

G:RASS – Experiencing a City Through an Artist’s Eyes

Anastasia Treskunov¹, Christoph Vogel¹, Marta Wróblewska^{2,3},
Michael Bertram¹, Fabian Büntig¹, and Christian Geiger¹✉

¹ University of Applied Sciences Düsseldorf, Düsseldorf, Germany
geiger@hs-duesseldorf.de

² Gunter Grass Gallery, Gdańsk, Poland

³ University of Gdańsk, Gdańsk, Poland

Abstract. We describe a mobile app that allows to enjoy a city experience through the artistic perspective of an artist. For the Gunter Grass Gallery in Gdańsk we designed and developed a user experience that presents work of Grass directly at the original locations. In his “Danzig Trilogy” the Nobel Prize winner Günter Grass described places of his hometown Danzig (now Gdańsk), how they used to be in the beginning of the 20th century. With the G:RASS-app the city gets surrounded by art pieces (text passages, drawings, sketches, audio). Using mixed reality, visitors can explore Gdańsk from the artist’s point of view.

Keywords: Interactive city walks · Location-based mobile entertainment

1 Introduction

With the ongoing digitalization of cities and widespread use of mobile devices, the market for location-based services on smartphones is growing. Many available apps provide functionality for navigation, social interaction, entertainment and sightseeing. Few mobile applications provide a location-based access to art because there are few examples with a sound relation between art work and locations. We focus on the development of a mobile app for experience art fragments of the works of Günther Grass while walking through the inner city of Gdańsk, the native city of the artist. Aiming to motivate and empower people to explore their environments and discover the city of Gdańsk through the perspective of the artist should create a unique and entertaining experience. The project was initiated based on the insight that we often spend little time in our hectic daily life on mindfully experiencing our environments while maintaining a relation to artistic work with locations-based focus. Instead, we often commute from a start to an end-point in the most effective way and often use that time to work, read or simply kill time by engaging in social networking or playing mindless games on our smartphones. As a result, we are less aware of our surroundings and the exciting or beautiful things it might hold. The growth of digitization and the GPS-functions of mobile devices offer the possibilities to make cities playable and experience them in a whole different way. Also, it is possible to shape the city towards a given artistic experience without changing it in real life. Our aim was to represent Grass’ work in a playful, entertaining and unusual way.

Similar projects differ in the way they present artistic content. The app “Flaneur” [1] developed for the public library in Düsseldorf uses cutouts from literature, films and music and brings them to bizarre places of the city. The quotations, film parts or songs are chosen to underline the peculiarity of a certain place. The aim of this app is to bring back the serendipity of using digital libraries by offering media elements depending on the user’s location. “A secret golden age” [2] is a mobile app project by the University of Edinburgh, which is made for long-term Edinburgh residents and first-time visitors. After choosing one of five available routes, the mobile application leads you through the city of Edinburgh. On specific spots the application provides recent literary research and historical information as well as literary extracts along the way. The application focuses on literature written in English and Latin. Furthermore there is a project from the University of Iowa, “The city of Lit”, that also exploits the user’s location for a literary experience. Examples of geo-tagged events include locations of local readings, former dwellings of resident writers, and fictional or real Iowa City locations referenced in literature. Based on this, the user can take a literary stroll through the Iowa City [3]. The Bux app makes it possible to discover Zurich from eleven different authors’ points of view. They guide you to the certain places to get the quotations and for example pose virtual with you for a photo. For this app, the Zurich University of Arts, the Commission for Technology and Innovation and different publishing companies worked together [4]. The technical concept of our app was also based on STOYL, a location-based approach to music listening with a serendipity-based approach to experience the music library of other users [5].

