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cific target group would be led to identify with a company through their investments in art? We can identify several traditional mediation roles that could provide us with some models. First and foremost, the curator. Usually specialized in some aesthetic realm, the curator has an acute understanding of art and is able to grasp connections between different works and different artists in order to build an experience for an exhibition or private collection. Radio DJs have played a very important role introducing new music to audiences that followed their personal taste. Brand activation managers seek to devise a brand spirit and implement it coherently through different means. Stockbrokers know their clients as well as they know the market and advise them according to their specific interests and investing style.

As the curator, a person fulfilling this new role would have to become an expert in some aesthetic realm and establish a narrative point of view that would identify his work, so that brand activation managers could hire him accordingly to their own brand spirit. Their target audience would be able to identify his “aesthetic fingerprint” and follow his choices like once we did with Radio DJs. Like the stockbroker, this person would have to deeply investigate new artists in order to identify future investments while keeping their clients interests in mind. Why on earth do I think this could work without compromising art? Because different investors would guarantee diversity: while, e.g., the cellphone network corporation could favor big instantaneous pop-like successes, the insurance company could identify with works destined for a slow but steady and long-lasting recognition. The beauty of this would be that aesthetics, and, perhaps most importantly, aesthetic-based decision making, would have to become a part of everyones life. Who knows, maybe we can still save the word from drowning in nail polish...

NOTES

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2. <http://www2.inescporto.pt/>
3. <http://www.esmae-ipp.pt/>
4. <http://www.artes.ucp.pt/>
5. <http://creativecommons.org/>
6. <http://creativecommons.org/licenses/by-nc/3.0/>

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INTERFACE DESIGN FOR MOBILE DEVICES

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INTRODUCTION

Mobile devices and network infrastructures open the possibility for new forms of information access or storytelling while visiting physical places. The Interface Design for Mobile Devices workshop addressed this new trend by exploring the user interface design opportunities and challenges for different devices, taking into account the underlying information architecture or storyline. Participants with diverse backgrounds developed projects in user interface design and information structuring for exploring a physical location. In this Future Places event, the inspiring local were the grounds of the Serralves Museum in Porto.

Contemporary development methods in digital media explore the potential of experimental approaches where mobility is crucial, contributing to local communities growth and empowerment. By reinforcing connections and congregating the most diverse cultures, local naturally becomes global. In this essay we present some reflections and guidelines on interface design for mobile devices and the methods applied on the three-day workshop at Future Places festival, developed in an environment of an intense and concentrated collaborative experimental work.

INTERFACE DESIGN FOR MOBILE DEVICES

Interface design for mobile devices starts by setting the solution and describing the workflow, defining the information architecture followed by visual design.

Specifying the solution - by describing the concept, defining the users, and identifying the subset of features - will act as a reference and a filter for the options to consider in the development process. To define the application, features and functionality must be set by highlighting the essential, what really matters to users *in motion*; then, a concise representation is created and the subset of features becomes clear.

The mobile device is very responsive and is always on – typically, interactions with the phone

do not last long. Applications should be simple and direct, easy to use in short periods of time. Identifying secondary tasks that users will do with the proposed solution and the objects they will interact with will determine hierarchy and organization.

The workflow definition encompasses the interaction design microstructure. Interaction design involved at this stage focuses on building the functionality that will allow the users to achieve their task in a quick and effective way.

Users are already familiar with the way some features and controls of the standard integrated applications work, and the main content should be accessible as soon as possible, avoiding intro pages. Pages should be light, not only to load quickly, but also to optimize user time while on the move.

Terminology must focus on the user, and should not be overly technical. Minimizing text entry as input should be accomplished by selecting options, rather than having to write to access the information. Navigating through lists and pickers help to accelerate access to what interests the user. Features should be presented in several screens, from a macro set of general options to more specific features, whether they are mainly task-oriented or object-oriented. The need of zoom and panning should also be reduced.

For the interfaces design layout, one must start by considering the platform where the application will be used: size, interface devices (multitouch, keyboard), responsiveness, internet and other functionalities, portability and the possibility of being "always connected".

In a phone, resolution is higher, but there is less space, processing speed and bandwidth than in a computer.

Interface design for mobile users use requires robustness. Given the small sizes of the screens, constraints apply and context awareness is harder to provide, so detailed work is dedicated to navigation issues, menus, buttons, unambiguous pictograms and symbols, and short names. Although different devices have specific requirements, some general guidelines apply to the design of interfaces. Asking "what is important now?" will help to just keep on the screen what is really critical at that time. The result will certainly be different from the desktop computer interface.

The content presented can be maximized by optimizing the use of space, selecting sub-features, and also changing the font size for readability. Minimizing ads, redundant controls, text and unnecessary labels, and paying attention to the unused space will help to keep content simple and well organized. A clean design with hierarchical information and visual highlights, using the system fonts and a restricted color palette with great contrast between type and background will increase readability.

For multitouch screens, providing targets is important given the size of the fingers; for lists, clear edge-to-edge design will be prone to faster navigation. Most interfaces rely on vertical controls, and consistent criteria should be defined for the alignments of labels, controls, and values. From general information to specific tasks, an extensive use of arrows throughout the interface will work as a progression of screens that follow, and ensure that the navigation structure and the screens are well known and hierarchical.

Finally, it is essential to communicate the status of the application with feedback to the users on what is happening, when, and what has changed.

DESIGN PROCESS

Starting from the participants' interests, previous experiences, and expectations, and considering the design of visual interfaces, available technologies were introduced. Programming tools, network infrastructures, and access to geo-referenced information have a major role in the design process. Additionally, in the interface design for mobile devices, key concepts and references on task analysis, usability issues, heuristics, and design guidelines are of critical relevance; when applied, these become the structure and look and feel of the overall project.

Such concepts had visual expression through the InStory case study, a system for mobile information access, storytelling and gaming activities in physical spaces. Previous outcomes from a course featuring a module on mobile interface design at ESTGP (Portalegre, Portugal) were also introduced to the workshop participants.

The case studies presentation set the context for a challenge, made to the participants, to develop a project in two days. Accomplished by multidisciplinary teams, each participant had individual responsibilities on the final result. The elements that were requested for each project were the concept, structure diagrams and the visual interface.

The concept is the description of the idea and main features involved, while the information architecture and interaction design is implicitly defined in the interface. The interface includes a 1st level template for the home/main menu and a 2nd level with content definition, geo-references, user data and optionally games.

Methodology suggestions included the distribution of tasks, sharing indoor and outdoor image and video resources, rapid prototyping techniques, use of heuristics checklists, design guidelines, and emulators, as well as uploading interface design images to the mobile devices for debugging.

Field work was required for collection of records at the Serralves Foundation for site-specific resources. An important step in the process was the presentation and discussion of ongoing work, a collaborative approach that later contributed to improve the final proposals. Comments and suggestions shared at this stage triggered the optimization of the proposals.

A critical overview on limitations and prospects of development were then discussed, considering proposals that could lead to implementation. Further ideas aroused during the public presentation of the outcomes of the workshop in the main Future Places conference.

FUTURE DEVELOPMENTS

The challenge proposed to the workshop participants was successfully achieved through collaborative "hard work", bringing ideas to life in an inspiring environment where participants interacted as if they already knew each other before. Interesting proposals appeared – useful, playful, and ambitious projects with potential for further development.

More advanced approaches and narratives languages, including geo-referenced data visualization, real-time video, interactive storytelling, and mashups to support local communities, will be the focus for future work.

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LINKS

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