







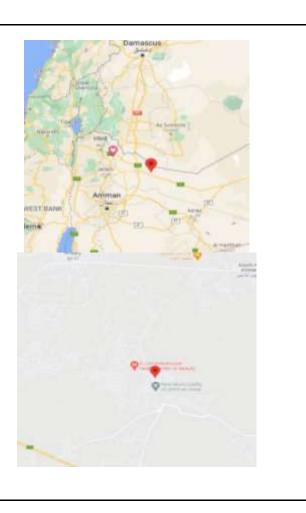
GAMIFICATION STRATEGY UMM EL JIMAL

Umm el-Jimal: distance to Mafraq city is 20 Km Covered civilizations:

- Nabataean period
- Roman period
- Byzantine period
- Ottoman period

Themes:

- City
- Churches
- Water system
- houses





Umm el-Jimal archaeological site is located approximately 70 km northeast of Amman. This dark basalt site is the remains of an ancient frontier town in the Jordanian badia. Umm el-Jimal has been known as a home for a unique architecture. Ancient denizens have used the abundant amount of black basalt in the region's volcanic plain to construct sturdy, insulated structures reaching up to six stories skyward. Techniques such as corbelling allowed most buildings to contain multiple floors, while cantilevered stairways provided access to these upper stories.

The Directorate of Antiquities (DoA), along with partners from Princeton University (Dr. Bert de Vries), have recently excavated several historical sites in the destination. More projects are planned for the coming years.

Umm el-Jimal city

Umm el-Jimal is most often noted for its stunning architecture and wealth of inscriptions.

Executed projects:

- Archaeological excavations program
- A survey of surviving artistic fragments inside the late antique town
- Rehabilitation of some khans (hotels), houses and streets
- Investigation of religious edifices among the standing remains of the town.

Foreseen projects:

• Continuation of the excavation and rehabilitation of the parameter of the city

Churches in Umm el-Jimal

Executed projects:

- Archaeological excavations program
- Discovery and presentation of more than 10 churches
- Investigation of religious edifices among the standing remains of the Umm el-Jimal town site

Foreseen projects:

• Documentation and Rehabilitation of more than 10 churches



6.1.2 Suitable Sites for Gamification

1. Water System of Umm el-Jimal

Site Overview

The key to understanding this hydraulic design is that the system had to be strictly based on run-off water collection. The basalt sheet is by nature porous, for when molten lava solidifies into solid rock, its mass shrinks, so that instead of forming a solid sheet, the lava breaks up into huge boulders. The cracks and fissures between these allow the surface water to escape downward to pool on the limestone sediments below. Because this underground aquifer is some 200-300 m below (except where they surface in the Azraq Oasis), this water was not accessible to people in antiquity. The trick, therefore, was to forestall this downward escape by diverting the flash-flood waters gushing through the wadis into upstream canals. These delivered the water to carefully sealed reservoirs or along diversion barrages into diffusion irrigation systems. This ingenious hydraulic system provided an adequate water supply for humans, animals and plant agriculture.

Suggested Individual Game applications

- Games can be developed to show the advance yet simple water system in the city
- The water system can be simulated in digital format to demonstrate how the system helped the city turn into a commercial rest area on trade routes in dry and hot area

2. Houses

Site Overview

The Home of the Sheikh, so-called House XVII-XVIII is a major mixed-use complex in the southeast section of Byzantine-Umayyad Umm el-Jimal. Howard Crosby Butler, the Princeton archaeologist who first mapped Umm el-Jimal in 1905 and 1909, gave the structure this official name based on his belief that the complex was two distinct domestic buildings. Butler's interpretation prevailed until 2012, when project archaeologists excavating the structure discovered a doorway connecting both buildings and other evidence demonstrating that it is in fact a single, massive complex. While final interpretation of these results is ongoing, research data suggests that House XVII-XVIII did begin its centuries-long occupation as a home, and later was expanded into an administrative center or possibly even a hotel for caravans and dignitaries traveling through the region.

Suggested Individual Game Applications

- VR or AR-based games to be applied in the Hammam
- Other types of games related to historical events that took place in the historic city.