2 Concept and Implementation

G:RASS [Gdańsk: real and simulated spaces] leads the user along the route of motifs taken from Grass’s books. This project is based on digital media and mixed reality technologies, implemented thanks to the collaboration between the Gallery and the University of Applied Sciences Düsseldorf, in result of the partnership within the Creative Europe project – The People’s Smart Sculpture. The authors of the script are Piotr Wyrzykowski, a visual artist familiar with mixed reality projects and the poet Andrzej Fac. The main idea of the app is going out into the public space (both virtually and physically) to rediscover it through the oeuvre of Günter Grass. Prinz – the dog from the novel “Dog years/Hundejahre” (one of the three novels of the so-called Gdańsk trilogy) becomes the city guide, taking the users on a walk through Gdańsk and leading them to selected places full of different surprising pieces of information and sensations. One of the main goals of this project is its accessibility – physical, cultural and financial. That is why the app is free of charge, and its content is friendly to all kinds of users regardless of age or education. It has been prepared not only for the inhabitants of Gdańsk, but also with a view to the foreign visitors – hence it can be used in three languages: Polish, German and English. Günter Grass was a very distinctive person. He is famous as a writer, but was also sculptor and painter. Aim was to filter all his work and convey it in a multimedia way by connecting it with the real surroundings. Here it was very helpful to have a Günter-Grass-expert joining our team, who knows about his complex work and the person. Our first step was to work through

Grass' "Danzig Trilogy" where he describes several places in Gdansk. The novel "Dog Years" was the main inspiration for this project and based on this, we selected eleven locations in the city. Aim was to develop a tour that takes about an hour. Also, using a dog as guide that leaves a trail where to go next was a good way to illustrate selected perceptions. When a quotation was talking about the smell of fire, an illustration of a sniffing dog augments the quote (Fig. 1).



Fig. 1. Interface and design elements from the G:RASS mobile app

Every station is designed in a special way using illustrations, photos, quotations and sound recordings. The illustrations are inspired by the drawings of Günter Grass, which are presented in the gallery. During the project, we received significant help from institutions based in Gdansk. For example, when we needed recordings from a choir, we collaborated with the main choir of the city. At the amber market, we placed photos of an amber sculpture made by a contemporary local artist. Initial tests showed that the usability is easy and self-explaining by using mostly symbols (Fig. 2).



Fig. 2. Interface and design elements from the G:RASS mobile app

The G:RASS application was developed as a mobile app for the Android operating system. The system was implemented with the Unity3D version 5.4 game engine,

because it provides easy integration for multiple deployment platforms and fast prototyping possibilities. Due to the limited possibility of continual presence at the location the use of Unity3D also facilitated the remote testing and development directly on Windows computer. Marker-based AR tracking was not possible in this case because of the changing light situation during its outdoor use. Instead, we used a GPS-location based positioning approach to approximate the world position of the device. At key locations in Gdansk the content aligns according to the cardinal directions using the plugin GyroDroid for sensor fusion.

3 Conclusion

Valuable information for future improvements of the app was collected in a workshop with students from Gdansk. Around 20 students aged from 16 to 19 years participated in the workshop. After a short introduction of the content and functions of the application, the students offered suggestions for its additional features and further enhancements. The following remarks originated from the workshop: ‘The app should contain a lot of interesting functions’, ‘...be safe for the user’, ‘...contain translations in various languages’, ‘...take little memory space’, ‘...contain colourful characters and interesting plot’, ‘...be accessible to everyone’, ‘...give opportunity to create your own avatar’, ‘...contain elaborate graphics’, ‘...have an option of guide selection’, ‘...have an option to choose a short or a longer route’, ‘...contain short information about the places’, ‘...be accessible to a greater number of devices’.

This paper described the design and development of G:RASS, a mixed reality app, that shows Gdańsk from Grass’ point of view. The application shows that his work isn’t bound to the medium of a book and can be integrated in a mobile app using different media. Therefore, it can be easier available for young users, tourists or people who want to discover his work in another way. The work shows that the mixed reality function offers an interesting way to present artistic information in real city spaces. This opens new opportunities to access literature for new user groups.

Acknowledgments. This work was partially supported by the Polish-German Cooperation Foundation and Creative Europe EU Program (The People’s Smart Sculpture).

References

1. Treskunov, A.: Flaneur – Master thesis, University of Applied Sciences Düsseldorf (2016)
2. A secret golden age. www.asecretgoldenage.com/about-the-project/
3. Draxler, B., Hsieh, H., Dudley, N., Winet, J.: City of Lit: collaborative research in literature and new media. *J. Interact. Technol. Pedagogy* (1) (2012). <https://goo.gl/tVKAlM>
4. Discover Literature in Zurich with the new Bux App. www.bux-app.ch/
5. Hultgren, A., Mayer, C., Kierepka, O., Geiger, C.: Towards serendipitous urban encounters with SoundtrackOfYourLife. In: Proceedings of the 11th Conference on Advances in Computer Entertainment Technology (ACE 2014). ACM, New York (2014)