

Munich Quest

A Gamified Exploration of Central Munich

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Munich Quest is a city exploration video game created to teach players the history and geography of Munich in an intuitive, amusing and pedagogic manner. A vital gameplay element of Munich Quest is its map, which represents Munich's centre. Even if Munich Quest is initially understood as a video game, it is the developers' aspiration that it can also be perceived as an interactive map; unlike popular GUI elements and controls found in 'traditional' interactive maps, here, interaction takes the form of communication between the player and Non-Player Characters (NPCs).

LITERATURE REVIEW

There are many case studies of gamifying city exploration [1][2]. On one hand, such an approach to learning is expected to lead to better results. For instance, Huizenga et al. [3] demonstrated that playing the mobile city game 'Frequency 1550' allowed the acquiring of historical knowledge about mediaeval Amsterdam very effectively by participating students. On the other hand, there is substantial proof that games which deal with city exploration are not only educational but also enjoyable; since 2017, Ubisoft, a world-renowned video game company [4], has been making 'Discovery Tour', a series of video games aimed at allowing players to experience ancient cities as a first-person narrative [5]. This series has had great commercial success.

METHODS OF DEVELOPMENT

1. Munich's centre was chosen as the area to be mapped in-game.
2. Ten landmarks considered representative of Munich's history were selected, based on their stated importance on Munich's official tourism website [6] and their proximity to Munich's centre.

3. Specialised information on the landmarks' histories was retrieved from Encyclopaedia Britannica [7].
4. The extent of the map was defined to include every landmark.
5. The map and the landmarks were designed.
6. Interactivity with the NPCs was implemented.

RESOURCES

Munich Quest was made with the RPG Maker MZ engine, a game engine specifically programmed to help developers create role-playing video games. Custom tiles were created and modified using GIMP raster graphics editor.

KNOWN LIMITATIONS

Because of the limited functionalities of the game engine used, Munich Quest was designed as a tile-based game; the playing area consists of small square graphic images referred to as tiles, laid out on a grid. This design feature resulted in the lack of any curved lines on the map, forcing the transformation of all the road junctions' angles to 90°, creating a somewhat distorted depiction of central Munich.



Fig. 2 – Munich Quest's map with landmarks highlighted.

MUNICH QUEST'S MAP

The orientation of the map was chosen to be as close as possible to north – considering the aforementioned limitations. The arrangement of the ten landmarks was maintained but some distances were minimised to make exploration easier. Custom tiles were used for the designing of the landmarks in order for them to be recognisable (Fig. 1). Finally, a significant number of graphic details were added to give more life to the city and make it aesthetically pleasing (Fig. 2). To facilitate navigation, an auto-scrolling mini-map (a minimised copy of the game's map) was added to the top left of the user interface.

INTERACTIVITY

Munich Quest was designed to be inclusive and accessible with its user interface being as simple as possible, for textual information to be the focus. NPCs are the main means of immersion for the player; the player's avatar can initiate discussions with the NPCs that include various dialogue options. Many NPCs are present, ready to share their knowledge about Munich. The most important ones are the ten landmarks' 'guides': each of them is adjacent to a landmark, and provides information about it. This information must be remembered by the player, who will be allowed to take a final test after interacting with all ten guides. Successful completion of the test is the objective the player is given at the start of the game.

IMPRINT

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LINK

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CONCLUSION AND FUTURE

We believe that Munich Quest succeeds in being an accessible, educational and fun way for players to learn the history and geography of Munich. This game fits well in the pre-existing literature showing the value of video games as a method of teaching. In the future, for the game to reach the general public, it could be translated into other languages and even distributed by a state institution interested in promoting tourism through the means of a gamified exploration of Munich.



Fig. 1 – In-game model of Frauenkirche – one of the ten landmarks of Munich Quest – juxtaposed with the model of Frauenkirche from Google Maps.

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