6.1.3 Local Cultural and Creative Resources

	Gamification Stakeholder			
1	Name of stakeholder	The Municipality of Umm Jimal		
2	Country of affiliation	Jordan		
3	Type of stakeholder	Governmental institution		
4	Interests of the stakeholder	Promotion of the village, development of tourism. The municipality of Umm Jimal has already implemented many actions to promote the village.		
5	About the stakeholder	Local authority at municipal level. The Municipality is the major actor in local development of Umm Jimal at all levels.		
6	Stakeholder contact information	Hassan Rohiabah (Mayor of Umm Jimal) newummeljimal@gmail.com Tel: +962(2) 626 7788		
7	Stakeholder website	https://ar-ar.facebook.com/UmmEljimalMunicipality/		



Gamification Stakeholder			
1	Name of stakeholder	Department of Antiquities	
2	Country of affiliation	Jordan	
3	Type of stakeholder	Governmental institution	
4	Interests of the stakeholder	Promotion of the village development of tourism. Management and restoration of the historical site	
5	About the stakeholder	Department of Antiquities is responsible of all historical sites in Jordan including Humm Jimal.	
6	Stakeholder contact information	Dr Fadi Balawy (General director) info@doa.gov.jo Tel: +962(2) 4336 464 6	
7	Stakeholder website	http://doa.gov.jo/	



6.1.4 Possible Financing Structures and Procedures

	Gamification Financial Resource		
1	Name of stakeholder	Business Development Center	
2	Country of affiliation	Jordan	
3	Type of stakeholder	non-profit organization	
4	Interests of the stakeholder	 Fostering sustainable socio-economic development through employability and Entrepreneurship training programs, Social enterprises support hand-in-hand with a strong team of experts and pool of trainers. 	
5	About the stakeholder	The Business Development Center—BDC, is a Jordanian non-profit organisation dedicated to fostering sustainable socio-economic development through employability and entrepreneurship training programs, social enterprises support hand-in-hand with a strong team of experts and pool of trainers. BDC accurately monitors the labour market, analyses supply and demand needs, spots missing pieces and designs developmental evidence-based programmes that provide linkages to build business opportunities and effectively administrates training programs. Through delivering community-led solutions for development, BDC acts as a local multiplier for an inclusive regional economic development.	
6	Stakeholder contact information	Name: Galeb Hijazi Email: info@bdc.org.jo Phone: +962796132111	
7	Stakeholder website	www.bdc.org.jo	



	Gamification Financial Resource		
1	Name of stakeholder	Center of Excellence for Innovative Projects	
2	Country of affiliation	Jordan	
3	Type of stakeholder	Governmental institution	
4	Interests of the stakeholder	 Support and sponsor innovative people; Develop t innovative people' skills and Innovativeness—starting from creating the initial product; passing on to the service model; Establishment and the commercial launch of small businesses. The Technical Incubator provides the necessary technical support to design and build prototypes of products and services. 	
5	About the stakeholder	The Center of Excellence for Innovative Projects was established at Jordan University of Science and Technology to provide the appropriate, technical environment to support and sponsor innovators from both the university and local community. The center has a range of facilities and services to support and sponsor innovative people; develop their skills and innovativenessstarting from creating the initial product; passing on to the service model; and finally the establishment and the commercial launch of small businesses. The Technical Incubator provides the necessary technical support to design and build prototypes of products and services. The Training Department develops the personal, technical, and entrepreneurial skills of the innovators. The Marketing Department, on the other hand, promotes products and services; attracts customers and investors. The Technology Transfer Office, however, is largely concerned with the protection of intellectual property rights by documenting innovative ideas, registering patents, and managing them.	
6	Stakeholder contact information	Name: Muhannad Quwaider Email: <u>innovation@just.edu.jo</u> Phone: +962 2 7201000 Ext. 26869	
7	Stakeholder website	https://www.just.edu.jo/Centers/ceip/Pages/aboutus.aspx	

	Gamification Financial Resource		
1	Name of stakeholder	Virtual Reality Jordan	
2	Country of affiliation	Jordan	
3	Type of stakeholder	Private Company	
4	Interests of the stakeholder	 Augmented reality applications 3600 interactive tour that will allow the user to experience a virtual visit to a specific location Produce professional video production 3D Modeling Games design and development Branding Website and Mobile application design & development Geographic information system (GIS maps) 3600 videos, as illustrations of the exceptional venues of any selected city 	
5	About the stakeholder	Golden Glove for Marketing and Information Technology is a local company owned by a group of youth expertise, with a well-established record in virtual reality services since 2011. Golden Glove for information technology and marketing is specialized in designing, developing, and presenting information technology tools for various types of industries including tourism, education, and business around the world. Such tools can be specifically tailored to suit the needs of the different markets as they can provide the user with the most important sites and exquisite attractions in Jordan and will help the party of interest in planning their future and exciting trip to the Kingdom.	
6	Stakeholder contact information	Name: Fairs Masoud Email: farisfaisal.masoud@gmail.com Phone: +962 799 6700 17	
7	Stakeholder website	http://www.vrjordan.com/	

