon clicking, every item on the grid leads to a sub-page for each installation, containing the following information:

- Exhibitions at the specific site (permanent & temporary) – including links where necessary for 2. Exhibitions & 3. Events;
- Array of clickable pictures – upon zooming in, an annotation is displayed;
- Possibility to embed a video (*at least 720p, maximum 1080p – max size 100 MB*);
- History of the building (*text, 20-100 lines, aligned to the left*);
- Educational programme(s), if any;
- Current events, if any;
- Working hours & admission information (*text, 20-100 lines, aligned to the right*);
- Contacts (*merged with admission information*);

2. **Exhibitions**

Filter with buttons for temporal distribution:

- All;
- Current;
- Upcoming;
- Past (archive);
Filter with checkboxes in a drop-down menu for geographical distribution:

- Kvadrat 500;
- The Palace;
- Museum of Christian art;
- Sofia Arsenal – museum of contemporary art;
- Museum of socialist art;
- Touch the gallery;
- House-museums;

A grid of up to 8 items representing current exhibitions (*up to 4 in a row*) is displayed, with possibility for more than 8 total items including past or upcoming exhibitions. Each item contains a picture, title, period of exhibition & location. Upon clicking every item on the page, a sub-page opens, containing an annotation and a gallery of images.

Upon hovering the cursor over an item, its picture should be dimmed as a hover effect.

### 3. Events

Filter with buttons for temporal distribution:

- Upcoming;
- Past (archive);

A grid of items representing current or past events (*up to 4 in a row*) is displayed. Each item contains an image, title, a date & location. Upon clicking every item on the page, a sub-page opens, containing an annotation and possibly a gallery of images.

Upon hovering the cursor over an item, its picture should be dimmed as a hover effect.

### 4. Collections

Drop-down menu, containing links to:

1. Christian art on the Bulgarian lands, 9th-19th Centuries;
2. Bulgarian art, 19th Century;
3. Bulgarian art, 20th Century;
4. Bulgarian art, 21st Century;
5. European art, 15th-20th Centuries;
6. Art from Asia, Africa, America;

Clicking each link opens a new page containing a description of the collection and a slideshow with 20-25 images.
5. Educational programmes

Drop-down menu, containing links to:

- Workshops;
- Lectures;
- Internship programmes;
- Contacts;

6. Shop

A grid of items representing books or souvenirs (up to 4 in a row) is displayed. Each item contains a picture, title, author (if applicable), price & location where it can be purchased.
Updated Requirements

1. Visit

(The grid of 7 items, representing each installation of the National Gallery, was switched to a drop-down menu, saving users the time to navigate through an additional hub page in order to see each location):

Drop-down menu, containing links to:

1. Kvadrat 500;
2. The Palace;
3. Museum of Christian art;
4. Sofia Arsenal – museum of contemporary art;
5. Museum of socialist art;
6. Touch the gallery;
7. House-museums (sub-hub, contains 3 items in a row representing the house-museums);

4. Collections

(Drop-down menu was replaced with a list view of all the collections on a separate page for maximum aesthetic impact)

List view, containing links to:

- Christian art on the Bulgarian lands, 9th-19th Centuries;
- Bulgarian art, 19th Century;
- Bulgarian art, 20th Century;
- Bulgarian art, 21st Century;
- European art, 15th-20th Centuries;
- Art from Asia, Africa, America;

Upon hovering the cursor over a label, a different background is displayed, representing the highlighted collection in full screen.

Clicking each link opens a new page containing a description of the collection and a slideshow with 20-25 images. Clicking each picture zooms it in and shows:

- Artist name;
- Year of birth – year of death;
- Title of exhibit;
- Year;
- Type of technique used (material + medium);
- Size;
5. Learn

(The drop-down menu, representing each type of educational activity, was switched to a hub page, containing all the activities, in order to avoid dilution of few items over many pages, giving users an overview of all activities instead. Separation of events by type was dismissed in order to avoid unloading unnecessary information on users, where content is more important than classification.)

A grid of items representing educational activities (up to 4 in a row) is displayed. Each item contains an image, a title, a date & location. Upon clicking every item on the page, a sub-page opens, containing an annotation, contact information and possibly a gallery of images.

6. Shop

(Since the catalogue of different items sold at the different museums proved too varied and complex to digitize in time for release, it was temporarily replaced with an overview of the 4 available shops)

A grid of items representing the 4 locations that have a souvenir shop (2 rows with 2 items each) is displayed. Each item contains a picture, address & opening hours.
The organization of information is the next natural step in the Discovery phase. After establishing a list of requirements and deciding on developing the platform on WordPress, the future system needed to be structured.

The sitemap of the National gallery website is to be read vertically as well as horizontally. The main pages (Visit, Exhibitions, Events, Collections, Learn and Shop) contain all the information about all the National Gallery outlined in the requirements. The structure is hierarchical, but also features traits of matrix- & sequential structures. An example of a matrix structured segment is seen with the red arrow, which allows for a multiple entry points to the exhibits – both from the Location hub that has them, as well as from the global navigation. This is the case with the rest of the exhibits too, but it is not marked on the sitemap for clarity.

Horizontally, the pages of the different locations are summarizing and contain all the information about the location. For example (in red), the page about Kvadrat 500 contains all exhibits, events, news and educational programs that are part of Square 500’s program.
After the Information Architecture diagram has been done, Melon designers proceed with wireframing.

One crucial component of wireframes, as per the Skeleton plane, is navigation. There are 3 navigation types: Global navigation (that is always visible no matter where users are); local navigation (that is accessible only when the users reach a specific part of the website) & contextual navigation (which does not fit the previous categories and can be f.ex. an inline hypertext link) (Rosenfeld et. al, 2015, p.175-193). The National Gallery website features all three types, although they are not immediately seen from this example wireframe of the home page.

The global navigation bar contains the 1st level nodes of the information architecture and is always visible. An example of local navigation would be when users go to Collection and see a list of links which is not visible otherwise. Contextual navigation as hypertext links, which lead from certain annotations talking about the Collections, and can be clicked to lead the user to said Collection. This is due to the matrix-style structure of the architecture and the hypertext structure of the information that support its hierarchical nature. (Rosenfeld et. al, 2015, p.107-130)

Due to volume & time constraints, wireframes won’t be examined further in the report, but a design document full of described wireframes for discussion with the stakeholders can be found in APPENDIX C.
After the wireframing and user testing with the stakeholder was concluded, the Discovery phase was already reaching its end and visual designer Ali Abdala alongside a fellow Wordpress developer took over, while the UX design team was no longer involved in the National Gallery project. Thus, the Surface plane, where visual design takes place at Melon, was out of scope for the student’s responsibilities.

CONCLUSION

The report at hand showed the involvement of the student during the process of designing a new website for the National Gallery in Sofia, Bulgaria. As a part of a team of Melon designers, the student was involved in the entirety of the Discovery phase and contributed to the findings and artifacts described above.
Literature list


Books List


Tableau References


Steve Wexler, “Visualizing Survey Data 2.0”, Tableau Conference 2016: https://www.youtube.com/watch?v=nmr_-1aL1T4