HBKU Thematic Research Grant 1st Cycle—Project Highlight

Project Title: A Multimedial Education Tool for Qatar’s History

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Executive Summary

History education at schools assumes a mostly linear view of time. However, real-world history features highly interwoven causal relations. Efforts to remedy this shortcoming aim at providing tools and education to history teachers so they can deliver their content in a multimedial fashion. As a result, ready-made multimedia software to comprehensively teach history are scarce to non-existent. This project aims at designing and driving further a novel, interactive educational software being prototyped at the College of Science and Engineering. The software will provide school students with a rich, immersive, and deeply interconnected tool to explore Qatar’s history. In collaboration with the Middle East Department of the College of Humanities and Social Sciences, we aim to create a database of facts and stories with spatiotemporal indexing. Content will be solicited from leading experts in the field. Through an interactive and intuitive interface, students can select data through a collection of linked views (data brushing). The result is a rich multimedia user experience going beyond retrieving the same content online or from books. The resources granted in this first cycle of HBKU’s Thematic Research Grant will be used to develop novel educational multimedia interfaces using tracked 3D screens and head-mounted displays.

Expected Outcome

We will develop a copyrighted and publicly tested software, aiming at a TRL of 6. In addition, we will create a repository with contributions from internationally recognized Middle East experts. Contributions will have been carefully curated, cross-linked semi-automatically, and clustered into a hierarchy. We will also be able to demonstrate a commercial setup including stereoscopic views with and without head-mounted displays. The commercial version will be protected by copyrights and as a trade secret (“closed source” software), substantiated by means of tech disclosures and copyright filings with Qatar Foundation’s Industry Development and Knowledge Transfer Office.
Collaborating HBKU entities:

**College of Science and Engineering (CSE)**
(Dr. Jens Schneider, Dr. Marco Agus, Dr. Dena Al-Thani, Dr. Younss Ait Mou)

**College of Humanities and Social Sciences (CHSS)**
(Dr. Georgios Mikros, Dr. Wajdi Zaghouani, Dr. Marc Owen Jones)

Photos:

Our initial prototype for this project. Clicking on the short description (top left) zooms into a map of Qatar, surrounded by the time-ring. Relevant images are displayed (top right) and the trajectory of the Al-Thani family before settling in Al-Bidda in 1847 is depicted. Each location can be clicked to access additional information. Future versions will also contain audio and 3D data. ([https://qatar-history.herokuapp.com/](https://qatar-history.herokuapp.com/)) tested on Google Chrome & Safari, 13.November.2020).